Study of Civil Liability Systems for Remedying Environmental Damage

FINAL REPORT
(as at 31st December 1995)

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Study of Civil Liability Systems for Remedying Environmental Damage

FINAL REPORT
(as at 31st December 1995)

to be read in conjunction with the Table of Issues which summarises the findings of this Report

(Supersedes all other versions)

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June 1996
In this Report, the term “civil liability” (which appears in the title) means, in general, environmental liability under private law. However, it was recognised early in the Study that restricting the scope to civil liability would not provide a true view of environmental liability in the countries studied. Indeed, in many countries, civil liability is insignificant in comparison with liability under the administrative (public) law and criminal law systems. Thus, reference is made to liability under both administrative and criminal law in a number of sections of this Report.

The Study was carried out in two phases, for the purposes of this Report called Study 1 and Study 2. Study 2 was shorter than Study 1. The information contained in this Report has been compiled from questionnaires sent to contributors in the countries set out on the next page and McKenna & Co has been dependant on the answers to those questionnaires, subject to comments from National Experts, in compiling this Report. McKenna & Co extends their gratitude for the co-operation received.

The Report is organised as follows:

- each Section is divided into Study 1 and Study 2 sub-Sections; and
- within each sub-Section, the countries are arranged in the following order:

### Study 1:
- United States of America
- Denmark
- Finland
- France
- Germany
- Italy
- The Netherlands
- Spain
- Sweden

### Study 2:
- Austria
- Belgium
- Greece
- Iceland
- Ireland
- Luxembourg
- Norway
- Portugal
- Switzerland

* United Kingdom

* Primarily England and Wales, except where specifically indicated.
The information in this Report reflects the situation as at 31 December 1995.
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STUDY OF CIVIL LIABILITY SYSTEMS FOR REMEDYING ENVIRONMENTAL DAMAGE

EXECUTIVE SUMMARY

Introduction

This Final Report covers the legal liability systems of 19 different countries with regard to “remedying” environmental damage as at December 1995. Although the original terms of reference were limited to consideration of civil liability, administrative and criminal liability have also been considered in some depth in order to provide a representative overall view of “environmental liability” systems in place.

Civil Liability

All the countries considered have a form of classical civil liability based on the fundamental principle that where a person causes damage to another with some degree of fault (usually negligence) that damage should be compensated. These rules are expressed either as part of a civil code or through common law developed through case law or through enactments formalising common law. The classical civil liability systems in a number of countries have been developed to introduce forms of strict liability for environmental damage where, for example, hazardous activities are being undertaken.

Some countries have enacted specific laws to provide a basis for claiming compensation for environmental damage suffered. The first countries to take this step were Norway and Sweden. Significantly, the other Scandinavian countries have also now introduced specific environmental civil compensation laws. Among others Germany also has such a law and Austria is due to introduce one based mainly on the Lugano Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment 1993. Many of these laws are recent and therefore experience of their use is limited. The German legislation has been particularly under-used.

The specific environmental compensation laws impose strict liability and are directed towards environmental issues. Some are made to apply only to certain industrial activities or (51998936.01)
installations. This is, for example, the case with the Danish and German legislation both of which list in an annex the industries to which the legislation applies. In contrast, the Finnish and Swedish legislation applies to any activity which results in damage to the environment.

**Administration and Criminal Liability**

The majority of environmental regulation in the countries considered, both in terms of the quantity of legislation and practical measures, operates through administrative law which is supported by the availability of criminal sanctions involving fines and/or imprisonment where breaches of the rules occur. In some countries such as the Netherlands, administrative fines are also available.

A common characteristic is the use of administrative licensing or authorisations, but countries differ in the way in which such systems have been developed. Some countries have a number of administrative enactments and administrative bodies which control the activities of certain industries or environmental sectors. This often operates on a federal, regional or county basis. Other countries operate such systems under the control of a central “environmental protection agency” which exerts control over most sectors of the environment and most industrial activities in conjunction with local authorities. The UK is at present undergoing transition from a sector-based approach to control mainly under the Environment Agency although local authorities retain certain competences. Denmark has a similar regulatory structure although the municipalities and county councils appear to have retained more powers relative to the central authority. Finland operates a central environment agency with thirteen specific regional environment agencies.

Criminal sanctions mainly arise where there is breach of a licence or administrative order although direct criminal pollution offences are used in more serious situations. Some countries such as Finland, Germany and Spain have now introduced broad environmental criminal offences into their criminal codes.

**Civil Damages**

The main civil law remedy common to the countries studied is compensation by way of damages. The objective is to compensate persons for injury or loss caused to them - that is, (51998936.01)
as far as possible to put them in a position as if the damage had not occurred. The systems therefore seek to assess the value in financial terms of this loss. Recoverable losses are generally limited to personal injury, damage to property and often pure economic loss. Accordingly, most systems do not allow compensation for pure ecological damage. This does not mean that compensation is never available where damage to soil, groundwater, flora, fauna etc. has occurred. Compensation in such circumstances is not in respect of the ecological damage but in respect of any consequential loss to the landowner or occupier, for example, for the reduction in value of land or damage to livelihood. Usually compensation in respect of clean-up costs may be claimed.

Some moves have been made towards compensation for pure ecological damage. The USA has a system allowing the recovery of “natural resource damages” which may however only be claimed or recovered by government trustees and therefore do not represent a windfall to private persons. The courts are still developing the methods for assessment and the limits for such damages. In Belgium the courts are using the concept of collective goods so that pure ecological or aesthetic loss can be compensated. In France and the Netherlands there is some possibility for environmental action groups to claim damages in respect of the interest which they aim to protect. The damages are awarded to enable them to carry out some form of restoration such as restocking rivers with fish or cleaning oiled birds.

Under civil law principles most systems do not impose an obligation to use damages received to restore the environment. This is not, however, without qualification. A number of the civil liability systems impose an obligation to mitigate any damage and this may involve clean-up. In addition, in a number of countries the administrative authorities may order the plaintiff to carry out clean-up operations effectively requiring use of civil damages for restoration. In Norway the damages will often be paid to the authorities to enable them to carry out clean-up. The private plaintiff will only receive the money where it is not in the public interest to clean-up.

**Administrative Powers**

The systems studied all operate some form of administrative system for environmental protection and it is through these systems rather than civil law remedies that most action to
protect and restore the environment takes place. The licensing and monitoring systems provide the authorities with information and they usually have considerable powers to either order remediation or to remediate and reclaim the cost. The powers available often depend upon the legislation establishing them. Most countries give regulatory authorities powers to order restoration or clean-up themselves and reclaim the cost. Such powers have only become available in the more recent statutes in Luxembourg. In the Netherlands, these powers are supported by administrative charges for non-compliance. A further power available, for example, in Portugal, the Netherlands and Italy is the closure of plants which breach rules and are causing pollution. In Italy relocation of plants may also be ordered.

**Limits on Damages or Clean-up Costs**

Maxima for damages or clean-up costs are rare. Germany has a theoretical limit in its civil environmental legislation for personal injury and damage to property set at quite a high level. Austria usually limits civil damages to the value of the property involved. Clean-up costs are generally limited only insofar as they are necessary and reasonable, requiring some form of assessment of the costs and benefits of remediation.

**Remediation/Restoration Standards**

Some differences exist between the countries with regard to the level of restoration required. The most developed system operates in the Netherlands where the basic level is “multifunctionality” which requires restoration suitable for all uses. The present system is a revision of the well known ABC standards. In exceptional cases multifunctionality is not required. Current use is generally relevant only in deciding whether or not clean-up should be commenced. The USA operates a system requiring clean-up to a level similar to multifunctionality. Due to the huge costs involved there is a move towards less ambitious standards in practice. A few of the countries set high absolute standard such as Denmark, Finland and Portugal although in practice these seem not to be rigidly adhered to. Most countries otherwise have no central standards although guidelines exist and in practice end use is normally taken into account.

**Injunctive Relief**

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In most countries injunctions are available in urgent cases to prevent polluting activity or requiring positive preventative measures. Generally, it is for the court to grant injunctions. However, in Denmark the administrative authorities have some powers to enforce injunctive relief without the courts. In Germany the level of urgency required to justify an injunction appears to be high and in Italy injunctions are unusual in environmental cases. The UK employs a “balance of convenience test” which requires assessment of the relative advantages and disadvantages to the parties. If there is a significant disadvantage to one of the parties an injunction may be refused. The Swedish system appears to be more liberal, granting injunctions where a mere risk of pollution arises.

**Liable Persons**

The general rule is that the polluter is responsible. Normally the liable person is an operator or land owner although specific legislation may name the liable person more specifically. Criminal sanctions although aimed at specific actions are generally expressed widely in terms of the liable person. In some cases a primary and secondary liable person is named. New provisions in the UK concerning contaminated land make the polluter primarily liable for clean-up with the landowner or occupier becoming liable if the polluter cannot be found.

Directors and managers may be held liable in most countries, particularly in criminal law. In some countries such as Finland, the Netherlands, UK, Sweden, Switzerland and Spain liability of a parent company is theoretically possible where it exerts actual control. Similarly lenders may incur liability through foreclosure or exertion of actual control.

**Causation and the Burden of Proof**

A significant obstacle common to environmental cases in the countries studied is proof of causation. Frequently the issues are complex and high levels of technical and expert evidence are required. This can be a significant barrier to successful action by individual plaintiffs bringing claims.

The basic rules applying to most systems is that the plaintiff carries the burden of proof. The plaintiff must normally in civil law show that one cause or version of events was more likely to have occurred than any others. This level of proof is often referred to as “the balance of
probabilities” or “prevailing probability”. Some countries such as Belgium, Portugal and Iceland require higher levels of proof.

Reversal or reduction of the burden of proof is used in a number of the countries studied. Usually reversal has been developed by the courts and is employed in specific circumstances. Some courts may, for example, reverse the burden of proof where particularly hazardous activities are involved or where there is apparently no alternative explanation to the version of events which the plaintiff seeks to show. In Germany a reduction of the burden of proof of causation developed through case law has been included in the environmental liability legislation. This merely requires the plaintiff to show the suitability of the plant to cause the damage. The defendant must then show that the actual cause was different.

**Access to Justice**

There are some significant variations in the extent to which individuals and particularly environmental interest groups can gain access to the courts to enforce the law for protection and restoration of the environment.

**Civil Law**

The general principle throughout most of the countries studied is that only a person with a direct interest, that is, having suffered some damage or loss may bring a civil action for compensation.

Generally therefore plaintiffs do not have rights in relation to the unowned environment. Such rights for individuals were considered and rejected in Denmark.

As they cannot show any direct loss, environmental interest groups cannot usually bring civil actions. In France there is provision, however, for concerned individuals to appoint an interest group to bring an action in the civil, administrative or criminal courts. Under certain Italian legislation recognised interest groups may intervene in the assessment of civil damages. Portugal and the Netherlands allow interest groups to seek injunctive relief for protection of the environment.
In Luxembourg certain laws have begun to allow interest groups standing to act as civil parties. The Norwegian approach is interesting in that environmental interest groups have been awarded standing in certain cases and the courts often favour such claims more than those of individuals. In addition in the Netherlands and France the courts have awarded compensation to interest groups for costs incurred in restoring the environment. Compensation for costs of restocking waters with fish can be claimed under specific legislation in Denmark.

The most liberal rules on standing appear to be in Ireland where the courts have held that by definition an aggrieved person has standing. This right extends to include interest groups.

**Administrative Law**

In relation to administrative law the countries studied show considerable differences in the rights of individuals and interest groups to challenge decisions and require enforcement of the law. Individuals are in most cases empowered to challenge administrative decisions in the courts only where their interests or rights have been violated or affected in some way. Again the broad Irish ruling would seem to apply to any person or group challenging an administrative decision.

Rights of interest groups to challenge administrative decisions are somewhat more liberal than their rights in civil courts. Often the group concerned must be acting in relation to the interest it was created to protect. This is the case in the Netherlands and Switzerland. Others such as the UK, Sweden, Norway and Iceland require the interest group to show a sufficient level of interest. In the UK the courts seem to be taking an increasingly liberal approach in this respect. In some of the countries legislation actually sets out whether or not the interest groups are to have such rights and Italian and Danish legislation has gone so far as to list interest groups upon which rights are conferred.

**Criminal Law**

The widest disparities in rights of individuals and interest groups amongst the countries appear in relation to criminal law. Spain, France, UK and Austria allow private prosecutions. In the UK this right has been used by environmental interest groups and in France the right is
available for all listed interest groups. In Finland private prosecutions are possible but very rare and in Ireland certain legislation confers the right on “any person” to bring a prosecution. Different rights are available in Luxembourg and Portugal. In Luxembourg an interest group may prosecute if it can show an interest different to that of the community for whom the public prosecutor must act. In Portugal interest groups may only act as third parties.

The remaining countries not mentioned above do not permit prosecutions but usually permit some form of challenge or complaint to the authorities against a decision not to prosecute. This right is usually only available to the victim, although in Italy listed interest groups may do so.

**Financial Security**

Where a polluter is insolvent or cannot be found there is in general no civil remedy available to a plaintiff. Only Sweden has an environmental liability fund for this purpose. Similarly, where clean-up of land is required and a polluter cannot be made to pay, the cost falls upon the authorities to fund operations. A number of specific funds exist, for example, in Germany for contaminated land remediation, in France for airport noise compensation, and in the Netherlands for air pollution and amongst oil companies for clean-up of contamination at old petrol stations.

Compulsory insurance is used in a number of the countries studied but mostly in specific high risk areas only. Examples are nuclear installations, some listed sites (in France and Germany) and toxic and hazardous waste. Sweden, however, requires licensed sites to pay into the environmental civil liability fund.

The majority of insurance policies available in the general insurance markets are limited to sudden and accidental damage. Insurance pools covering pollution risks provide specialised insurance in some countries (notably Denmark, France, Italy, the Netherlands and Spain). Those pools, as well as some policies available from individual insurers in countries such as Germany, the UK, Sweden, Switzerland and Ireland, provide cover which extends to gradual pollution.
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APPENDICES

Appendix I

[Note: In the original report the contents of Appendix I were photocopied. They are, therefore, not reproduced in this electronic version.]

Lists:

2. Nomenclature to French Law 76/663 on classified installations.
3. German Umwelthaftungsgesetz and Annex 1 listing plants covered.
4. The German Klärschlammverordnung.
5. Excerpt from the "Dutch List" standards for clean-up used in Germany.
7. Annex to Danish Act on Compensation for Environmental Damage 225/1994 listing major and hazardous plants covered.

Appendix II

Curricula Vitae of the Contributors to the Study.

Appendix III

Sources of information used by the Contributors to Study 1.
1. INTRODUCTION : NATIONAL CONSTITUTIONS

STUDY 1

USA

Constitution

The written Constitution of the United States of America ("USA") dates from 17 September 1787 and provides that the federal government is composed of the legislature, executive and judiciary. The Constitution establishes the competence of the federal government to legislate. Each state has its own constitution deriving its authority from the people of the state. The Constitution guarantees that each state constitution shall be in a republican form. All states except Nebraska have a legislature consisting of two Houses. There is a governor, various state officials and a separate state judiciary.

Legislature

The USA is a federal republic consisting of 50 states and the District of Columbia, each enacting its own laws and regulations alongside the federal government. These are governed by 52 separate court systems in the USA. There is also a further set of laws and regulations issued by local governments in counties, cities and municipalities. This can lead to a number of different laws or regulations controlling a certain legal area, sometimes setting different criteria, all of which must be complied with.

The legislative branch of the federal government comprises 2 separate chambers: the House of Representatives and the Senate, which together are known as the Congress. For a bill to become a law it must be passed by a majority vote of both chambers and then approved by the President. If the President vetoes a bill it can still be made law upon an overriding vote of a two-thirds majority by each house of Congress.

Except for statutes and regulations which are enacted at federal, state or local level, the legal rules are governed by common law. Therefore, court decisions establish precedents for future courts which will be binding in the same or similar circumstances. In addition, court decisions often decide how statutes or regulations will be applied in given situations where the legislation is unclear. Case law then becomes part of the governing rules.

The state laws tend to be similar. There are principles governing conflict-of-laws to help determine which state law is applicable. It is usual in business contracts to specify which state law is to be applied and there is a tendency to use certain states for this purpose because the law in that state is more developed than in others, for example, California or New York.
The primary basis of the statutory civil liability system for remedying environmental damage in the USA is the federal Comprehensive Environmental Response, Compensation and Liability Act 42 USC paragraph 9601 et seq. ("CERCLA" or "Superfund").

CERCLA itself and a wide variety of USA federal and state statutes impose criminal, civil and administrative liability for breach of environmental regulatory requirements. Major federal environmental statutes that impose both civil and criminal penalties in certain areas for regulatory violations include: the Resource Conservation and Recovery Act (regulating solid and hazardous waste management and disposal), 42 USC paragraph 6901 et seq.; the Clean Air Act (regulating the emissions of air pollutants), 42 USC paragraph 7401 et seq.; the Clean Water Act (regulating discharges of water pollutants and filling in of wetlands), 33 USC paragraph 1251 et seq.; the Oil Pollution Act (regulating the discharge and clean-up of oil spills to water), 33 USC paragraph 2701 et seq.; the Safe Drinking Water Act (regulating the quality of public drinking water sources 42 USC paragraph 300 et seq.; the Toxic Substances Control Act (regulating the manufacture and distribution of toxic chemicals) 15 USC paragraph 2601 et seq.; the Hazardous Materials Transportation Act, 49 USC paragraph 5101 et seq.; the Emergency Planning and Community Right-to-Know Act (regulating the reporting of inventories and emissions of toxic chemicals); the Endangered Species Act (protecting threatened and endangered plant and animal species and their habitats), 16 USC paragraph 1531 et seq.; and the Occupational Safety and Health Act (regulating work place hazards), 29 USC paragraph 651 et seq..

**Executive**

In the federal government, the President heads the executive branch. A number of executive departments of the civil service exist under the President who appoints the head of each to become a member of the Cabinet. The members of the Cabinet are not members of the legislature. Governments at the state level have much the same pattern as their federal counterpart. At the state level the chief executive, the Governor, heads the state's executive branch, with additional powers being separated between the legislative and judicial branches. Unlike members of Congress, state legislators are frequently part-time rather than full-time politicians.

Under CERCLA, the federal Environmental Protection Agency ("EPA") has primary responsibility for implementing site clean-up and cost recovery process (see 3).

**Judiciary**

The judicial branch of the federal government is headed by the United States Supreme Court which consists of 9 justices and is the final and controlling body over both the federal court system and the state court system.

The federal court system is authorised by Article III of the Constitution to govern matters of particular federal interest. The federal court of first instance is the
United States District Court, of which there is at least one per state, depending on population, geography and caseload. There is then a right of appeal to the United States Court of Appeal relevant to the circuit in which the district court is located and a final appeal to the United States Supreme Court.

The state court system runs in parallel with the federal court system and is in no way inferior to it. The state court system is usually also a three-tier system with trial courts, state courts of appeal and a state Supreme Court. If there is a federal consideration then there may be a further appeal to the United States Supreme Court.

Appeals

CERCLA includes a relatively complicated set of administrative and judicial rights and procedures for appealing various governmental actions and decisions relating to the clean-up of contaminated sites. Firstly, interested parties may participate in the EPA's procedure for selecting an appropriate remedy by submitting at public hearings either oral or written comments on the EPA's proposed clean-up action and the studies on which such action is based. The EPA has an obligation to compile an administrative record of all such comments and its answers to them (Record of Decision - ROD), and it is on this that selection of the final remedy is based.

Secondly, interested parties can challenge the EPA's selected remedy in one of two ways. Responsible parties who are being sued by the federal government for the recovery of its costs in performing the clean-up, or facing an injunctive action compelling the performance of a clean-up, may challenge the EPA's remedy at that time (albeit, only on the basis of the adequacy of the EPA's administrative record, which is reviewed under a deferential "arbitrary and capricious" standard of judicial review). However, potentially liable parties cannot obtain a "pre-enforcement" review of the EPA's remedy determination prior to being sued by the EPA, that is, they cannot bring an independent action to challenge the remedy.

Under certain circumstances parties affected by the EPA's clean-up plan may bring a CERCLA "citizens suit" challenging the adequacy of the remedy prior to or during its implementation, (see CERCLA paragraph 310(a), 42 USC paragraph 9659(a)). CERCLA paragraph 310(a)(1) authorises private civil suits against persons, which may include the EPA, alleged to be in violation of CERCLA, while CERCLA paragraph 310(a)(2) provides a private right of action against federal officials who fail to perform non-discretionary duties under CERCLA. For a general discussion of CERCLA citizen suits, see S Cooke, The Law of Hazardous Waste paragraph 16.03[4].

If the EPA seeks to compel responsible parties to perform the clean-up by issuing an administrative clean-up order, the parties again cannot seek a "pre-enforcement" judicial review of the order, but must either comply with the order and later seek reimbursement of their costs on the grounds that they were not liable, or else disobey the order and challenge it when the EPA brings a suit to enforce the order (which is risky, since the EPA can collect treble damages and/or
$25,000/day civil penalties if the defendant fails to show that it had "sufficient cause" for not complying with the order), 42 USC paragraph 9607(c)(3). Once the federal district court issues its decision in a CERCLA cost recovery, injunctive or contribution action under paragraphs 107, 106 or 113, respectively, the losing party has the right to appeal the decision to the United States Court of Appeal. Such appeals are governed by the generally applicable federal Rules of Appellate procedure. In general, all federal and state trial court decisions are reviewable by an appellate court in the appropriate jurisdiction. Decisions of the federal courts of appeal and the highest state appellate courts are reviewable by the United States Supreme Court. The United States Supreme Court rarely exercises its discretion to hear environmental cases (two or three cases per year under all federal and state environmental statutes).

DENMARK

Constitution

The Danish Constitution is written and defines the organs of government as the legislature, the executive and the judiciary and provides that Denmark is a parliamentary monarchy. The Danish kingdom contains three different areas: Denmark, Greenland and the Faroe Islands. Greenland and the Faroe Islands each have 2 members of the 189 members of the Danish Parliament. While Denmark is a full member of the European Union, Greenland and the Faroe Islands are not and are not covered in this Report.

Legislature

The legislature is the Danish Parliament, (Folketing) which has only one chamber. The Parliament is elected for a 4 year term using a system of proportional representation. Danish law is mostly based on statutes adopted by the Parliament, approved by the government and promulgated in the official publication, Lovtidende. Ordinances issued by Ministers or by the Environmental Protection Agency (see below) are also relevant. These must also be published in the Lovtidende if they are to be immediately binding.

The Constitution provides that a certain minority of members of Parliament may request a national referendum following the adoption of a statute by the majority of Parliament. In such circumstances, the statute does not receive Royal Assent until it is approved by a majority of the electorate. This mechanism does not apply to all legislation; for example, decisions on foreign affairs and finance are exempt.

Some legislative powers are delegated to the administration. These are overseen by Parliamentary standing committees.

Criminal law is part of public law. Civil law is divided into public and private law.

Executive
Executive power is formally vested in the Monarch. The leader of the majority party in the Parliament is appointed by the Monarch to form a government. Executive power is exercised by a Cabinet of Ministers who delegate authority to the public administration. An ombudsman is appointed to investigate complaints concerning the abuse of power by the administration.

In general, the administration is centralised although powers are delegated to authorities at local and regional level.

Environmental matters are administered by the Ministry of the Environment (Miljøministeriet), supported by a number of more specialised agencies to which many of the Ministry's executive powers are delegated, including the drafting of legislation and guidance, and the implementation of policy at national level. One such agency is the Environmental Protection Agency (Miljøstyrelsen). The Environmental Appeal Board (see below) is also part of the Ministry. A number of other Ministries have environmental units. County (amter) and municipal (kommuner) authorities also have environmental responsibilities and must be consulted on draft legislation and may be involved in policy development.

Under Section 82 of the Constitution, the municipalities have certain rights to self-determination. In the last twenty five years there has been a tremendous increase in the powers of the municipalities through new legislation. Municipalities decide through their elected councils their own taxes on land and income tax. This transfer of power has also been prevalent in the environmental area.

Judiciary

The Danish court system comprises three levels: local courts, higher courts and the Supreme Court.

All the courts cover criminal and civil cases as well as administrative decisions. Local courts include the "fogedretten", which are authorised to execute and issue preliminary injunctions. Cases against the State, cases involving interpretation of new laws or cases involving more than DKr500,000 usually commence in the higher courts.

"Principle cases" are cases of great concern or on important interpretation issues. The value of the claim itself does not in itself make a "principle case". If the jurisprudence of the case will be of importance for many others the case may constitute a principle case provided that the legal issue has not been resolved by previous judgments. Where a dispute involves a difficult question of law this may justify the claim for the case to be a principle case.

Appeals

The rule is that a case can only be the subject of an appeal once. Principle cases, as well as cases against the state, will normally start in the higher courts, from which appeal to the Supreme Court is possible. Disputes starting in lower courts can be appealed to higher courts and a second appeal may be permitted at the
discretion of the Minister of Justice. This power to allow a second appeal might, in the near future, be transferred to the Supreme Court. A proposal on this is currently being considered.

Administrative appeals are influenced by the concept of decentralisation of the power of administrative bodies as well as the intention to limit the rights to and numbers of appeals. There is no right to an administrative appeal on an enforcement decision taken by a municipality or a county. This means that injunctions or orders based on the Environmental Protection Act 358/1991 cannot be appealed to any administrative body and must be complied with until overruled by a decision on appeal to a court.

Other decisions, such as orders to take specific preventive measures pursuant to Section 41 of the Environmental Protection Act 358/1991, are capable of being appealed to the Environmental Protection Agency. Decisions made by the Environmental Protection Agency on appeal are final and can only be referred to the Environmental Appeal Board in principle cases. Any administrative decision however may be brought to court so that decisions of the Environmental Protection Agency and the Environmental Appeal Board may be referred to the higher courts, and hence to the Supreme Court. The Nature Protection Board of Appeal is a further administrative appeal body with competence on substantive decisions regarding nature conservation, physical planning, environmental impact assessment and exploitation of some raw materials.

Decisions made by the Environmental Appeal Board or the Nature Protection Board of Appeal can be referred to the Ombudsman and/or can be appealed to higher courts.

FINLAND

Constitution

Finland has been an independent and sovereign state since 1917. According to the written constitution of 17th July 1919 it is a republic. There are 4 Acts of Parliament with constitutional status. These are:

- the Constitution Act 1919;
- the Parliament Act 1928;
- the Ministerial Responsibility Act 1922; and
- the Act on The High Court of Impeachment 1922.

The Constitution Act 1919 contains most of the provisions associated with the structure of government, the form and definition of the legislative, executive and judicial powers, state finance and constitutional rights. The Parliament Act 1928 contains the provisions on the composition and election of Parliament and its role in enacting legislation.

Legislature
The Parliament Act 1906 introduced the system of Parliament sitting in 1 chamber elected through universal suffrage. There are 200 seats in Parliament and the parliamentary term of 4 years.

Since 1991 the President has been elected through a system of direct and indirect election. The citizens vote for both the President and for 300 electors. If through the direct vote a candidate does not achieve a majority, the electors vote to confirm the position. Since 1994, the elections for the President have become a single direct election requiring a candidate to achieve a majority. If in the first vote no candidate achieves a clear majority a second vote is taken between the top 2 candidates.

The doctrines of parliamentary supremacy and the separation of powers are both set out in the Constitution Act 1919. Parliament is the sovereign legislative power and all members of the Parliament may submit legislative bills for approval. If Parliament approves a bill the President has the power to veto the bill. However, the President can only veto a bill once so Parliament can ensure the enactment of a bill at a second vote.

However, most bills are submitted by the Government having been prepared by the Cabinet. The President actually submits the Government bills and may also withdraw them. Such bills have priority over proposals from members of Parliament.

**Executive**

The President has a wide range of powers including appointing the Prime Minister and members of the Cabinet after consultation with the speaker of the Parliament and the parliamentary parties. Upon the initiative of the Prime Minister and following similar consultation the President may dissolve Parliament.

The Cabinet is called the Council of State and has the responsibility for development and preparation of matters decided upon by the President. The Cabinet also has the power to pass decrees without the consent of the President and it may appoint certain lower public officials.

The Ministry of the Environment is the highest administrative authority in environmental matters. Other ministries also have responsibilities regarding the environment, especially the Ministry of Agriculture and Forestry which is responsible, *inter alia*, for matters relating to forestry, fishing, hunting, planning and the supply of water. Also the Ministry of Trade and Industry and the Ministry of Traffic are responsible for certain environmental matters.

**Judiciary**

Chapter 5 of the Constitution Act 1919 sets out the basic structure and system of the courts. The highest court in relation to civil and criminal proceedings is the Supreme Court which also supervises the administration of justice. The Supreme
Administrative Court is the highest court of appeal in relation to administrative matters. The judges in these 2 courts are appointed by the President.

There are basically two aspects to the court structure in Finland: courts with jurisdiction over civil and criminal matters and administrative courts which cover disputes between private persons and state authorities. As mentioned above the highest court on either side is the Supreme Court and the Supreme Administrative Court. A system of general and special courts also exists. General courts deal with all issues that have not been removed from their jurisdiction by specific rules requiring the special courts to have jurisdiction. An example of a statute conferring jurisdiction on the special courts is the Water Act, 264/1961.

The lowest level of the general courts is the district courts. Generally, in criminal cases, the courts will consist of a legally trained judge and 3 lay members, while in civil cases, it will consist of 3 judges. Decisions of the lower courts may be appealed to the appeal courts of which there are 6. In the appeal courts cases will normally be heard by 3 judges. The appeal courts have a supervisory role over the district courts and are responsible for administrative actions. Oral hearings are rare in the appeal courts with most cases proceeding in writing with documentary evidence.

The Supreme Court is comprised of a president and 15 or more justices who have the responsibility of supervising the judiciary. Leave to appeal is normally required to appeal a case from the appeal courts. The number of justices present in a particular case will vary according to the importance of the case, ranging from 3, for example in granting leave to appeal, to 11 in highly important cases.

Amongst the special courts are the Water Law Courts and the Superior Water Law Court which have been in existence since 1962. The Water Law Courts are amongst the few special courts with jurisdiction in both civil and criminal matters. Due to the fact that the Water Courts are fully competent licensing authorities under the Water Act, 264/1991 they do not deal with disputes over consents.

**Appeals**

In civil and criminal matters all decisions of the courts of first instance may be appealed to one of the 6 Courts of Appeal and decisions of the Court of Appeal may be further appealed to the Supreme Court provided that leave is granted by the Supreme Court. Leave may be granted, for example, if the case involves a new legal issue on which a precedent would be needed, or if the decision of a lower court was based on an error of fact or law.

In administrative case appeal of a lower administrative authority's decision is to the county administrative court, which is the equivalent to the Court of Appeal in civil and criminal matters. Further appeal is to the Supreme Administrative Court.

In relation to administrative matters, decisions of agencies may be reviewed by the county administrative courts from which appeal is to the Supreme Administrative Court.
The decisions of the Water Law Courts may be appealed to the Superior Water Law Court. The Superior Water Law Court is in turn subordinate to the Supreme Court and the Supreme Administrative Court, depending on the nature of the case.

FRANCE

Constitution

The written Constitution of the Fifth Republic entered into force on 4th October 1958. It contains an introductory section on the rights of man and ninety two articles. It provides that France is a democratic republic in which sovereignty is held by the people and exercised through their representatives and by referenda. The President who is the head of state must ensure that the Constitution is upheld.

Legislature

The parliament consists of 2 houses, the National Assembly and the Senate. The National Assembly is elected by direct election and has 577 members elected for a 5 year term.

The Senate is elected by indirect suffrage and has 321 Senators elected for terms of 9 years. Election is by an electoral college in each Department consisting of all Department Council members and all Municipal Council members within the area.

As is the case in most of the other countries in continental Europe, the legal system in France is part of the Roman-German system based on Roman law. One of its most important characteristics is that of written law which, in turn, leads to a tendency towards codification. It should be noted however that as time goes on, the courts' interpretation becomes of increasing importance.

In most national laws belonging to the Roman-German system, there is a basic distinction between private and public law. Relationships between individuals concerning the protection of their own interests are governed by private law. Relationships between individuals and public entities or rules concerning the management of public affairs are governed by public law; in the latter, the law will not protect private interests but those of society generally.

Private law sets out the general legal parameters within which individuals act freely; public law, on the other hand, imposes specific rules to ensure the protection of society "against" individuals. Private law covers four main categories: civil law; commercial law; labour law; and others. Public law includes: constitutional law; administrative law; public finance; and international public law.

Aside from private and public laws, there are a number of "mixed and special" laws which may have some aspects that are characteristic of private law and others of public law. Criminal law is certainly the best known and most straightforward example. Planning law is another such example where on the one hand there are
rules concerning: co-ownership; the status of builders; contractors; and liability etc. which are clearly private law rules; and on the other hand rules concerning: land use; construction permits; building hygiene and security etc.; and which are within the scope of public law.

French environmental law, like EU law, although generally within the ambit of public law is also considered to be a special law.

Executive

The President is elected for a 7 year period by direct elections. It is his duty to appoint a Prime Minister and to appoint or dismiss the other members of the Government after consultation with the Prime Minister. Further, the President must preside over the Council of Ministers and following consultation with the Prime Minister and the Presidents of the 2 houses of legislature may dissolve the National Assembly.

The relevant public and regulatory bodies on the environment are firstly the Ministry of the Environment. The Ministry of the Environment has at its head a cabinet Minister who is supported by a team of advisers. The Ministry of the Environment has a wide range of competence including over hazardous, unhealthy and harmful establishments. Inter-ministerial bodies exist with specific responsibility to different sectors of the environment. These bodies provide information, advice on guidance and future legislation and policy.

Certain special bodies made up of environmental association members and some local area groups make recommendations and give views on issues within their areas of competence. Examples of such groups are the High Council for Listed Installations and the National Water Committee. There are also a number of non-governmental agencies which are autonomous public bodies. They are controlled by the Ministry of the Environment and have delegated powers. The Agency for the Environment and Energy Control and National Forestry Commission are examples.

The local authorities in France include the regional environmental authorities, the Departments and municipalities.

Judiciary

The separation between public and private law entails a relatively complex judicial system in France, which can be summarised as follows: both private law disputes and criminal proceedings are heard within the judicial courts; public, or more specifically, administrative law disputes are heard in the administrative courts. The Tribunal of Conflicts decides which is the competent jurisdiction in cases of any doubt. Private law (civil) courts of first instance are the Tribunal d'Instance (for claims of less than FF 30,000) and the Tribunal de Grande Instance for claims of FF 30,000 and over.
Where both the plaintiff and the defendant are "commerçants" (a company or person in business), the action must be brought before the Tribunal de Commerce. Where the defendant is a commerçant but the plaintiff is not, the action may be brought either before the Tribunal de Commerce or the Tribunal de Grande Instance (or the Tribunal d'Instance where damages are less than FF 30,000). The public law (administrative) court of first instance is the Tribunal administratif. The Cour d'Assises deals with all criminal matters whether of first instance or appeals. The Tribunal de Commerce deals with matters where either both parties or just the defendant are commerçants (i.e. a company or person in business registered with the Commercial and Trade Registry).

The administrative courts are competent with respect to all matters involving public authorities, the only two exceptions being "voie de fait", (where the public authority has acted *ultra vires*), and where the damage has been caused by (or to) the private property of public authorities, in which case the competent courts are the civil courts. All administrative measures and sanctions, such as the obligations to clean-up, which may be imposed by public authorities are therefore nearly always adjudicated by administrative courts.

**Appeals**

Each court decision may be appealed (except decisions of the Supreme Court and decisions of the "Cour l'Assises" (i.e. court dealing exclusively with crimes). Civil matters may generally be appealed to the Appeal Court ("Cour d'Appel") and administrative matters to the Administrative Appeal Court, and from there to the Supreme Court ("Cour de Cassation") for civil matters on aspects of law and not fact, and to the State Council ("Conseil d'Etat") for administrative matters.

Civil cases up to (FF 13,000 in value are dealt with on appeal by the court of first instance (Article 321.1 of the Code of Judicial Organisation). These actions can only be appealed on points of law to the Supreme Court. In administrative cases appeals may be subject to time limits depending on the type of judgment (normally this is one month but sometimes may be 15 days, for example in respect by summary judgment).

**GERMANY**

**Constitution**

The Federal Republic of Germany is, as the name already indicates, a federal republic, consisting of 16 states (Länder). The constitution of the Federal Republic of Germany is written down in the so-called basic law (Grundgesetz) of 23rd May 1949. In addition, the states have written constitutions of their own.

The basic law divides public authority into 3 different branches: the legislative power which has the task of creating laws; the administrative authority which has the task of carrying out the laws; and the judiciary which has the task of deciding disputes on laws.
Legislature

In Germany, legislation takes place on 2 levels. On the one hand, the federal legislature enacts federal laws which apply in the whole of the Federal Republic of Germany. On the other hand, the legislatures of the different states enact state laws which only apply in the respective states. Moreover, local governments are entitled to enact regulations concerning their own affairs which apply in the area of that local government. The basic law provides for the areas of laws which are to be regulated by the federal legislature and which are to be regulated by the legislatures of the states. For example, civil law may be regulated by the federal legislature, whereas the main areas of public law may be regulated by the legislatures of the states.

The legislature on the federal level is the Parliament, the so-called lower house (Bundestag). The upper house (Bundesrat), which consists of representatives of the governments of the 16 states, has a right of participation. Participation depends on whether a law needs the consent of the upper house or not. In general, laws which affect the interests of the states need the consent of the upper house. A law which needs the consent of the upper house cannot be enacted without that consent. The upper house is also entitled to object to a law which does not need its consent, but in that case it might be overruled by the lower house. The legislative power of the states is allocated to the respective state parliament. The constitutions of the different states provide for the relevant proceedings.

As in most of the other countries in continental Europe, the legal system in Germany is founded on the old Roman-German system. In contrast to the Anglo-American system, the German legal system is based predominantly on the written laws which have been enacted by Parliament. It is not the primary task of the courts to enact law. Instead, they have to work with the written laws and interpret them. However, cases may arise where the written law is not clear or contains gaps, or in areas not governed by written law as yet. Although decisions of the courts (except decisions by the federal Constitutional Court) do not bind other courts, in practice they are often relied upon when the same problem arises again.

Under German law there is a distinction between the areas of public law and private law. Public law provides regulations for the relationships between public authorities and individuals, and for the organisation and management of the public administration. Private law provides regulations for the relationships between 2 or more individuals. Under German law, regulations with regard to environmental liability can be found in both private and public law.

Executive

The federal government has executive power and consists of the federal Chancellor who is elected by the lower house following a proposal of the federal President, and the federal Ministers appointed on a proposal of federal Chancellor by the federal President. Competent authorities in respect of environmental matters are the ministries of the states (Länder) or the federal ministries which act
as the highest administrative bodies; the administrative districts, and the rural districts.

**Judiciary**

In Germany, there are in essence 5 types of jurisdictional branches: the ordinary jurisdiction (criminal and civil courts), the administrative jurisdiction, the jurisdiction in labour matters, the social jurisdiction and the jurisdiction in tax matters. With regard to environmental liability, only the ordinary jurisdiction and the administrative jurisdiction are of importance. The ordinary jurisdiction decides on disputes regarding private law, whereas the administrative jurisdiction decides on disputes regarding public law.

The ordinary jurisdiction comprises the county courts (Amtsgerichte), the regional courts (Landesgerichte), the higher regional courts (Oberlandesgerichte) and the Federal Court of Justice (Bundesgerichtshof). The civil court of first instance is either the county court or the regional court, depending on the value of the claim (up to DM10,000 in the county court, and higher claims in the regional court). It is one of the tasks of the Federal Court of Justice to guarantee uniformity in the application of law.

The administrative jurisdiction comprises the administrative courts (Verwaltungsgerichte), the higher administrative courts (Oberverwaltungsgerichte) and the Federal Administrative Court (Bundesverwaltungsgericht). Depending on the matter under consideration, the court of first instance is either an administrative court or a higher administrative court.

In addition, there are Constitutional State Courts in the different states and the Federal Constitutional Court in Karlsruhe.

**Appeals**

In civil and criminal matters appeals of judgments of the county courts are heard by the regional courts (Landesgerichte). The higher regional courts (Oberlandesgerichte) in turn hear appeals against judgments made at first instance in the regional courts. The jurisdiction of the Federal Court of Justice (Bundesgerichtshof) includes appeals against judgments of the higher regional courts.

The higher administrative court (Oberverwaltungsgericht) hears appeals against judgments of the administrative courts (Verwaltungsgerichte). Under certain circumstances, in particular if federal law is infringed, the Federal Administrative Court (Bundesverwaltungsgericht) will hear appeals against judgments of the higher administrative courts.

The Federal Constitutional Court (Bundesverfassungsgericht) can be called upon if a decision made by a public authority infringes the basic law. The Federal Constitutional Court is entitled to render void any decisions by a public authority which contravene the basic law.
Claims for payment are in principle made before the civil courts (this also includes the situation where compensation is claimed from the authorities). On the other hand, if an action involves an authority seeking specific measures to be taken by a responsible party, the action would be an administrative court matter with appeal to the higher administrative court. A decision of the higher administrative court will be quashed by the Federal Administrative Court (Bundesverwaltungsgericht) only where a fundamental question of law or a serious procedural error is concerned.

ITALY

Constitution

The Constitution sets out in writing the principles governing citizens' basic civil, political and economic rights, defines the bodies (legislative, administrative, judicial) of the Republic and grants legitimacy to all public powers, regulates the legislative activity and sets out the general principles of the legal system.

Legislature

The parliament has 2 houses: the Chamber of Deputies and the Senate. The Chamber of Deputies is elected every 5 years by direct elections and has 630 members. The Senate is elected every 5 years and has 315 members.

The sources of Italian law are, in order of hierarchy: the Constitution; state laws and EU regulations; regional laws; regulations which implement or supplement state laws; and procedures.

Thus state laws cannot conflict with the Constitution; regional laws must comply with the Constitution; regulations are not valid if they conflict with laws; and usages are effective only when specifically referred to in a law or regulation.

Italy is a civil law system and accordingly the main sources of law and legal interpretation are codified. The Civil Code dating from 1942 and the Criminal Code of 1930, contain guidelines to which special regulations issued from time to time, must generally conform. There have been several major changes over the decades and derogations have been granted for particular issues under the principle of lex specialis (see for example, the product liability law, introduced in 1988 which reversed the burden of proof against the manufacturer).

The Italian system of law is basically divided between public law (which governs the organisation of the state and local authorities and their relationships with other public or private entities) and private law (which governs the personal, contractual and tortious relationships between private individuals).

Besides general and special legislation at the state and regional levels, another source of legal guidance is the judicial precedents (particularly those of the Supreme Court of Cassation, which establishes the most important principles of
law as expressed in its judgments). Although these are not binding upon other courts, they play an important role in helping to interpret the law and to solve controversial issues (see below).

Government Decrees (Decreti-Legge) can, under the Constitution (Article 77), only be issued in cases of extraordinary urgency and necessity and must be ratified by Parliament within two months. In practice these Decrees, especially in the environmental field (for example, waste and water), have been renewed every 2 months for the last 2 years, due to the lack of action by Parliament.

**Executive**

The President is elected from a joint session of the Chamber of Deputies and the Senate and 3 regional council members. The term of office is 7 years. The Executive comprises a Council of Ministers. The Prime Minister is appointed by the President and asked to form a government. The Prime Minister then appoints the Council of Ministers.

Italy is divided into 20 regions, 103 provinces and over 8,000 municipalities.

The regions are autonomous entities with specific powers granted by the Constitution. They exercise their powers through regional parliaments and a very complex bureaucratic system with a similar structure to those of the national Ministries. Regions may in turn delegate the exercise of their own administrative powers to provinces and/or municipalities; these have a lower degree of autonomy and are subject to state and regional controls. Five of the regions, Sicily, Sardinia, Trentino/Alto Adige, Friuli Venezia Giulia and Valle d'Aosta, have stronger autonomy powers, whilst additional special powers are granted to the 2 autonomous provinces of the Trentino/Alto Adige Region (Trento and Bolzano). They are allowed to pass laws on the matters indicated below, and have administrative powers in these matters. The state can delegate, by a specific law, the exercise of other administrative functions to the regions.

The Environment Ministry was created by Law 349 of 8th July 1986. The Environment Ministry has, in general, no direct and exclusive powers over the administration of the environment, but has instead a power to publish general guidance, to co-ordinate, advise, supervise and promote the activity of other public entities; it has a duty to provide studies and information on the state of the environment and heads a consultation body (CNA) which includes representatives of non-governmental organisation (NGOs), regions, provinces and municipalities; it is responsible for the implementation of international obligations; it has certain enforcement powers; a general power to draft and propose new environmental legislation, to enact secondary regulations such as Ministerial Decrees; and to issue circulars and legal opinions.

Certain other ministries have limited environmental powers, such as the Health Ministry and Transport Ministry which can lead to delays and confusion, particularly on controversial issues.
**Judiciary**

The Constitution states that the courts are only subject to the law and that the judges constitute an autonomous and independent body. Different entities may be competent for civil liability claims, according to the nature and circumstances of the case in question.

The judicial system is organised as follows:

- the Constitutional Court: the supreme body which has the power to decide on questions relating to the constitutional legitimacy of laws, conflicts of attribution between state and/or regional powers, and on the charges against the President of the Republic;

- civil courts, deciding private law disputes;

- criminal courts, deciding criminal matters.

- administrative courts, organised at the regional level which decide public law disputes (the Corte dei Conti for economic and accounting matters as well as officers' economic liability and the Consiglio di Stato for complaints against orders issued by public bodies in breach of law or regulation, or in breach of their powers). It is not possible to claim damages through administrative proceedings.

At the top of the judicial hierarchy is the Supreme Court of Cassation below which there are 26 Appeal Court District (Circondari) and a further 628 Mandamenti each with a magistrate. In addition to the magistrates there is a small claims system for civil business with jurisdiction in cases of up to 1 million lire. In addition to these courts there are 90 first instance Assize Courts and twenty six Assize Courts of Appeal.

**Appeals**

Both civil and criminal systems provide for 2 levels of appeal: before the Courts of Appeal, on both the merits of the case and the aspects of law applied in the case which determined the ruling in the first instance and before the Supreme Court of Cassation, on question of law only, against judgments of the Courts of Appeal.

Where individuals challenge administrative decisions, decisions of administrative tribunals may be appealed to the Court of Appeal and decisions of the regional administrative tribunals to the State Council (Consiglio di Stato).

**THE NETHERLANDS**

**Constitution**
The written Constitution dates from 1814 and was last revised in 1983. The Netherlands is a constitutional and hereditary monarchy. Article 21 of the Netherlands Constitution of 1983 creates the right to a clean and healthy environment.

**Legislature**

The Crown and Parliament hold the central legislative power. The upper chamber of Parliament has 75 members elected by members of the provincial states while the lower chamber has 155 members directly elected by proportional representation for terms of 4 years. In addition there is a Council of State of 28 members and a vice-president all appointed by the Crown. The monarch is the President but in practice everyday control is exercised by the vice-President. The Council of State exists to be consulted in legislative matters.

Bills may be proposed by the Government and the lower chamber. The upper chamber may only approve or reject bills without amending them.

**Executive**

Executive power lies with the Cabinet Council led by the Prime Minister. The composition of the Cabinet Council reflects the political majority in the lower chamber. Cabinet Council members are appointed by the Monarch and are responsible to Parliament. In appointing the leader of the Cabinet Council, the Monarch is advised by the political leaders of the upper and lower chambers and by the acting chairman of the Council of State.

The provinces and municipalities also have authority in the environmental area. Both the provinces and the municipalities have elected councils and a Queen's Commissioner or mayor who is appointed by the government to the province or municipality respectively.

**Judiciary**

The principle written sources of Dutch law are: the Constitution; the Civil Code; the General Administrative Code; the Penal Code; and the Codes of Procedure. Case law is also an important source of law and court decisions are important in interpreting the provisions of statutes and codes. Courts are not bound by either their own decisions or decisions made previously by other courts, although it is usual for lower courts to follow the decisions of higher courts, particularly the Supreme Court of the Netherlands.

Judicial power over civil and criminal matters is exercised by:

- "Kantongerecht" (Cantonal Court), for claims up to DFL 5,000;
- "Arrondissementsrechtbank" (District court); for claims over DFL 5,000;
- "Gerechtshof" (Court of Appeal),
- "Hoge Raad" (Supreme Court of The Netherlands).
There are 62 cantonal courts which sit with one judge. These are the courts of first instance for specific matters, including claims of up to DFL 5,000. The 19 district courts are the courts of first instance for all matters not specifically within the jurisdiction of the cantonal courts and also consider appeals concerning decisions from the cantonal courts. Appeals against district court decisions are heard by the 5 courts of appeal consisting of 3 judges. Finally, the Supreme Court of the Netherlands decides on appeals in cassation from decisions of lower courts. It sits with 5 judges and is concerned solely with questions of law. A number of specialised courts also exist to consider specific matters, for example complaints about administrative decisions. Judges are appointed by the Monarch, on behalf of the Government.

There are various administrative courts dealing with administrative sanctions which can be imposed on the basis of special legislation (especially in the field of soil contamination, waste disposal, water pollution and infringement of the conditions of environmental permits). These courts do not deal with civil liabilities. Generally, the competent administrative court in environmental cases is the "Afdeling Bestuursrechtspraak van de Raad van State" (Administrative Judicial Department of the Council of State). This general administrative procedure is not subject to the tribunal system.

**Appeals**

There is an automatic right to appeal in civil and criminal cases. Generally, appeals deal with the merits of the case including new facts and points of law, but the Supreme Court of the Netherlands deals only with points of law, not fact. There is no appeal of decisions of a Kantongerecht on claims below DFL 2,500, but appeals concerning Cantonal Court claims of over DFL 2,500 can be made to the district courts. Referral to the Supreme Court of the Netherlands is possible for decisions of the district courts on appeal.

Decisions of the district courts as a court of first instance (cases over DFL 5,000) can be appealed to the Court of Appeal. Referrals of the decision on appeal by the Court of Appeal is possible with the Supreme Court of the Netherlands.

The Court of Appeal therefore acts as the Court of Appeal for cases of the Supreme Court of the district courts and the Supreme Court of the Netherlands deals only with matters of law and judgment of the Court of Appeal or the Supreme Court of the Netherlands on appeal.

Broadly, in administrative matters the body which has taken the decision must first be asked to review it. The decision is then open to appeal to the district court, administrative section and thereto the Administrative Judicial Department of the Council of State. Some administrative decisions are open to appeal directly to the Administrative Judicial Department of the Council of State, without first going to the district court. This is generally the case with decisions involving environmental matters.
SPAIN

Constitution

The basic principles and rules of Spain's political and legal organisation are contained in the written Constitution of 1978. Article 45 of the Constitution of 1978 creates a right to a clean and healthy environment.

Politically, Spain is organised as a parliamentary monarchy. The Monarch is the representative of the Spanish state, but has no actual decision-making capacity. Spain is further defined in the Constitution as one single state governed by the law and inspired by social principles. Notwithstanding the unity of the nation, the regions have their own autonomous political organisations and enjoy significant powers. In addition, local entities (municipalities, provinces) also have their own political organisation as well as areas of responsibility which they manage independently.

Spain is therefore organised into 3 different "layers": local authorities, including 50 provinces; 17 autonomous regions; and the central state. Political responsibilities are distributed among these bodies in accordance with constitutional principles.

Legislature

The Parliament ("Cortes") has 2 chambers: the Congress and the Senate. It holds legislative power and approves the annual budget. Proposed legislation is debated and approved by Congress and then considered by the Senate which has the power to make modifications. It is then returned to Congress for final approval. Laws are published in the official gazette once the adoption procedure is complete.

The 17 autonomous communities retain legislative powers in many areas. Cataluña, Galicia, and Andalucía and the Basque region have particularly extensive powers.

Various types of statutes may be enacted in accordance with the Constitution. In essence, these are:

- organic laws, which regulate fundamental civil rights and liberties, the approval of laws of the autonomous regions and the electoral system. Approval, change or substitution of organic laws requires an absolute majority in Congress;

- ordinary laws, are those laws whose subject matter is not reserved to organic laws by the Constitution. They require a simple majority of the Congress and of the Senate, with the Congress making the final decision;

- decrees which are issued by the Government, but rank as laws. They regulate exceptionally urgent matters and must be referred to
Congress for ratification. Decrees cannot deal with the basic institutions of government, fundamental rights and liberties of individuals or autonomous regions, or general election laws.

- laws of the autonomous regions issued within their competence. The autonomous parliamentary chambers issue laws with the same status as those issued by Parliament while the autonomous government dictates decrees and orders. These legal provisions only apply within the particular region.

In the absence of an applicable statute, custom has the force of law, provided that it is substantiated and is not contrary to morals or public order; and if no such custom exists, the general principles which constitute the underlying basis of the legal system may be applied. In practice, both custom and general principles have very limited relevance.

Although the Spanish legal system is a civil law system and the law is not created by court decisions, case law issued by the Supreme Court is important in the interpretation and application of the law. The decisions of a court may be challenged if they do not conform with the judgments of the Supreme Court on the same issue in at least two judgments.

According to Article 148.1 of the Constitution, the autonomous regions may assume powers regarding the management of environmental protection. Article 149 of the Constitution sets out the powers of the state in this regard. Firstly, paragraphs 6 and 8 provide for its exclusive power on criminal and civil law, without prejudice to the preservation, amendment or development by the autonomous regions of their own special or civil laws, if any. Secondly, paragraph 23 provides that the state has exclusive power to enact basic legislation on the protection of the environment, without prejudice to the powers of the autonomous regions to issue additional rules of protection. Matters not expressly assigned to the state by the Constitution may be dealt with by the autonomous regions by virtue of their respective Basic Laws ("Estatutos de Autonomía").

The following general conclusions arise from Articles 148 and 149:

- only the state may issue criminal laws;
- as a general rule, any question regarding civil liability will be governed by the state legislation. However, the autonomous regions may issue rules on their own existing specific civil regulations;
- both the state and the autonomous regions may issue administrative laws on the environment.

Executive

The Government has executive power. Parliament elects the President of the Government who, in turn, appoints the Ministers in the Government.
The autonomous regions and local entities are each organised with an elected parliamentary chamber and an executive body. The regional or local deputies forming the Chamber elect the governors of the relevant political organisation.

Administrative bodies which are particularly relevant to environmental matters are: the state (namely the Ministry of Public Works, Transport and Environment), the autonomous regions and the local authorities.

**Judiciary**

The Spanish court system is based on the Constitution of 1978 as an independent power within the state, governed by the General Council of the Judicial Power. Courts forming the judicial system are organised into 4 different jurisdictions: civil and commercial courts, criminal courts, administrative courts and labour courts.

In the first instance courts (Juzgados de Primera Instancia): civil and commercial matters as well as labour matters are judged by a single-judge court in the first instance. For civil and commercial matters, the proceedings are in writing. Only labour cases are heard. Criminal cases are investigated by individual judges, who are assisted by state attorneys. The case is heard by either a one judge or a three judge court, depending upon the seriousness of the offence. Administrative law disputes are decided by a three judge chamber of the Provincial Courts (see below).

There are different courts of appeal above the first-instance courts that are distributed on a regional basis: the Provincial Courts (Audiencias Provinciales), located in each of the 50 provinces; the Superior Court of each Autonomous Community, established in each of the regions; and the National Court, based in Madrid which has a special jurisdiction over certain criminal and administrative matters concerning several district courts. These courts are organised into chambers, each consisting of 3 judges.

The Supreme Court (Sala Primera del Tribunal Supreme), based in Madrid, has jurisdiction over all Spain and, except for constitutional matters, is the highest judicial body that may review judgments issued by the lower courts. It has 4 chambers specialising in civil and commercial matters, criminal cases, administrative law disputes and labour claims. Its jurisdiction includes civil liability claims against certain persons (e.g. the President of the Government) and enforcement of foreign court decisions.

The Constitutional Court is not part of the judicial system. It has nationwide jurisdiction over issues relating to constitutional rules and rights. Disputes between the state and autonomous regions relating to the constitutionality of laws, and violations of constitutional rights by the judicial courts are all within the jurisdiction of the Constitutional Court.

**Appeals**

(51998936.01)
Civil and commercial claims are generally heard by a first instance court. The decision is subject to appeal before the Provincial Courts (Articles 376 onwards of LEC). The Provincial Court's decision can then be challenged before the Supreme Court (Articles 401 onwards of LEC), but only to determine the correctness of the lower court's application of the law ("casación") (Article 1692 LEC). Appeal from the Provincial Courts in administrative matters is to the Supreme Court in Madrid.

SWEDEN

Constitution

Sweden has 4 constitutional laws establishing the relationship of the Executive and Parliament to each other and their relationship to the Judiciary and the law. The status and powers of the civil service and various fundamental rights and principles applicable to individuals are contained in the constitutional laws.

Legislature

Both the Executive (see below) and the Parliament are involved in the legislative process. The Executive proposes and initiates legislation. A draft of the legislation is submitted to Parliament along with all the preparatory studies and materials. This whole submission is referred to as a "Bill". It is then the responsibility of the Parliament to vote on the Bill and establish it as law. Statutes in Sweden tend to have fairly short general provisions and therefore it is established practice that the Courts refer to the preparatory works in the Bill for detail and interpretation.

In Sweden there is a distinct division between civil law, that is private law and administrative law. Civil law covers conflicts between private parties (individuals or organisations, such as companies). The state or local government can also be regarded as a private party when, for example, the state acts as a business partner, or when the government's property has been damaged.

Conflicts between a private party and the state or local government are covered by administrative law. From an historical point of view the roles of government and of the administration are very similar and in practice the two roles overlap.

Executive

The civil service is divided into ministries headed by a minister who is a member of the Government. The Government ministry responsible for the environment is the Ministry of the Environment and Natural Resources.

Sweden is divided into 24 counties each with an administrative board of 14 elected members chaired by a Governor. Each county contains a number of municipalities. In 1994 Sweden had 288 municipalities each with elected councils dealing with issues such as social welfare, education, health, town planning and housing.
Judiciary

The judiciary is independent of the Government. The Attorney-General who is a Government appointee and 3 Ombudsmen supervise the administration of justice. Supervision of the implementation of regulations and Acts of Parliament in the public sector is the responsibility of the Attorney-General and the Judicial Commissioner for the Judiciary and Civil Administration.

The courts are arranged on 3 levels. At first instance, there are 97 district courts which deal with both civil and criminal matters. Generally cases are heard by 3 to 4 judges or 1 judge for minor cases. More serious criminal cases are heard by a judge and a jury of 3 or 4 lay assessors. 27 of the district courts are land courts while six act as water rights courts.

Appeals

There are 6 intermediate courts of appeal which usually consist of 4 or 5 judges but in serious criminal cases the court consists of 3 or 4 judges and a 2 or 3 member jury.

The court of last instance is the Supreme Court, and leave to appeal to the Supreme Court is required. Such a leave will be granted if the case is deemed to be important for the application of laws.

Decisions of the county administrative boards may be reviewed by the Licensing Board. Review of the administrative decisions to the Supreme Administrative Court can be requested by parties with standing. The final appeal body for applications for administrative licences under Environmental Protection Act 1969 is the Ministry of the Environment and Natural Resources.

UK

Constitution

The United Kingdom has an unwritten unitary, rather than a federal, constitution providing for one central government. Nevertheless England and Wales, Scotland, and Northern Ireland form three separate jurisdictions with wholly separate courts. Scotland in particular has a system of law very distinct from English law. The constitutional and legislative structure is, however, virtually the same as that for England and Wales. This Report deals mainly with the situation in England and Wales.

There are 3 distinct organs of Government. These are the legislature, executive and judiciary. The United Kingdom has no clear "separation of powers". The legislative function (the enactment of new laws), the executive function (the shaping of policy and the administration of state affairs) and the judicial functions (the determination of disputes between subjects and between subjects and the authorities in accordance with the law) are not precisely identified within the 3
organs of government and there is some overlap between the organs of government in carrying out the functions.

Legislature

The legislature is Parliament consisting of 2 Houses, namely, the House of Commons and the House of Lords. Membership of the House of Commons is by election and membership of the House of Lords depends on holding either hereditary or life peerage; the House of Lords may delay legislation and frequently amends it, but it enjoys little real power to prevent House of Commons measures from becoming law.

Legislation gives substantial powers to Government ministers to issue secondary legislation and sets out the constraints on the exercise of those powers. In other words, primary legislation often operates as a framework for secondary legislation which tends to deal with the practical elements of implementing the law. Secondary legislation, which is contained in a variety of statutory instruments, is usually made up of regulations and orders.

Legislation passed by Parliament may be applicable to either the whole United Kingdom or to the individual jurisdictions within the United Kingdom. It is important therefore when considering legislation to establish which jurisdiction it applies to. An example is the Environmental Protection Act 1990 which applies mainly to England, Wales and Scotland. There are some provisions which apply only in Scotland and others where application to Scotland is excluded. The majority of the Act however does not apply to Northern Ireland.

Within the 3 jurisdictions of the United Kingdom there are 2 traditional sources of law: statute and common law. Statute law is law derived from legislation enacted by Parliament. Common law is law which is derived from judicial precedent either in its entirety (for example, the tort of nuisance) or by providing the interpretation of statute law. Common law precedent binds future decisions of courts of equal or less authority.

Executive

The executive is the Civil Service departments, ultimately controlled by Cabinet Ministers. These Ministers are appointed by the Crown, but are in fact selected by the Prime Minister, who is leader of the political party which holds the majority of seats in the House of Commons, from members of that party in either the House of Commons or the Lords. The Ministers most relevant to environmental matters are the Secretary of State for the Environment who heads the Department of the Environment, and the Minister of Agriculture, Fisheries and Food.

Much of governmental administration however is carried out by local authorities which derive their powers and functions from statute. As with central Government, membership of local authorities is determined by election. It operates basically on a 2 tier system comprising (outside the major conurbations) counties and districts. Each county and district has a council which is effectively
the "local authority" for that area. London is divided into London Boroughs each of which has its own independent local authority.

**Judiciary**

**England and Wales**

The jurisdictions of the civil and criminal courts are as follows: the civil courts in England and Wales broadly consist of, at first instance, the County Court and the High Court, from which there are rights of appeal to the Court of Appeal and, ultimately, the House of Lords.

The County Court's jurisdiction is limited to minor civil claims, and each court hears cases arising in its geographical district. Guidelines state that claims of less than £25,000 should be pursued in the County Court *per se*, and that claims of between £25,000 and £50,000 may be pursued in either the County Court or the High Court. Consideration, in the latter case, should be given to the complexity of the issue, the costs involved (the County Court is a cheaper forum) and the importance of the issues raised (for example, matters of general public interest).

The High Court, which has virtually unlimited civil jurisdiction, is split into 3 divisions operating separate, but not exclusive, jurisdictions. These are the Chancery Division (whose jurisdiction includes, for example, sale of land, redemption of mortgages, dissolution of partnerships), the Queen's Bench Division (whose jurisdiction includes principally actions in contract and tort) and the Family Division (whose jurisdiction includes matrimonial and other family based matters).

Under the existing guidelines the High Court hears cases where the value of the claim exceeds £50,000 or where it is appropriate in the circumstances outlined above. The High Court also has limited appellate and criminal jurisdictions. This is not considered relevant to the study.

Actions by the administrative authorities relating to the remediation of contamination (of land) or pollution/harm to health are pursued in the civil courts. Judicial review, where an application is made by an individual to the court to review the legality of the decision of an administrative body in the exercise of its powers is conducted by a High Court. Claims by regulatory bodies for costs arising out of administrative action taken to clean-up pollution should be pursued as a debt claim in the civil courts.

The criminal system works in parallel to the civil system and consists of, at first instance, the Magistrates' Court and the Crown Court, with rights of appeal to the Court of Appeal and, ultimately, the House of Lords. The Magistrates' Court hears less serious cases which importantly with regard to environmental liability include statutory nuisance proceedings. More serious cases are heard by the Crown Court. Statutory provisions lay down which court has jurisdiction for the various statutory offences (for example, Section 23 of the Environmental Protection Act 1990 provides a detailed list of offences some of which are triable in either court,
depending on the severity of the breach, whilst others are triable only in the Magistrates' Court).

The House of Lords (strictly, its Judicial Committee) sitting in London is the ultimate Court of Appeal for all three jurisdictions.

Scotland

The majority of civil litigation in Scotland takes place in the Sheriff Court. Appeals may be taken to the Sheriff Principal or to the Court of Session. The Court of Session is Scotland's highest civil court. It has 2 branches, an inner house and an outer house. The majority of litigation originates in the outer house as a court of first instance with the inner house mainly existing to hear appeals from that outer house and other lower courts. The House of Lords is the final Court of Appeal in Scottish civil law and can take appeals from the inner house of the Court of Session.

The two main criminal courts in Scotland are the High Court of Justiciary which handles more serious offences and the Sheriff Court which has more limited jurisdiction and powers of sentencing. The High Court sits in Edinburgh and "on circuit" in other Scottish cities. It has both trial and appellate functions. Its appellate functions being under the title of Scottish Court of Criminal Appeal from which no appeal to the House of Lords is possible. Two basic criminal procedures exist. The "solemn" procedure involves trial before a jury of 15 lay members where the judge pronounces on the law and the jury decides on the facts or "summary" where the judge pronounces both on fact and law. The Sheriff Court can hear cases under both procedures. Unlike England and Wales, the environmental regulatory agencies cannot themselves initiate prosecutions. The prosecutions must therefore be referred to the advocates depute in the High Court or the Procurators Fiscal in the Sheriff Court.

Other lesser courts and courts of special jurisdiction include district courts (which are the administrative responsibility of local authorities and which are presided over by lay justices of the peace), a Scottish land court (with jurisdiction over agricultural tenancy and crofting matters) and the lands valuation appeal court.

The courts are administered by the Secretary of State for Scotland through the Scottish Courts Administration, a government department. Development and reform of Scottish law is entrusted to the Scottish Law Commission.

With an exception, the Scottish courts are not under an obligation to follow the decisions of English courts, although Scottish courts would almost certainly follow a House of Lords decision in an English case on construction of a UK statute. The Scottish courts must however follow a decision by the House of Lords in a Scottish appeal. In the case of environmental law where there is relatively little case law as yet, a Court of Session is more likely to follow a precedent set in an English appeal if it felt that it was a fair representation of general jurisprudence on the matter and would do justice between the parties.
Northern Ireland

The system of legislation in Northern Ireland is different from that in Great Britain. Since 1974 Northern Ireland has been governed directly under the provisions of the Northern Ireland Act 1974. Under this Act the bulk of the environmental (and other) legislation in the province consists of Orders in Council issued under Schedule 1 to the 1974 Act. An order in council, as with other secondary legislation must either be approved or dismissed by Parliament in the form which it is presented. This has not in practice made it easy to introduce legislation and there is frequently a delay of two or more years between introduction of legislation in England and the equivalent in Northern Ireland. Indeed some legislation which has been in force in England for a number of years has never been introduced in Northern Ireland. The delays also arise in relation to EU Directives with implementation long after the due date. Accordingly, the legislation in force in Northern Ireland at present reflects the legislation of England and Wales prior to the reforms of 1989 and 1990. In relation to water, the main piece of legislation is the Water Act (Northern Ireland) 1972, air pollution is controlled by legislation essentially the same as that operating in England prior to implementation of Part 1 of the Environmental Protection Act 1990 and waste disposal is controlled under the relevant parts of the Control of Pollution Act 1974. Legislation updating the position in Northern Ireland is programmed to be passed in 1996 and is presently being drafted.

The Courts structure and system for Northern Ireland is the same as that for England and Wales.

Appeals (England and Wales)

The Court of Appeal, civil division hears appeals from the High Court, the County Courts, the Restrictive Trade Practices Court, the Employment Appeal Tribunal and various other tribunals.

The Court of Appeal, criminal division hears appeals by persons convicted and, in certain cases, considers points of law referred by the Attorney-General.

The House of Lords hears appeals from the Courts of Appeal but only with the leave of either the Court of Appeal or the Appeals Committee of the House of Lords. Appeals do not have to be on a point of law. It is possible, in limited circumstances, to appeal directly from the trial court.

Appeals against High Court decisions, in the area of common law, will be to the Court of Appeal and then to the House of Lords, on matters of law and not on fact. It is necessary to obtain leave to appeal to both houses before lodging an appeal. Leave can be granted either by the court giving the decision to be appealed against or by the court to whom the appeal will be made. In certain cases of legal importance appeal can be direct to the House of Lords from the High Court with the leave of the House of Lords.

STUDY 2
AUSTRIA

Constitution

The present written Austrian Federal Constitution dates from 1920 and was revised in 1945. One the main principles of the Austrian Federal Constitution is the principle of federalism ("Austria is a federal state"). Other principles are the principles of legality, democracy and republic. The Austrian Federal Constitution allocates the powers for legislation, jurisdiction and administration between the federal state ("Bund") and the nine provinces ("Bundesländer").

All competencies which are not explicitly the responsibility of to the federal state rest within the competencies of the provinces. As the environment was not a prominent issue at the time when the Austrian Federal Constitution was drafted there is no general competence by the federal state for environmental matters. But it is to the state that many of the important competencies like the competence for the legislation and the execution of civil law (and therefore also the legislation of civil liability) rests with the federal state. As consequence the Austrian courts are federal authorities.

Legislature

There is a National Assembly with two chambers: the National Council and the Federal Council. The National Council (Nationalrat) has 183 members who are directly elected members for a 4 year term by proportional representation. There are 43 regional, 9 state constituencies and 1 federal constituency. The Federal Council (Bundesrat) has 6 members appointed from the 9 states for the duration of the relevant State Assembly term. The President appoints a Federal Chancellor from the party which wins the most seats in the National Council in the general elections who then nominates a Vice Chancellor and Ministers from whom the President appoints a Council of Ministers for the Chancellor to lead. Each of the provinces has an elected assembly and each of the municipalities (Gemeinden) has a Council.

The Austrian Federal Constitution contains no comprehensive definition of "environmental protection". Consequently, it does not specifically delegate responsibility for the environment to the federal Government or the provincial authorities. This means that legislation regarding the environment is very fragmented.

Executive

The principle of federalism manifests itself in the way legislative and administrative powers are allocated to the provinces. For example, the provinces participate in the enforcement of legislation passed by the Federal Council and also introduce environmental legislation of their own. Certain powers are handed down further to the municipalities.
The Federal Ministers of the Environment, of Agriculture and Forestry, of Economic Affairs, of Traffic and Public Economy have responsibility for environmental matters (see 3).

**Judiciary**

There are about one hundred and ninety local courts (Bezirksgerichte), about twenty provincial and district courts (Landes- und Kriesgerichte) and four higher provincial courts (Oberlandesgerichte). The highest court in Austria is the Supreme Court (Oberster Gerichtshof) in Vienna.

In civil matters, the competent courts for claims up to ATS 100,000 are the district courts, while the provincial courts are competent for claims of more than ATS 100,000.

Of the administrative courts the most important for the environment is the so-called Independent Administrative Senate (Unabhängiger Verwaltungssenat). It is an administrative tribunal (in the sense of Article 6 of the Human Rights Convention) which has been established in each province since 1990. It deals with environmental matters as a final instance tribunal for administrative appeals.

Penal law may be enforced by both the courts and the administrative authorities. They can both establish the facts and impose a suitable penalty. It has to be established by law which authority is competent.

**Appeals**

An appeal from the district court is to the competent provincial court and from the provincial court to one of the four appeal courts. If certain minimum amounts are met, a further appeal to the Supreme Court is possible. However, the Supreme Court does not decide questions of fact, only questions of law.

Appeals in criminal matters from the district courts are to the provincial courts. Appeals from cases in the provincial courts go to the Court of Appeal although appeals to set aside a judgment go to the Supreme Court.

Appeals on decision of the authorities when all non-judicial appeals are exhausted are to the administrative court (Verwaltungsgericht).

**BELGIUM**

**Constitution**

Constitutional reforms in 1980, 1988 and 1993 have transformed Belgium into a federal state with 3 regions based on territory (Flanders, Wallonia and Brussels) and 3 communities based on language (the Flemish community, the French community and the German speaking community).
The separation of legislature, executive and judicial powers is a key principle of the Belgian legal system. For more details, reference should be made to the Belgian Constitution set out in writing and the Special Law of Institutional Reforms of 1980, as amended in 1988 and 1993.

**Legislature**

The legislative power is vested in the Monarch and the Parliament (the 2 chambers) at federal level, and in the Council (chamber of regional Members of Parliament) and the Government at regional or community level.

Since 1995, the Parliament has consisted of a single "Chamber of Representatives" with 150 members and a Senate of 71 members (not including the members of the Monarchy who are senators by right).

The members of the Chamber of Representatives are elected for a term of four years from twenty one constituencies by proportional representation. Of the senators' 25 and 15 are elected by a Flemish and French electoral college respectively and a further 21 are elected by community councils (10 Flemish, 10 French, 1 German). The senators then appoint a further 6 Flemish and 4 French senators.

The Parliament has competence in relation to constitutional reform, federal finance, foreign affairs, defence, justice, internal security, social security and health. The Senate is generally only competent to revise legislation, however, in relation to constitutional reform and international treaties it has full competence alongside the Chamber of Representatives.

Each of the communities and regions elect parliaments from which governments are formed. The Flanders Region and Community have a single parliament while the Walloon Region and French Community have separate parliaments. There are also parliaments for the Brussels Region and German speaking Community. Regional parliaments have a wide range of legislative competence and raise their own revenues although, under certain circumstances, funds are available from the federal budget.

The Belgian State Reform Law 1980 allocated most legislative and governmental powers in relation to the environment to the three separate regions of Belgium. Federal legislation still applies but only where not superseded by regional laws.

Each region is now exclusively competent within its jurisdiction to legislate on environmental matters (except for three issues left to the federal State: product standards, ionising radiation and the transportation of waste). However, the Constitution remains the supreme law and until a region has issued new legislation on any matter, the national laws remain in force. Conflicts of competencies are dealt with by the Court of Arbitration (Cour d'arbitrage/Arbitragehof).

**Executive**
Executive power is vested in the Monarch (the federal Government) or in the regional or community governments. The executive is in charge of ensuring the execution and implementation of the various legal provisions. Administrative services have been specially created within each regional ministry to regulate offences and specific institutions linked to those regional ministries have been established.

**Judiciary**

The judicial courts and tribunals are competent to deal with civil rights and interests and with criminal matters. The most relevant judicial bodies are: the courts of first instance; the courts of appeal; and the Supreme Court: Cour de Cassation/Hof van Cassatie.

The administrative courts have also an important role in dealing with environmental issues. They are the Conseil d'Etat/Raad van Staat which considers the legality of administrative acts; and the Court of Arbitration which settles questions of competencies and of the respect of the constitutional principles of equality, non-discrimination and freedom of education, (for example, the competence of the federal legislator in imposing ecotaxes).

**Appeals**

The five courts of appeal hear appeals against decisions of the courts of first instance, in addition to appeals in certain circumstances as required by law. Each court comprises of a civil, criminal and juvenile chamber.

The Supreme Court considers questions of law based on the judgments of lower courts. There are 3 chambers dealing with civil and commercial matters, criminal matters and labour court matters. On reversing a decision, the case will be returned to the appropriate court for a re-trial. An appeal may be made to the Supreme Court where there has been an incorrect application, non-observance or misinterpretation of the law by a lower court.

The Supreme Court will not review decisions which should be appealed further, even if the time limit for doing so has expired and it will only consider appeals in cases where all other remedies have been exhausted.

The highest court of appeal in administrative matters is the Conseil d'Etat/Raad van Staat.

**GREECE**

**Constitution**

A new written Constitution came into force in June 1975. Article 24 of the Constitution binds the State to preserve and protect the natural and cultural environment.
Legislature

The legislature is the 300 member Chamber of Deputies. Members are elected for a term of 4 years by proportional representation. Extra seats are awarded to the party which wins the most votes in the election. The President is elected for a 5 year term from the Chamber of Deputies.

The legal framework in Greece is determined by legislation; custom; and case law.

The Constitution underpins both the public law and private law systems: private law (civil and commercial law) governs disputes between individuals (legal entities, natural persons and the State); public law is divided into criminal and administrative law, and governs relations between individuals and the State. Article 94 of the Constitution of 1975 provides for 2 jurisdictions: the jurisdiction of the Civil Courts, which consist of the courts of first and second instance and the Supreme Civil Court (Arcios Pagos); and the jurisdiction of Administrative Courts, which consist of the courts of first and second instance and the Supreme Administrative Court (Conseil d'Etat).

Executive

The Ministry of Environment, Physical Planning and Public Works is the most important administrative body for environmental protection. Other ministries also have important jurisdiction in this field: the Ministries of Agriculture, Shipping, Civilisation, Tourism, Internal Affairs and Industry.

Under Article 24 of the Constitution, the State is bound to protect the natural and cultural environment. Specific environmental provisions and the provisions of the general Civil Code provide a framework for environmental protection and restoration. The competent authorities issue administrative legislation which implements the general principles and practical basis of the law. However this environmental framework is not yet complete nor is it always sufficiently effective.

Judiciary

In Greece there are 3 divisions of the courts: civil; administrative; and criminal.

The civil courts hear all contentious civil matters as well as some non-contentious matters.

The Special Supreme Court is an ad hoc constitutional court. It adjudicates on matters such as review of elections, constitutionality of acts of parliament, disagreement between Supreme Courts and interpretation of acts.

Judges are appointed for life by the President and are fully independent. Judicial deliberations are held in camera but the proceedings and judgments are in open court.
Appeals

The highest administrative court is the Council of State which was founded in 1928 and was based on the French Conseil d'Etat. This court is an administrative court of in some cases both first and last instance which can hear review applications in respect of administrative instance administrative courts. Appeal from the second instance is to the Council of State.

The Supreme Civil Court hears final appeals on points of law in both civil and criminal cases. There are special courts hearing matters of miscarriages of justice and charges brought against the Ministers or President.

ICELAND

Constitution

The Constitution of the Republic of Iceland 1944 in the central source of law. Iceland therefore has a written constitution.

Government in Iceland is divided into the legislature, executive and judiciary.

Legislature

The Althingi, the legislative body, consists of 63 members who sit in a single house. 54 seats are divided among the constituencies. Of the remaining 9 seats, 8 are divided among the constituencies according to the number of votes in the last election and 1 seat is allotted to the party with fewest seats as compared to its number of votes.

No general legislation laying down the rules on environmental liability has been enacted. For this reason, general principles of the Icelandic legal system must be applied when pursuing remedies for environmental damage.

Executive

The Government is divided into 14 ministries. The Ministry of Environmental Affairs administers and supervises most environmental matters, but in some instances these fall within the remit of other ministries, such as the Ministry of Industry, Ministry of Agriculture, Ministry of Health Affairs, Ministry of Education and Ministry of Foreign Affairs.

There are approximately 190 communes which elect councils. Most of the communes appoint representatives to sit on district councils which promote inter-communal co-operation.

Regulatory authorities have been established to control certain areas of environmental concern such as the Offices of Radiation Protection, Maritime Affairs Institute, State Work Environmental Control, State Planning Office,
Committee on Nature Protection etc.. Other areas of environmental concern are administered by the municipalities in each community.

The main task of the different regulatory authorities is to supervise the relevant areas and to conduct research work. In some instances, the authorities must grant licences before a project can be undertaken or must comment on its effect on the environment. Some ministries grant licences for access to limited resources, for example fish, wildlife and minerals. Others, for example issue building licences.

The focus for environmental matters has been on the marine pollution of the ocean since the fishing industry accounts for approximately 70% of the national income. The State is a party to many international conventions relating to this issue.

**Judiciary**

In general, there are 2 levels of courts in Iceland: the 8 district courts (the courts of first instance) and the Supreme Court of Iceland (the Court of Appeal). These courts hear civil, criminal and administrative matters. The courts rule both on civil and criminal liability, depending on the power granted by the relevant statute and general principles of Icelandic law. The basic civil liability rules in Iceland, namely the *culpa* rule (a fault-based rule), principal liability and some strict liability rules, are not based on legislation but have been developed by the courts. Accordingly, both courts are relevant in relation to environmental matters.

**Appeals**

Appeals on both civil and criminal matters from the eight district courts are to the Supreme Court of Iceland. Supreme Court decisions are final and cannot be appealed. Where the value of the matter is less than ISK 150,000 the case cannot be appealed to the Supreme Court.

Parties can generally appeal against decisions made by the regulatory authorities or the municipalities and request a revision by a Minister in the relevant area.

**IRELAND**

**Constitution**

The 1937 Constitution of Ireland established Ireland as an independent legal entity. It is a written constitution and is the sole legal basis for the validity of the institutions of state, including the court system. It is therefore the ultimate source of legal authority in Ireland. The head of state is the president who has the power to refer legislation which may be unconstitutional to the Supreme Court.

While the new structures of state, such as a new parliament consisting of two chambers (Dáil Éireann and Seanad Éireann) and a new courts system, were established by the Constitution, the legal rules which were to be applied in the new state were to a large extent those which had been in operation prior to
independence in 1922. Even today, much of the law which operates in the state pre-dates 1922.

**Legislature**

The National Parliament is made up of the President, Dáil Éireann (House of Representatives) and Seanad Éireann (Senate). Dáil Éireann has 166 members elected by direct adult suffrage. Seanad Éireann has 60 members. The Prime Minister nominates 11, the universities elect a further 6 and the remaining 43 are elected from 5 panels each covering different sectors of public services. The role of Seanad Éireann is the consideration and amendment of legislative Bills referred to it from Dáil Éireann. It must make any amendments within 90 days but has no power of veto.

Where legislation does not exist, the laws that operated prior to 1922 are rules of common law as developed by judges by the establishment of precedent.

In consequence, where legislation has not yet been passed to deal with a particular area of law, the judges continue to be the sole source of the law to be applied in such situations. Therefore, in Ireland, in spite of increased legislation, a substantial amount of law continues to be laid down by the courts as precedent which must be followed.

Administrative law relates to the organisation, powers and duties of administrative authorities such as local authorities or public authorities. Each authority operates within the boundaries set out by statutes and statutory instruments.

Private law is the area of domestic law dealing primarily with the relationship between individuals within the state, such as the law of contract or of tort.

**Executive**

Executive power is exercised by or on the authority of the government. The Prime Minister (Taoiseach) is head of the government which reports to Dáil Éireann. The Prime Minister is appointed by the President on nomination of Dáil Éireann. He appoints a deputy Prime Minister (Tanaiste) and 15 ministers to form a Cabinet. Administrative powers are distributed between a number of different government departments.

In environmental matters the relevant administrative bodies are the Department of the Environment (though other Government departments do have limited roles relating to the environment), the local authority (including Planning, Fishery, Harbour and Sanitary Authorities), An Bord Pleanala (the Planning Appeals Board) and the Environmental Protection Agency.

There are also elected local authorities at county, county borough and urban district level.

**Judiciary**
The relevant judicial bodies are the courts. In relation to the environment, 4 courts are of importance. They are the District Court, the Circuit Court, the High Court and the Supreme Court which were all established by the Courts (Establishment and Constitution) Act 1961 (as amended).

The District Court is a unitary court in the sense that it is presided over by the President of the District Court, who has complete administrative control over the assignment of the fifty district judges. It is a court of local and limited jurisdiction in the sense that a district judge has responsibility for a particular district court area and has no jurisdiction to act outside that geographical location. It is limited, in dealing with civil cases, in relation to the amount of damages that it may award (up to a maximum of £5,000). In criminal cases, it is limited to offences which can be summarily prosecuted.

The Circuit Court is, as with the District Court, a unified court of local and limited jurisdiction. Its jurisdiction, geographically, is greater than the District Court, there being a Circuit Court for each of Ireland's 26 counties and, in civil cases, it is the appellate court for the District Court. It has a monetary jurisdiction up to a maximum of £30,000.

The High Court is perhaps the most important court in the environmental area. The High Court has full "jurisdiction": it cannot be prevented from having some role such as on appeal or by way of its traditional supervisory functions, and in what is now the procedure for judicial review. For example, under the Air Pollution Acts the High Court is given specific powers to prohibit or restrict emissions or even to impose conditions that it sees fit. The High Court is also, for example, given specific powers under the Planning Acts and the Water Pollution Acts.

The final court of note is the Supreme Court. This is the court of final appeal except in cases involving the Constitution where it may be the designated court of reference.

Appeals

Appeal from a District Court is to the Circuit Court. Cases commenced in the Circuit Court may be appealed to the High Court. The judge in a Circuit Court may refer a case to the Supreme Court for an opinion on a point of law. There is a right of appeal from the High Court on points of law where the case commenced in the High Court to the Supreme Court. Appeals from the Circuit Court by way of case stated may be heard by the Supreme Court. Also cases appealed from lower courts to the High Court may be appealed with leave of the High Court to the Supreme Court.

In criminal matters appeals from the District Court are to the Circuit Court. Appeal from the Circuit Court is possible on the grounds that the judge erred in law. Such cases go to the Court of Criminal Appeal. Cases in the Central
Criminal Court may be appealed to the Court of Criminal Appeal and then to the Supreme Court but this requires leave of the judge.

In administrative matters the High Court has the jurisdiction to judicially review administrative decisions and appeal is to the Supreme Court.

LUXEMBOURG

Constitution

The Luxembourg Constitution is a written constitution dated 17th October 1868. The Grand Duchy of Luxembourg is a constitutional monarchy.

There is separation of powers between the legislature, executive and judiciary.

Legislature

The legislative power is vested in the Grand-duc and the Parliament. There is a maximum of 60 members of Parliament who are elected every 5 years. Parliament votes on legislative proposals submitted to it by the Government or prepared "in house".

There is also a Council of State with 21 life members who are appointees of the Sovereign. It has an advisory role in relation to proposals for legislation and any other matters to which it is referred.

The Luxembourg legal system is divided between the private (civil and criminal) jurisdiction and the administrative jurisdiction. As in neighbouring France and Belgium, case law is not binding, but is indicative.

Executive

The executive power is vested in the Grand-duc, who nominates (and dissolves) the Government, headed by a Prime Minister and with at least 3 ministers. The Government can be censured by the Parliament.

The relevant administrative bodies are the Minister of the Environment assisted and advised by the Administration of Environment, whose decisions may be reviewed on appeal from individuals, by the Council of State.

Judiciary

Judicial power is divided between local courts, district courts (civil, commercial and criminal), the Court of Appeal and the highest degree of jurisdiction, the "Cour de Cassation".

Questions relating to liability and remedies for environmental damage will be submitted to the civil jurisdiction of the legal system, whereas recourse against administrative acts and decisions will be submitted to the administrative
jurisdiction (Council of State). Enforcement of and claims for damages that may arise from a decision of the administrative jurisdiction are brought before the civil courts. Matters relating to fines are brought before the criminal courts.

**Appeals**

Appeals from the local courts may be made to the district courts. Further appeals are made to the Court of Appeal. The Cour de Cassation may only hear cases on points of law and may not examine the facts. If it reverses a ruling on the law it then remits the case to the lower court for further consideration.

The Conseil d'État hears appeals on administrative matters.

**NORWAY**

**Constitution**

The Norwegian legal system originates from the Norwegian Constitution of 1814. The constitution in Norway is written. It is essentially a civil law system in that it is based on a comprehensive set of laws and regulations rather than only on case law.

**Legislature**

The parliament is the Storting which has 165 members elected by proportional representation from the 19 districts. The Storting is divided by way of election into the Lagting and Odelsting. The Lagting has one quarter of the 165 members and the Odelsting has the remaining three quarters. Each of the Tings appoints its own President. The two separate Tings deal with matters of legislation. If the Lagting and Odelsting do not reach agreement, the Storting must consider the Bill and can only pass the legislation by a two thirds majority. Similarly the Storting must vote by two thirds majority to change the Constitution.

**Executive**

The executive is the Cabinet which operates under the authority of the Monarch. The ministers who make up the cabinet may attend the Storting and take part in debates but may not vote in the Storting.

The administrative bodies are organised in a hierarchy, with the Government at the top and the municipalities at the bottom. The Government may instruct and delegate functions to lower administrative authorities and even to private legal entities. Therefore, the responsibility and the authority of lower administrative bodies are based on statutory provisions, regulations issued by Government offices and delegation. The lower administrative authorities have a legal right of delegation within their sphere of competence and this right is frequently exercised.

The administrative bodies are actively involved in the enforcement and implementation of legislation in most legal areas.
**Judiciary**

The Norwegian courts are organised in a hierarchy:

- the city and district courts ("By/erredsretten");
- the High Court ("Lagmannsrett");
- the Supreme Court ("Høyesterett").

The courts hear both civil and criminal matters. All civil actions must be filed with the city or district Courts. Appeal is to the High Court and, provided that certain requirements are met, to the Supreme Court. The primary function of the courts is to resolve legal conflicts and interpret existing laws and regulations through individual rulings. Only judgments of the Supreme Court may form binding precedents, although lower court judgments may have persuasive value.

As the description above indicates, the Norwegian system does not include any system of administrative courts, except in the area of social security.

In most cases, an attempt must be made to settle the dispute by way of mediation before a civil case is presented to the court. This mediation is carried out by a Reconciliation Council, which mainly consists of non-lawyers. If no amicable settlement is reached or the issue falls outside the competence of the Council, the dispute will be referred to the ordinary courts. Cases against the Government or public bodies, and cases where the parties involved have already been assisted by lawyers, may be brought directly before the courts of first instance.

**Appeals**

Appeal from the city or district court judgments in civil matters is to the High Court and if leave is granted by a special board of 3 judges to the Supreme Court. The board can also give leave for direct appeal from city or district courts to the Supreme Court.

In criminal matters appeal is to the High Court and if leave is granted by a special board of three judges to the Supreme Court.

Appeals in administrative matters may be made to the City and District courts and on to the High Court and the Supreme Court.

**PORTUGAL**

**Constitution**

The Constitution of 1976, was replaced in 1982 by a new Constitution which abolished the Council of the Revolution and reduced the powers of the President.

The Constitution establishes a right to live in a healthy and ecologically balanced environment (Article 66 of the Portuguese Constitution). This general principle is
applied to relevant subordinate legislation and imposes an obligation on the legislature.

**Legislature**

The National Assembly is the only chamber of the legislature and is elected by proportional representation for a term of 4 years.

The Portuguese legal system is based on a civil law system. It is therefore dominated by rules originating from statutes which are laid down in a number of codes (about 20) and separate bills published in the Official Gazette ("Diário da República").

The sources of national law are, in accordance with Articles 1 to 4 of the Civil Code, the statute and "assentos" (that is, certain mandatory precedents adjudicated by the Supreme Court under certain limited conditions).

Private law governs the relationship between individuals/entities or between individuals/entities and the state, provided that the state is not intervening in that relationship in the exercise of its authority (ius imperii). Public law governs the relationship in which at least one of the parties is acting under public authority.

**Executive**

The executive power is held by the President who is directly elected for a term of 5 years. The President appoints the Prime Minister who recommends members of the Council of Ministers for appointment by the President. Secretaries and Under-Secretaries of State are appointed in the same way. They are not, however, part of the Council of Ministers.

The relevant administrative bodies, other than the administrative courts, are the Government and local municipalities.

**Judiciary**

The relevant judicial bodies are the courts. Apart from Lisbon, Oporto and a few other districts, the courts of first instance have a broad jurisdiction, which means that they cover almost all matters, such as civil, commercial, criminal, family, maritime, etc..

There are, however, some matters which are always heard in specialised courts spread throughout the country, namely administrative courts, fiscal courts and industrial courts.

The courts of first instance have jurisdiction in their particular county and hear all cases on civil and criminal matters. Civil matters over P.Esc 120,000 start in the second instance courts. They also hear civil and criminal matters. The Supreme Court appeals from the lower courts and matters beyond the jurisdiction of the
second instance courts, that is P.Esc 400,000. There is also a constitutional court hearing matters of the Constitution.

Appeals

Appeals from the court of first instance are to the court of second instance and any appeal from the second instance court is to the Supreme Court.

SWITZERLAND

Constitution

The Federal Constitution of Switzerland of 29 May 1874 is a written constitution. It allocates powers between the federation and its members, the 26 Cantons. Matters not explicitly mentioned in the Federal Constitution are subject to legislation by the Cantons. The powers at the federal level are separated into the legislature, executive and the judiciary.

The same structure is adopted at the cantonal level, except that their legislative bodies have only one chamber. The judiciary consists of cantonal courts and, below them, district courts.

Legislature

The federation has sole competence in certain areas such as water pollution, which since 1971 has been extended to the protection of human health and the environment, particularly in relation to noise and air pollution. As a result of the increased federal competence, cantonal competence has been restricted leaving only residual power to enact substantive environmental rules. Enforcement of federal law is however through the cantons.

The Congress (Bundesversammlung) elects the members of the Government and the Supreme Court. It is divided into a Council of States (Ständerat, 46 members) and a National Council (Nationalrat, 200 members). Both Chambers have the same tasks and power in the legislative process. In the Bundesrat, any member or either chamber may propose legislation.

The Swiss legal system is a civil law system. Private law is predominantly a federal matter (Swiss Civil Code, Code of Obligations, including contractual liability and civil liability; Article 64 of the Constitution).

Amendments to the Constitution must have the consent of both the majority of the cantons and the people. Acts are only voted on if 50,000 citizens require it and are passed by a simple majority.

Executive

The Government of 7 members (Bundesrat) exercises executive power. The Bundesrat has 7 members elected each from a different canton for four years by
the Congress. The 7 members are each ministers for the different government departments. Frequently, the power to enact legislation is at federal level, while law enforcement is delegated to the cantons. This is the case for legislation relating to environmental protection.

**Judiciary**

The federal Supreme Court (Bundesgericht) consisting of 30 ordinary and 15 extraordinary members forms the judicial branch. It sits at Lausanne and has a President and Vice-President elected for 2 years and who are not available for re-election. Judges of the Supreme Court are elected by the federal Congress. The Supreme Court has jurisdiction, both original and final, on matters:

- between the federation and cantons;
- between cantons;
- between corporations or individuals and the cantons or federation;
- where legislation or the constitution confers jurisdiction;
- where parties forward their case to the court.

**Appeals**

The Supreme Court also acts as the final court of appeal in relation to decisions of federal authorities or cantonal authorities applying federal law. The Supreme Court has a number of chambers dealing with different areas of law, including two public law courts, two civil law courts and federal criminal law courts.

The cantonal offices for environmental protection are responsible for the prevention of pollution and the enforcement of environmental standards. Their decisions are subject to appeal to higher cantonal administrative bodies, the cantonal government, cantonal administrative appellate courts (which differ from canton to canton) and, ultimately, the Supreme Court. Claims for damages, or for compensation of expenses incurred in connection with remedial measures, must be brought before the ordinary courts.
2. THE LEGAL BASIS OF CIVIL LIABILITY

STUDY 1

USA

State tort law is a mixture of strict (abnormally dangerous activities, nuisance) and fault-based (negligence) principles. Fault-based liability generally arises from negligence or a nuisance. Strict liability has been developed in the courts for "ultra hazardous" and "abnormally dangerous" activities.

Proof of fault-based liability requires damage, caused by the defendant acting without reasonable care (see 5). The basic requirements for strict liability are damage caused as a result of an ultrahazardous or abnormally dangerous activity irrespective of any fault on the part of the defendant (see 6).

Damages for injuries to persons or private property are recoverable where the action is brought by the injured party in person in respect of certain pollution events. The scope of available damages is wide and extends to economic loss, emotional distress and loss of quality of life. Ecological damages per se cannot be compensated in state tort law.

The scope of remedies available includes punitive damages, injunctive relief and recovery of clean-up costs.

However, the primary basis of the statutory liability system for remedying environmental damage is the federal Comprehensive Environmental Response, Compensation and Liability Act, also known as "CERCLA" or "Superfund" (42 USC paragraph 9601 onwards). Two major sets of damages are covered by CERCLA, namely: clean-up costs; and natural resource damages (that is, damages to the "unowned" environment or ecological damages). Natural resource damages may only be recovered by government trustees of these resources. Although CERCLA is essentially administrative in nature individuals may reclaim costs of clean-up under it. A majority of the fifty states have adopted "Superfund" type state statutes based to varying degrees on CERCLA. (For details of variation between state laws see S. Cooke, The Law of Hazardous Waste, paragraph 17.01 (Matthew Bender & Co, 1995)).

Both tort law and CERCLA are not limited in scope to any particular industrial sectors. CERCLA does, however, exclude in its definition of "hazardous substance" (and thus from CERCLA liability) certain substances such as petroleum, nuclear materials and agricultural pesticides. These are regulated under separate legislation (see 6).

DENMARK

There is no civil code covering "classical civil liability" otherwise known as "ordinary civil liability" or "principles of neighbourhood disputes". Such liability in Denmark is based on case law covering liability for personal injury, property
damage, and economic loss. It is fault-based but the higher courts and the Supreme Court have made exceptions in cases where damage has been caused by commercial hazardous activities, by either shifting the burden of proof from the plaintiff to the defendant (that is, "presumptive liability") or in very few cases introducing strict liability. However, the higher courts and the Supreme Court have rejected strict liability for clean-up costs other than that provided by legislation. For fault-based liability the elements of damage, causation and negligence must be shown.

The Compensation for Environmental Damage Act, 225/1994 introduces strict liability for environmental damage caused by major and hazardous plants listed in the Annex to the Act. For strict liability damage and causation must be shown, with causation being the most difficult element to prove. The scope of legal action for damages under Act 225/1994 is the same as for "classical civil liability".

The list of industrial activities is finite, and additions to the list can only be made by Parliament. The Act does not cover environmental damage caused by mobile sources, pipelines, sea-going vessels and offshore platforms.

The following types of industrial activities are listed:

- manufacturing, processing, surface treatment of iron, steel, metal, wood and plastic;
- processing of certain listed types of raw material;
- winning and treatment of mineral oil, mineral oil products, asphalt and natural gas;
- manufacturing of chemicals and glue;
- processing of vegetable raw materials;
- manufacture of feedstuffs;
- printing works;
- processing of animal raw material;
- generation of power and heat;
- motor racing circuits and airfields;
- manure storage tanks;
- fish farms;
- manufacturing of protein, pectin and enzymes;
- crematoria;
- companies possessing an underground oil tank of more than 6000 litres; and
- plants for storage, deposit, treatment, destruction and recycling of waste.

To have legal standing an individual must have both an interest involving an injury to either person or property and a global interest such as avoiding "substantial change" to a neighbourhood.

Under "classic" civil actions damages cover economic loss associated with damage to property. Non-economic loss including ecological damage is only compensated where the governing statute expressly provides it shall be
recoverable. The Environmental Damage Compensation Act 225/1994 only came into force on 1 July 1994 and so far there have been no cases pursuant to it. It has, however, superseded classic civil liability in relation to claims for environmental damage.

FINLAND

Under the new Environmental Damage Compensation Act, 737/1994 which entered into force on 1st June, 1995 liability is strict. It is a comprehensive act which applies to all activities which have "harmful consequences" for the environment. There is no list of activities covered and such activities have not been defined specifically. The courts will have to develop rules as to how this should be interpreted. Under the Environmental Damage Compensation Act 737/1994 operators are strictly liable for environmental damage. Strict liability arises where the plaintiff has suffered damage and can prove that the causal link between the activity and the damage is probable. It does not apply to areas that are regulated by special legislation, such as liability for nuclear or oil pollution damage or damage occurring during transport, the latter to some extent being fault-based (see 6). However, roads, ports and airfields are covered.

Before the Act, civil liability for environmental damage had to a large extent been regulated by general rules of tort, specifically the Tort Act 412/1974, the Neighbour Relations Act 26/1920 and the Water Act 264/1961. These Acts have now been amended so that the new Environmental Damage Compensation Act, 737/1994 will apply where environmental damage has occurred within the scope of these Acts. Liability under the general rules of tort is fault-based. The recoverable elements which the plaintiff must prove are a negligent act or omission, damage and causation.

However, compensation for damage caused by the lawful pollution of surface waters will remain subject to the Water Act, 264/1961. Under this Act, compensation is awarded by the Water Court ex officio where damage has occurred or is anticipated to occur by permitted discharges or in some cases separately. The compensation is often awarded on the basis of loss of property values. Unlawful pollution of surface waters and all pollution of groundwater is covered by the new Environmental Damage Compensation Act 737/1994. At present the most significant amounts of compensation for environmental damage paid yearly in Finland result from decisions of the Water Courts rather than the general courts.

Supreme Court decisions on the Water Act 264/1961 are as follows:

- 1974 II 73: compensation was awarded for reduction in fishing yield due to an action undertaken on the basis of a permission granted in accordance with the Water Act 264/1961, since the right to fish was a benefit with economic value and based on the proprietorship of the water area;
- 1983 II 71: total fish death occurred in an area of water adjoining a shore area which was suitable for holiday and other recreation uses. The fish death was caused by a lawful action in accordance with the Water Act 264/1961. The owner of the shore area was, independent of his right to the water area, entitled to compensation for diminution in market value of the shore due to the fish death; and

- 1984 II 134: waste water was discharged into the sea on the basis of a permission granted under the Water Act 264/1961, as a result of which damage was caused to the fish stock in a public water area. The State was not entitled to compensation for diminution in fishing yield.

Under civil law in Finland, including the new Environmental Damage Compensation Act 737/1994, damages generally include losses with some economic value. Compensation for purely ecological damage to the environment is not available, however, under the Environmental Damage Compensation Act 737/1994 reasonable costs of clean-up and restoration of environmental damage including ecological damage may be claimed by individual plaintiffs or the authorities.

FRANCE

Articles 1382 to 1386 of the Civil Code provide for two different types of liability, namely, liability for negligence (for individual actions or omission) (1382 and 1383 and 1384 at line 2); and non-fault (strict) liability for persons, things or animals in one's custody (1384 to 1386), as follows:

- 1382 : any act which causes damage to a third party obliges the wrongdoer to repair it ("Tout fait quelconque de l'homme, qui cause à autrui un dommage, oblige celui par la faute duquel il est arrivé, à le réparer.")

- 1383 : each is liable for damage caused not only by his acts, but also by his negligence or carelessness ("Chacun est responsable du dommage qu'il a causé non seulement par son fait, mais encore par sa négligence ou son imprudence.")

- 1384 (1st paragraph): each is liable not only for damage caused by his acts, but also for damage caused by persons or things in his custody ("On est responsable non seulement du dommage que l'on cause par son propre fait, mais encore de celui qui est causé par le fait des personnes dont on doit répondre, ou des choses que l'on a sous sa garde.");

- 1385 : each is liable for animals he owns or uses;
Liability for negligence has three essential elements namely; a harmful event resulting from a wrongful act or omission, damage suffered by the victim and a causal connection between the harmful event and the damage suffered.

Strict liability arises where a harmful event results from a potentially dangerous thing or activity; a victim suffers damage, and a causal link exists between the harmful event and the damage suffered.

Article 544 of the French Civil Code is the basis for a specific type of civil (strict) liability, that is, liability for causing neighbourhood disturbance, as follows:

- ownership is the right to use and enjoy things in the most absolute way, provided that they are used in a manner which does not breach law and regulation ("La propriété est le droit jouir et disposer des choses de la manière la plus absolue, pourvu qu'on n'en fasse pas un usage prohibé par les lois ou par les règlements.")

This type of liability falls in the category of liability for individual behaviour but, unlike Articles 1382 and 1383, it does not require any fault or negligence: the only requirement is the abnormality of the alleged neighbourhood disturbance. Case law has played an important role in the evolution of this type of liability.

Article 1382 is not relied upon as much as Article 544, as proof of fault and causation under Article 1382 is difficult. Article 544 is particularly used for neighbourhood nuisance, such as noise nuisance etc.

Specific legislation regulates liability for damage arising out of certain activities (see 6).

With respect to environmental civil liability the type of damages available are described under 14.

GERMANY

A new law on environmental damage (Umwelthaftungsgesetz (UmweltHG)) came into force on 1st January 1991. It covers claims concerning personal damage or damage to private property arising from specific plants listed in the appendix to UmweltHG. The most important innovation to be introduced by UmweltHG is strict liability (Gefährdungshaftung) under Paragraph 1 UmweltHG which states:

"The "proprietor" of a plant included in Appendix 1, is required to compensate any person who is killed or injured, suffers damage to health or damage to property as a result of the environmental impact of the plant."

The plants listed in Appendix 1 fall within the following industrial activities:
- thermo-electric, mining and energy industries;
- non-metallic mineral, glass, ceramics and building materials industries;
- steel, iron and other metal industries;
- chemical, pharmaceutical and oil industries;
- plastics industry;
- timber industry;
- waste industry;
- storage of dangerous substances.

Under the "old law", prior to the UmweltHG, no homogenous system for environmental damage existed. It was mainly dealt with by the general civil liability rules provided for in the general Civil Code (Bürgerliches Gesetzbuch (BGB)) and in particular by the provisions of paragraphs 823 and 906 BGB and paragraph 22 of the Law on Water Resources Management (Wasserhaushaltsgesetz (WHG)). These provisions are still in force.

Paragraph 823 BGB states:

"Liability for compensation:

(1) A person who, intentionally or negligently, unlawfully injures the life, body, health, freedom, property or any other right of another person is bound to compensate him for any damage arising therefrom.

(2) The same obligation arises in relation to a person who breaches a statutory right intended for the protection of another person. The obligation to compensate will only arise if the right has been breached intentionally or negligently, even if the statutory right does not require such intention or negligence."

(See 10).

The requirements for liability under paragraph 823 BGB are therefore:

- injury to life and limb, health, property or intervention in an established practised business committed by one juridical person to the disadvantage of another. "Juridicial persons" are individuals and legal or administrative entities. The intervention in an established practised business must have the impetus to damage that specific business;

- the infringing act must be illegal. That means the wrongdoer must have no right -such as self-defence or provision of assistance in case of emergency - to interfere with the rights of another person;

- fault. The wrongdoer must have acted on purpose or at least negligently, that is, without regard to the normally required standard of care;
- damage (including loss of profits and legal costs incurred in rectifying the injury).

Paragraph 906 BGB states:

"Emission of non-solid and non-liquid substances:

(1) The owner of property cannot prevent emissions of gas, steam, smell, smoke, soot, heat, noise, vibrations and similar substances from another property insofar as they do not impair the use of his property or only impair it negligibly. As a rule, negligible impairment will be deemed to exist, if the standards set down by statute and regulations are not breached (paragraph 48 of the Law on the Protection Against Harmful Effects on the Environment (Bundes-Immissionsschutzgesetz (BImSchG)).

(2) Where substantial impairment is caused by the use of another property but in accordance with local custom and cannot be prevented by reasonable measures the owner is entitled to an appropriate payment in kind from the owner of the other property".

(3) ...".

Paragraph 22 WHG (which was the first environmental provision to provide for strict liability) states:

"Liability for changes in the quality of water:

(1) A person who introduces or discharges substances into water or affects water in such a way that the physical, chemical or biological quality of the water is changed, must compensate any person damaged as a result. If several persons have affected the water in such a way, they are jointly and severally liable.

(2) The proprietor of a plant in which substances are produced, processed, stored, deposited, transported or sent off site has to compensate any other person for any damage which arises if these substances enter the water without being (intentionally) introduced or discharged ... There is no obligation to compensate if the damage is caused by an act of God.

(3) ... ".

Paragraph 14 BImSchG protects a licensed plant against a claim by a third party to cease activities which cause harmful effects to the environment. However, it may be liable for damages.

Claims brought under paragraph 823 BGB, paragraph 906 BGB, paragraph 22 WHG are not restricted to particular industries.
Although the UmweltHG has been in force since 1991 it has so far barely been used by plaintiffs as the basis for claims. Accordingly claims for compensation for environmental damage have more frequently been based on the general provision of paragraph 823 BGB.

Under both the UmweltHG and the old BGB and WHG system pure ecological damage is not compensable. The damages payable must relate to some loss or cost incurred by the plaintiff. Under paragraph 1 UmweltHG, paragraph 823 BGB, paragraph 22 WHG any financial damage is reimbursable including the costs of remediation.

ITALY

The basic principle of civil liability is contained in Article 2043 of the Civil Code. The main characteristics of such liability are the degree of intention or negligence of the action, the causal link between the action and the event and the unlawful damage (for example, the breach of some legally protected interest), all of which must be proved by the plaintiff. Generally, all industries are subject to the general civil liability regime.

Whereas Article 2043 of the Civil Code generally applies, Articles 2050 and 2051 of the Civil Code provide a presumption of (somewhat stricter) liability for activities specified as "dangerous" and for damage caused by "things kept in one's custody". Article 2050 does not define what is "dangerous": it applies to any activity that, in the court's judgment, is objectively dangerous to the public and to those who work on the sites involved. Accordingly, Article 2050 was considered applicable for example, to the following activities: hunting, production and distribution of bottled gas, production and distribution of electric energy by ENEL. Article 2050 is not considered applicable to the dangerous activities regulated by special laws: Law 1860/1962 for nuclear energy, the Navigation Code for air navigation and Presidential Decree 175/88, implementing the Seveso Directive.

Under Article 2050, the polluter shall be deemed liable if he does not prove that he adopted all the appropriate steps to avoid damage, and under Article 2051 he is always deemed liable unless he can prove a force majeure cause. These provisions are to prevent damage caused by specific activities or circumstances, which are held by law as being potentially more dangerous and therefore requiring particular care and attention. Accordingly application of the stricter provisions is mandatory and the parties involved cannot invoke or choose the general treatment provided under Article 2043 which is more favourable to them in terms of evidence required from the damaged party.

In civil law generally only damages for direct damage to owned property may be claimed. Therefore pure ecological damage cannot be claimed by the plaintiff as it is of no economic value to the plaintiff.

THE NETHERLANDS
The civil liability system is based on tort, the general provisions of which are found in the Civil Code and in case law interpreting the Civil Code. To have standing in civil law, a plaintiff must generally have personally suffered damage resulting from a breach of the Civil Code (see 15). The tort system is fault-based. Fault liability arises under Articles 162 and 98 Book 6 Civil Code where the necessary elements of fault, damage, causation and relativity are established.

Recently, "modified strict liability" has been introduced for commercial users of hazardous substances, operators of landfills, operators of drilling holes and operators of ships (sea-going and inland navigation) and vehicles and trains carrying hazardous substances (Article 175, Book (Civil Code). "Modified strict liability" creates deemed knowledge of a potentially damaging situation from the moment it arises. Liability is, however, not imposed unless the defect existed for some time prior to the damage. These areas of strict liability have been incorporated into the Civil Code by the Act of 30 November 1994. Apart from these, industries are subject to the rules of tort.

Special legislation exists creating strict liability for damage arising out of certain activities (see 6). Strict liability arises if the conditions of the relevant section of the legislation on which liability is based, are met. The basic elements are damage and causation by an act of the defendant. The scope of damages which the plaintiff may recover extends to all damages reasonably attributable to the polluting event including consequential and pure economic loss.

Compensation for pure ecological damage cannot be claimed although pressure groups have been able to obtain compensation where they have incurred costs in cleaning up the aspect of the environment which is their purpose to protect, (see 15).

In general the environmental liability system is moving towards administrative law and remedies although tort remains the basis for civil liability. The Soil Protection Act 1994 continues to give the administrative authorities the power to reclaim clean-up costs in tort. It is governmental policy only to use this possibility if no administrative remedy can be used.

**SPAIN**

Spanish civil law does not deal directly with the environment, save for very few exceptions; for example, Catalonian Law 13/1990, of July 9, on damaging activities, emissions, easements, and neighbourhood relations. Civil liability is primarily based on the Civil Code of 1889. In particular, Articles 1902 and 1903 establish the rules whereby anyone who, by his act or omission, or by the act or omission of third parties for whom he is responsible (for example, employees) and because of negligence, causes damage, shall be obliged to compensate for such damage, but excluding pure ecological damage.

Articles 1902 and 1903 are followed by other rules containing different specific cases of civil liability. Specifically, Article 1907 refers to the liability of owners for damage caused by defective buildings, when such damage arises as a
consequence of not carrying out necessary repairs to the building. Article 1908, on the other hand, establishes liability of owners for damage caused by the explosion of machinery, fumes which are harmful to people or property, trees falling down or pollution caused by drains or deposits of contaminating substances.

Further, Article 590 introduces a rule covering neighbourhood relationships. Under this article, no one is entitled to build or place next to somebody else's property, wells, cesspools, drains, chimneys, deposits of corrosive materials, etc., unless the distance and proportions, as determined in applicable regulations, are observed. Where there are no such regulations an expert's report will be required.

Where specific rules exist (for example, Articles 45 through 67 of the Law 25/1964 on Nuclear Energy - see 6), the specific rule must be applied first.

To have standing in civil law the plaintiff must be the person that has suffered either damage to his property or a personal injury.

Civil liability covers all damage suffered by the victim including both actual damage suffered and cost gain. Punitive damages are not recoverable.

**SWEDEN**

Civil ("tort") liability for environmental damage is codified under the Environment Civil Liability Act 1986, SFS 1986:225, under which an operator can be held responsible if a polluting activity on real property causes damage to the surroundings, notwithstanding the fact that it fulfils the requirements of a licence granted under the Environment Protection Act 1969, SFS 1969: 387. The liability is usually strict.


Under Swedish law the plaintiff can only claim compensation for losses actually suffered which can be given some kind of economic value. Therefore pure ecological damage cannot be compensated in Swedish law.

In practice the Environmental Civil Liability Act 1986 is the most used provision in civil liability claims although there has been little case law to date.

**UK**

Broadly, civil liability in England and Wales arises under common law (that is, case law). Civil claims for damages and other remedies such as injunctions may be made. Environmental claims will generally be brought under one of the three main heads of tort, namely:
- negligence;
- nuisance;
- the rule in Rylands -v- Fletcher.

It should also be noted however that certain statutes contain provisions which create civil rights of action where criminal liability is established: for example, under Section 73 of the Environmental Protection Act 1990 where any damage is caused by the unauthorised depositing of waste so as to commit an offence under Section 33, the person who has committed the offence is liable for the damage. Persons suffering damage in such circumstances may bring a claim under civil law based on this Section. By contrast, others may specifically prohibit civil rights of action, and anyone injured must rely on common law and/or such other remedies as may be available; an example of this is the Water Resources Act 1991 which prohibits the discharge of "any poisonous, noxious or polluting matter" into controlled waters (including inland waters and groundwater). There is express provision that no extra civil liabilities arise as a consequence of criminal liability.

Negligence requires proof of fault, that is, conduct falling below a standard that the courts would regard as reasonable. For this reason, negligence has not made a substantial impact in environmental matters. The plaintiff must show that: the defendant owed the plaintiff a duty of care; the breach of duty resulted in damage (not mere economic loss); and the damage was a reasonably foreseeable consequence of the breach. In deciding what is reasonable a balance must be struck between the cost and practicability of measures needed to avoid the damage and the seriousness of the damage that may be caused if things go wrong.

The tort of nuisance is probably the remedy most widely used by parties seeking to recover for environmental damage. Nuisance is basically an act or omission on certain land which unreasonably interferes with or disturbs another person's use or right of enjoyment of other land. Unlike negligence, an action under the law of nuisance can only succeed where the plaintiff has an interest in land. In determining liability for nuisance the courts will approach the issue by conducting a balancing exercise centred on the question of whether the defendant is using his property reasonably or not. There is no precise or universal formula to determine this question.

Nuisance may be either private or public nuisance. Unlike the former, public nuisance is a criminal offence as well as a tort (or civil wrong), and is only relevant if the defendant's act or omission is affecting a significant section of the public as a whole, for example where a contaminated site is polluting a drinking water supply (see 16).

In practice, however, where a person's use or enjoyment of land is unreasonably interfered with, the situation may be more conveniently, quickly and easily dealt with under statutory nuisance procedures. The Environmental Protection Act 1990 sets out a list of the categories of statutory nuisances which may be required to be abated by the service of abatement notices by local authorities.
The provisions also have relevance to "private rights" to remedy environmental damage, in that the local authority is under a duty "to take such steps as are reasonably practical to investigate" a complaint by a person living within the area of the alleged statutory nuisance and any "aggrieved" person has the right to make a complaint at a Magistrates' Court in respect of an alleged statutory nuisance with a view to the court issuing an order on the defendant to abate the nuisance.

The rule in Rylands -v- Fletcher (1868) LR 3 HL 330 is derived from a case decided by the House of Lords in 1865 which in its original formulation imposed strict liability for all damage resulting from a person having brought something on to his land that is not naturally there which is accumulated there for the defendant's own purposes, which is likely to do mischief if it escapes and which escapes from its place of accumulation to somewhere outside the defendant's control. This would include, for example, toxic chemicals, and anything that might cause purely physical damage, such as water held back by a dam. It is, therefore, no defence to prove that all possible precautions have been taken to prevent damage resulting from an escape. The House of Lords decision in Cambridge Water -v- Eastern Counties Leather plc [1994] A.C. 264 reviewed the basis of liability under the rule in Rylands -v- Fletcher. The House's conclusions, as stated by Lord Goff, were that the storage of substantial quantities of chemicals on industrial premises constituted a non-natural use of land and that strict liability (in the sense that the defendant may be held liable notwithstanding he exercised all due care to prevent the escape occurring) should be imposed for damage which was reasonably foreseeable and was caused by their escape. This retracts from the previous tendency in the courts to interpret non-natural use very restrictively so that virtually any industrial use of land in an industrialised area would be held to be "natural".

In Northern Ireland the same civil law principles apply as in England and Wales.

Civil liability in Scotland differs somewhat to the situation in England and Wales. The most frequently used basis of civil liability under the common law is the law of nuisance which is a branch of the law of delict (tort in England). In the case Watt v Jamieson [1954] SC 56 nuisance was defined as when a person "so uses his property as to occasion serious disturbance or substantial inconvenience to his neighbour or material damage to his neighbour's property". In Scotland there is no distinction made between public and private and nuisance and therefore all actions which cause offence or degrade the quality of life of the public generally or as part of the more localised law of neighbourhood fall within the definition of nuisance.

In the case of RHM Bakeries (Scotland) Limited v Strathclyde Regional Council 1985 SLT 214 it was held by Lord Fraser of the House of Lords that the rule in Rylands v Fletcher (see above) does not form part of the law in Scotland. The result of this case now makes it clear that in Scotland a plaintiff may only recover damages under the common law of nuisance if he can show that the damage arose as a result of fault on the part of the defendant. Strict liability in common law in Scotland therefore is now limited to the narrow situation where a person interferes with the course of a natural stream and thereby causes damage to another person.
Despite this difference to the English system the differences in practice between the two jurisdictions in nuisance are probably very small. This is because the Scottish courts effectively reverse the burden of proof in such situations. They readily infer fault on the part of a person causing damage under such circumstances and place the onus on that person to show that he was not at fault. In such cases the only defence generally available is to prove that the damage was caused by the action of a third party. Despite this tendency the courts do not automatically infer fault.

Under UK law the plaintiff will be entitled to recover reasonably foreseeable losses resulting directly from the breach of duty of care and/or the nuisance and/or damages are not recoverable.

The general aim of remediation is to put the plaintiff back in the position he would have been in if the tort had not been committed.

STUDY 2

AUSTRIA

Austrian civil law, which is governed exclusively by federal laws, contains for the time being no uniform regulations regarding liability for environmental damage. However, the Austrian General Civil Code ("Allgemeines Bürgerliches Gezetzbuch" - ABGB) contains in Sections 1293 -1341 provisions which allow damage-claims in respect of environmental damage if this damage can be expressed in costs. Damages for personal injury and property damage is available. Pure economic loss is not available in negligence, it may only be claimed where damages results from an intentional act. Pure environmental damage cannot be compensated (however, see 4). These provisions stipulate a fault-based liability. Claims can be raised for example if the polluter is negligent or in breach of any regulatory provision.

In some Austrian federal acts there are civil-law-type provisions, which are based on strict liability (e.g. in the Water Act, the Forestry Act, or the Mining Code etc.) The courts grant damages on the basis of such civil-law-type provisions of strict liability if the damage is the result of a dangerous activity (such as storing chemicals which endanger water, or emissions which are noxious for forests). In addition, the courts grant damages on the basis of strict liability in cases, in which the damaged person is not entitled to demand a cessation of a potentially dangerous activity, because the activity is legally permitted or because the activity occurred only once and a claim for cessation would be too late.

To the owners and lessees of real estate the above mentioned ABGB provides in Sections 364 -364c the right to demand the cessation of all activities which lead to emissions of waste water, smoke, gases, heat, odours, vibrations etc in excess of the maximum permissible levels customary for that region and that essentially impair the customary use of the land. The owners and lessees of land are also entitled to request that certain substances be removed from an adjacent property. However, an individual may not commence civil proceedings to demand the

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cessation of activities if the emissions emanate from a mining facility or another plant licensed by the authorities. In this situation, damages can only be claimed if the emissions could have been avoided. Although the law only explicitly mentions mining facilities and other plants licensed by the authorities the courts apply this provision to public roads, building works (for example, erection of a bridge), demolition of a building, regulation of a river, motor races and emission of waste water which is not sufficiently clean.

Civil liability claims for environmental damage under the General Civil Code have not been significant. There have only been three cases so far. Administrative action is more common.

BELGIUM

Civil liability for environmental damage in Belgium is governed by the general civil liability principles which are contained in the Civil Code. The main provision in relation to fault liability is Article 1382 of the Civil Code which states that anyone who negligently causes damage to another is liable to pay compensation. The plaintiff must prove damage, that the damage was caused by the defendant, and that the defendant was at fault, that is, acted negligently. In principle only personal injury and damage to property can be compensated. In addition breach of environmental law provisions is usually enough to establish fault under Article 1382.

It has been held that the courts may impose injunctions requiring action to prevent further damage and punitive damages may be subsequently imposed if the orders are not obeyed.

Strict liability similar to a form of nuisance exists under Article 544 of the Civil Code. Article 544 states that ownership is the right to absolute use and enjoyment of goods as long as that use does not breach laws or regulations. For liability under Article 544 it is only necessary to prove that disturbance was caused by the defendant. There is no requirement of fault.

For damages under the Civil Code the courts have developed Article 714 of the Civil Code on collective goods which may be interpreted to allow awarding of damages for the pure ecological or aesthetic loss. Article 714 of the Belgian Civil Code is a general provision which states that police regulations may be provided for the protection of "things" which are not the property of anybody but are used by all. In theory, such police regulations could be used for protection of the unowned environment, but this possibility currently is theoretical rather than practice.

GREECE

Civil fault-based liability arises under the following Articles of the Civil Code:

- Article 57: the right to use and benefit from the environment is considered an aspect of the right to personal enhancement, which is
protected by Article 57 of the Civil Code. This Article states that any person whose person is illegally offended, has the right to demand that the offensive action is withdrawn and not repeated in the future. Compensation according to tort law provisions is not excluded (see below for explanation);

- Article 914s. (tort law): any person who unlawfully and culpably causes damage to another is liable to make reparation. The injured party must establish the elements of liability, which are damage, an unlawful act or omission, the culpability of the perpetrator of the damage and a connecting act between the fault and the damage (causa adequata theory);

- Article 922: provides for the vicarious liability of an employer where an employee, who is rendering services to a third party, intentionally causes damage while executing his duties;

- Article 932: provides that the plaintiff is entitled to reparation in money for moral or non-pecuniary harm which he has suffered as a consequence of an unlawful act. This compensation for moral harm is considered to be compensation and not a civil penalty;

- Article 281: provides that the exercise of the right must not manifestly exceed the limits dictated by the concepts of good faith, good morals or the social and economic purpose for which the right was granted. This principle also governs the right to use and benefit from the environment.

Under Article 29 of Law 1650/1986, which covers most sectors of the environment and is mainly administrative in scope, there is a form of strict civil liability. A polluter is liable to compensate the victim where he has caused damage unless he can show force majeure or an intentional act of a third party which caused the pollution.

Personality enhancement is protected by Article 57 of the Civil Code. The articles states that any person whose personality is illegally offended, has the right to demand that the offensive action is withdrawn and not repeated in the future. Compensation according to tort law provisions is not excluded.

The legal term "personality" includes everything that refers to the physical, psycological, mental and social existence of a person. The right to use and benefit from the environment is considered as an aspect of the right to personality enhancement because it is essential to a person, to his health and life. Therefore everyone has a claim in court against whoever harms the environment.

Damages under tort law cover pecuniary losses, personal injury and pain and suffering. Compensation for ecological damage cannot, however, be claimed as no economic loss has occurred to the plaintiff and loss of enjoyment of the surroundings is not compensable.
ICELAND

In Iceland there have been no specific laws enacted on environmental protection or particularly civil liability for environmental damage. The law on civil liability for environmental damage is therefore based on general legal principles developed by the courts namely the fault-based *culpa* rule. Damage caused by the defendant who was negligent must be shown by the plaintiff to establish liability.

A private person or legal entity will normally seek a remedy for environmental damage through the courts but may in some instances seek a remedy from the government. The latter method is appropriate if the authority has the power to stop pollution or other environmental damage, order clean-up or protect the interests of the plaintiff in another manner.

Ecological damages are not available. Only quantifiable losses of the plaintiff may be compensated.

The scope and substance of that claim is regulated by general clauses in the Act on Civil Procedure No. 91/1991 as well as the Act on Enforcement of Judgment No. 90/1989.

The primary bases for civil environmental damages claims is the tort of negligence and under specific statues dealing with certain problems (for example, marine pollution).

IRELAND

Civil liability for environmental damage in Ireland is mainly based on common law tort principles of negligence, nuisance or the rule in *Rylands v. Fletcher* (1868) LR 3 HL 330, (see UK Section above).

To establish liability in negligence a plaintiff must show that: the defendant owed to him a duty of care; the defendant breached the duty of care; and the action by which the defendant breached the duty of care caused the plaintiff personal injury or damage to property. The damage claimed must be a reasonably foreseeable consequence of the defendant's negligent act. Damages under negligence are limited to loss from personal injury or damage to property.

The tort of nuisance is based upon the principle that activities upon land and the condition thereof shall not cause unreasonable interference or disturbance of another person's use or enjoyment of land. The courts must decide in assessing a nuisance claim whether the defendant's use of land which causes interference to his neighbour's enjoyment is unreasonable or not.

A common law tort imposing strict liability exists under the rule in *Rylands v. Fletcher* (1868) 3 App Cas 330. Under this rule a defendant is liable for all damage which results from his having brought something onto the land which is not naturally there which if it escapes is likely to cause damage and which does
escape to a place outside the defendant's control. In Cambridge Water Company - v- Eastern Counties Leather plc [1994] A.C.264 (also see UK section above) which is a recent English case reviewing the rule in Rylands -v- Fletcher the meaning of non-natural use of land was given a broader interpretation than had been the case in previous decisions. It was held that the storage of chemicals on the land constituted a non-natural use of land and the defendant was therefore potentially liable for reasonably foreseeable damage which resulted.

Fault liability can arise under other legislation where there has been a breach of the legislation. Thus under the Water Pollution Acts there may be fault-based liability following pollution of waters. Similarly under the Air Pollution Act a defendant may be liable for clean-up costs where a substance has been released into air which may be injurious to public health or damaging to property or flora and fauna.

**LUXEMBOURG**

Civil liability is determined by the general principles of tort as defined by the Luxembourg Civil Code:

- Article 1382 of the Luxembourg Civil Code provides that anyone who has committed a fault causing damage to someone is liable for his act(s) and is obliged to compensate for the consequences of such act(s).

- Article 1383 provides that the principle also applies for damage caused by negligence or lack of care.

- Article 544 provides an action for "abnormal disturbance of the surrounding area". When a property or an establishment exceeds levels of inconvenience which custom obliges neighbours to tolerate, the owner is liable to pay compensation, regardless of fault. Compliance with a licence granted by the authorities does not protect the establishment from civil actions.

- Article 1384 is the basis for liability derived from property or objects. The caretaker of such objects or property is deemed responsible and liable for damage caused. He may only escape liability if he proves that the damage results from another source or has been caused by circumstances beyond his control ("force majeure").

Damages available in civil law include personal injury damage to property and economic loss to whatever level the court considers reasonable compensation. Compensation for purely ecological damage is not available.

**NORWAY**
The civil law principles developed by the courts are no longer of any practical relevance in relation to environmental law due to the enactment of legislation introducing a civil liability regime for pollution damage, in particular the Pollution Control Act 1981 ("Pollution Control Act").

Under the Neighbour Act 1961 ("Neighbour Act") persons living close to a polluting activity may claim compensation or request that the polluting activity is stopped. The Act establishes a general limit for tolerable levels of nuisance from neighbours (under which pollution is covered) which if exceeded introduce the possibility of a claim. If the activity is performed under a permit required by the Pollution Control Act the injured party cannot demand that the activity ceases but can still claim damages. The regulations of the Neighbour Act and the Pollution Control Act are, therefore, harmonised with regard to this specific problem.

Under the Pollution Control Act the operator or owner or property is liable for pollution damage. The primary liability is strict liability. However, where a person indirectly causes or contributes to pollution damage there is a possibility of liability based on negligence. Generally only pecuniary losses are recoverable and therefore damage to ecological systems is not recoverable.

To prove a claim under strict liability a plaintiff must show:

- damage to the environment;
- caused by the defendant's activity or property in a sufficiently proximate way;
- leading to economic loss.

Under the Pollution Control Act, an individual has a right to bring an action against a polluter for the cost of cleaning-up pollution.

PORTUGAL

In accordance with Article 41 of the Basic Law on the Environment, "there is an obligation to indemnify, irrespective of any fault, whenever someone has caused significant damage to the environment as a result of a particularly dangerous activity, even though he has complied with the law and all applicable technical rules".

If these exceptional facts apply, that is, whenever "significant damage" has occurred as a result of "a particularly dangerous activity", there exists strict liability. In all other cases, liability is fault-based which is defined in Article 483 of Civil Code as follows:

"One who wilfully or negligently has infringed the right of a third party or any other legal provision established to protect the right of an individual, must indemnify the damaged party for the damages resulting from the infringement".
Bearing in mind the wording of this Article, all the following facts must be proved to establish civil liability:

- there must have been an act or omission;
- which must have been unlawful (that is, against the rule of law);
- which must be attributable to the guilty party;
- the existence and proof of particular damage caused;
- a causal link between the act or omission and the damage.

Under civil liability, property damage, personal injury and economic loss are usually all recoverable provided that the claim is approved by the court.

SWITZERLAND

The basic principles of civil ("fault") liability are that the injured party must prove: damage; negligent or intentional behaviour; a causal link between the elements mentioned above; and that the behaviour of the defendant is illegal.

Civil law in Switzerland is based on the Code of Obligations and Swiss Civil Code. The most important provisions in relation to environmental civil liability are Articles 41 of the Code of Obligations (which is fault-based) and Articles 55, 56 and 58 of the Code of Obligations and Articles 679 and 684 of the Swiss Civil Code (which impose strict liability).

An important provision of the Code of Obligations is Article 41 which states that whoever causes damage to another, either intentionally or negligently, is liable to compensate the other party. The defendant is judged by the standard of the ordinary person in the circumstances. The burden of proof is on the plaintiff and there can be no liability for damage caused by a risk not generally foreseen at the time the damage was caused.

Under Article 684 of the Swiss Civil Code, strict liability is imposed on the owner of property from which hazardous substances are released onto neighbouring property. Similarly, under Article 58 of the Code of Obligations there is strict liability where a private party suffers damage resulting from a defect in the construction or maintenance of property. Article 55 of the Code of Obligations imposes strict liability on the owner of a plant for damage caused by employees during the carrying out of tasks given to them. A wide definition of neighbouring property by the courts has made Article 684 particularly useful in environmental matters. The courts have held that in relation to releases of hazardous substances, buildings several kilometres away are still neighbouring property.

An example of statutory civil law imposing strict liability is the Water Pollution Control Act 1991. This Act imposes strict liability on operators of plants which produce a high risk of water pollution. The only defences are force majeure or serious fault of the victim or a third party. This Act also requires compulsory insurance to ensure compensation of victims.
Under Swiss law damages cover primarily personal injury and property damage and consequential losses. Purely ecological damage is not generally compensated for as a plaintiff can establish no economic loss. Under the Bundesgesetz Über die Fischerei 21 June 1941 SR 423.0 (Federal Law on Fishing) it is possible for persons with fishing rights (non-commercial) to claim damages where fish death has occurred. There is therefore a provision requiring non-economic environmental damages to be quantified.
USA

Administrative

Under CERCLA, the federal Environmental Protection Agency ("EPA") has primary responsibility for implementing the site clean-up and cost recovery process. Working with state agencies, local groups and other interested parties, EPA takes the lead in identifying and recovering costs from the wide range of parties liable for clean-up costs (so-called "potentially responsible parties" or "PRPs"). In some instances, EPA delegates its authority to state agencies under cooperative agreements.

Remedies and sanctions typically include administrative compliance orders, judicial injunctions, civil monetary penalties, and criminal monetary and imprisonment sanctions. For example, under Section 106 of CERCLA, EPA can issue an administrative order to liable parties compelling them to conduct the clean-up of a site. This is in addition to EPA's power to clean-up the site itself and then to recover its costs from liable parties in a civil liability action. In addition, CERCLA imposes criminal liabilities for failure properly to report discharges of hazardous substances to the environment and breaches of licences and permits (granted by various regulatory bodies, but primarily the EPA and state agencies).

Should EPA decide to go beyond its administrative authority and involve the courts, it does so in conjunction with the US Department of Justice ("DoJ"). DoJ represents EPA in proceedings before the US federal courts. These proceedings can include suits to collect clean-up costs, as well as to enforce clean-up orders. The federal court have exclusive jurisdiction over actions brought under CERCLA. Finally, claims under state "superfund" statutes and tort law are primarily handled in the state courts, although a variety of mechanisms exist for removing those cases to the federal courts (which then apply state law), or joining such state law claims with CERCLA claims in a federal court suit.

Different administrative bodies are involved in CERCLA's natural resource damage cases. Here, the right to assess and recover such damages is vested solely in those federal and state agencies which have "trusteeship" responsibility for specific natural resources. For example, the federal National Oceanographic and Atmospheric Agency ("NOAA") has responsibility for certain coastal areas, while the Department of the Interior ("DOI") has responsibility for federal inland resources. It is then up to these agencies to decide whether to bring an action seeking to recover natural resource damages in the federal courts.

While some types of claims and remedies for environmental damage are reserved to the government (for example, administrative clean-up orders, certain actions for injunctions, and actions for the recovery of natural resource damages under
CERCLA), both governmental and private plaintiffs often have a choice of remedies and legal bases for their claims. For example, clean-up cost recovery claims can be brought either in federal court under CERCLA or in state court under a potentially similar state Superfund statute. Injunctions to clean-up contamination that presents an imminent hazard can be sought under CERCLA or the Resource Conservation and Recovery Act by the government in federal court. In many instances, different statutes and legal theories provide similar or overlapping remedies (for example, orders and injunction actions under CERCLA paragraph 106 and the Resource Conservation and Recovery Act paragraph 7003; or cost recovery claims under CERCLA paragraph 107 and state Superfunds, for example, Mass. Gen. Laws Ch. 21E paragraph 4-5).

Criminal

Governmental enforcers generally have substantial discretion in determining what penalties to seek. The statutes typically provide for either civil or criminal penalties for broad categories of violations, with criminal penalties typically (but not always) reserved for cases of "wilful" or "knowing" violations. However, the requirements for proving a "knowing" violation have been substantially diluted by the courts. In addition, civil statutory penalties can be substantial - typically up to $25,000 (and in some instances up to $100,000) per violation, with each day of violation deemed to be a separate violation. Thus, environmental liabilities for ongoing violations of discharge permits or other environmental regulatory requirements can easily run into the millions of dollars, and criminal enforcement is becoming increasingly common. For a discussion of environmental citizen suit, tort and criminal liability, respectively see, S. Cooke, The Law of Hazardous Waste Chapters 15, 17 and 18 (Matthew Bender & Co., 1994).

DENMARK

Administrative

The main regulatory authorities are the county councils, the municipalities and the Environmental Protection Agency. The Environmental Protection Agency along with the National Environment Research Institute, the National Forest and Nature Agency and the national Geological Survey together form the Department of the Environment.

The administrative system set out in the Environmental Protection Act, 358/1991 depends, in general, on regulatory control by municipalities and in the case of some major plants and special issues, such as closed landfills, by county councils. Licences and permits with conditions for hazardous activities are in general granted by municipalities, which use guidelines from the Environmental Protection Agency in setting up conditions for discharge of waste water, air and noise pollution, waste treatment etc.. Enforcement depends on the municipalities, which under Section 69 can use various methods including:- written recommendations; injunctions; orders to restore the environment to its original state; and reports to the police. If the case is reported to the police, it is not for the administrative authority to institute prosecutions but for the police. However, the
police rely on environmental data from the administrative authority for the necessary evidence to institute a prosecution. In any event, anyone may report a breach to the police. Recently the media have raised the issue of lack of enforcement against the municipality-owned sewage plants for breaches of their discharge-permits. It is not clear if this public concern will result in any legal changes. Under Section 70 the authorities must act immediately there is a threat to human health or of a spreading of pollution. The authorities may under certain conditions reclain the costs of carrying out these actions from the party on whom the order was imposed.

If contamination of private land is a threat to the public interest, e.g. by posing a threat to groundwater, any preventative, cleaning up and restoration measures are a public concern and will be handled by the regulatory authority. If such measures cause damage to a private owner, he will be entitled to compensation from the authorities (Environmental Protection Act, 358/1991 Section 24 based on Section 63).

The Waste Deposit Act 420/1990 concerns "old" deposits of hazardous waste and differs in several ways from the principles in the Environmental Protection Act, 358/1991. The concept behind the Waste Deposit Act, 420/1990 is to compile a register of all closed landfills to ensure four purposes:

- the collection of environmental data - information on where and how serious the potential and actual contamination of the soil is. Based on this data the Environmental Protection Agency makes a priority list of which sites must be cleaned each year. The priority is not based on a National Priority List as in US, but is based on case by case decisions;

- the allocation of responsibility - between the county councils and the Environmental Protection Agency for clean-up (see below);

- the prevention of the spread of pollution and limiting its consequences - by, for example limiting how the property is to be used (for example, for vehicle parking, or for a particular industrial activity);

- publicity of the existence of contaminated land by inclusion on a public register - each individual property is registered and used in combination with the registration system used by lenders and purchasers of private land to ensure that the existence of contamination will be brought to their attention.

The county councils and the Environmental Protection Agency are responsible for cleaning up historic pollution, under the Waste Deposit Act 420/1990. (Pollution caused prior to 1972 is cleaned up by the county councils and prior to 1976 by the Environmental Protection Agency). However, the Act does not set time limits for carrying out the clean-up which will depend on the priority given to a site by the Environmental Protection Agency and the allocation of funding for the purpose.
Owners are allowed to clean-up voluntarily, following consultation with the regulatory authority. With regard to residential property on contaminated land, the Act on the Compensation for Residents on Contaminated Land, 214/1993 Section 12 provides for site owners to pay compensation up to a certain limit to persons resident or occupying land, above which the costs are borne by the State. For each residence the owner is liable up to a maximum of DKr 40,000 for the first year decreasing by DKr 2,500 each year to a minimum of DKr 15,000.

If the authorities initiate preventative measures and/or clean-up of an old landfill under the Waste Deposit Act, 420/1990 the owner of the land is entitled to compensation for any measures which constitute "expropriation" the exact meaning of which is, as yet, not clear; for example, in the case where an owner is prevented from using his house because of site remediation activities, it has not yet been decided by the Courts whether this qualifies as an "expropriation".

There is no general rule on the ring-fencing of different liability systems for specified activities. However, after the Supreme Court ruling in Purhus -v- Minister of Defence (UfR.1995.505H) it is clear that administrative liability does not preclude civil liability. Further, overlap between different regimes of civil liability is possible. The Compensation for Environmental Damage Act 225/1994 states at Section 7 that "the Act shall not limit the plaintiff's right to claim compensation according to ordinary rules of liability... or pursuant to provisions laid down in other Acts". The Act on Product Liability, 371/1989 (implementing Directive 85/374 on Product Liability) includes a similar provision in Section 13. In both Acts exceptions have been made concerning nuclear damage, (see the Act on Product Liability 371/1989, Section 15, and the Act on Compensation for Environmental Damage, 225/1994 Section 8).

All cases on "classical civil liability" are brought before the courts, usually the local courts, and cannot be dealt with by administrative bodies (except for some very limited cases concerning damage caused by one riparian of a watercourse to another riparian of the watercourse covered by the Watercourse Act, 302/1982 which are settled by so called "Watercourse Tribunals").

Criminal

The authorities may initiate criminal proceedings where relevant provisions are breached. Criminal proceedings may also be initiated where restoration of the environment is impossible. Fines imposed reflect money saved by the company by not complying with environmental regulations. Chapter 13 of the Environmental Protection Act, 358/1991 contains the provisions giving rise to criminal liability. In re Dansk Kabel Skrot A/S [Danish Cable Scrap Limited], (UfR.1994.267H), the cable scrap company was fined DKr 300,000 for various breaches of environmental regulation (for example, the handling and storage of cable scrap without a permit). In the Stalvaluevark-case a fine of DKr 300,000 was imposed on the company, and DKr 1.2 million was confiscated to reflect savings made by the company by not complying with regulations (Eastern High Court, 9 division, March 11, 1994 - S 2662/92).
In cases of intentional or grossly negligent behaviour the penalty may be imprisonment. It is, for example, an offence to carry out an activity which may cause environmental damage (Section 35) and to discharge waste water into the groundwater or the sea without authorisation (Sections 19 and 27).

FINLAND

Administrative

The distinction between administrative and civil law matters is based on the character of the claim; if it is based on civil law, the matter is handled in a regular court, whereas claims based on public law are referred to an administrative court. The distinction is not always clear and there are cases where there is an overlap between the two systems. In such cases administrative or even criminal sanctions may be imposed but if the provisions of the Environmental Damage Compensation Act are fulfilled there may be a claim under civil law for damages available as well. Where an action is brought in the criminal courts to secure a prosecution a civil claim for damages may be made in that court. The requirements of civil law must however be fulfilled. In cases of fault liability a criminal finding of fault is a very strong indication of civil law liability. Even if there is no conviction, civil liability can still be shown as liability requirements under civil law are lower.

Civil liability does not automatically flow from administrative liability and due to the specific remit of administrative courts civil claims are not heard there. The requirements of civil law must therefore still be proven by a plaintiff in a civil court.

Orders for remediation of the environment are mainly administrative sanctions although the Water Courts also make such orders in practice. The competence to make such orders is in the first instance vested in the administrative authorities under the Conditional Fines Act (1113/1990) and the relevant environmental acts. The right to reclaim remediation costs under the Environmental Damage Compensation Act 737/1994 will only therefore be relevant where the authorities have perhaps due to urgency acted without making an order.

As of March 1, 1995 the system of intermediate level and regional environmental administration has been reorganised. The administrative body in environmental matters below the Ministries, is the Finnish Environment Agency, which is a centre of environmental research and development. It is also responsible for the performance of various administrative functions; for example, it acts as a supervisory body for matters relating to the prevention of oil and other environmental pollution and the transboundary movement of wastes.

Regional environmental administration consists of thirteen regional environment agencies. They are responsible, inter alia, for matters involving planning, environmental protection, nature conservation and the use of water supplies. One of their primary functions is to produce and disseminate environmental information to the public and thus to increase environmental awareness.
Additionally, environmental permits, as provided for in the Act on the Procedure for Environmental Permits, 735/91 are obtainable from one of the regional environment agencies.

A wide range of administrative laws exist covering specific areas of environmental law such as the Air Pollution Control Act 1982 (as amended), the Water Act 1961, the Noise Abatement Act 1987 and the Waste Act 1993 which entered into force in 1994. These establish systems for regulatory control including the granting of consents or permits to carry out a process subject to certain controls and limitations. If these rules or permits are breached criminal sanctions are imposed.

Criminal

The Criminal Code in Finland has recently been updated and offences specific to the environment have been included. New environmental offences have been included which interact with the existing laws on the different sectors of the environment. The main offence under the new code is that of Impairment of the Environment. (Chapter 48 Section 1). This offence provides that a person who intentionally or by gross negligence:

- releases into the environment any object, substance, radiation or anything else in breach of any legal provision, specific or general regulation, or without a permit or in breach of a permit;

- produces, conveys, transports, uses, handles or stores a substance, good or product in breach of a general or specific regulation under the Air Pollution Control Act, 1982/67 or a provision referred to in 5.60(1) of the Waste Act, 1993/1072 or fails to organise waste management as required under the Waste Act;

- imports, exports or transports a substance or product in breach of the Waste Act or any general or specific regulation thereunder or in a manner referred to in 6.26(1) Waste Transport Decree or imports the same in breach of a general regulation under the Air Pollution Control Act;

so that the relevant act is conducive to causing a danger of damage to the environment or a health hazard shall be subject to a fine or imprisonment of up to 2 years.

This is a very wide provision which is drafted to take account of the existing laws to which it refers. Under Section 2 there is an offence of Aggravated Impairment of the Environment. This arises where the danger or damage caused is particularly great in terms of duration, and of effect and the offence is committed in breach of an order or prohibition under the Section 1 offence and is deemed to be aggravated. For this offence imprisonment of between 4 and 6 years is the penalty.

The remaining environmental offences are:
- environmental misdemeanour;
- negligent impairment of the environment;
- nature conservation offence;
- building protection offence.

Also of importance is the specific reference to provisions on corporate criminal liability which are to apply to these offences.

**FRANCE**

**Administrative**

The Regional Environmental Authorities mainly have powers in relation to conservation. The Departments play a major role in enforcing compliance with legislation such as that on listed industrial processes. Municipalities have some powers in relation to noise pollution and have responsibility for household waste, and more general powers in cases of threats to public health and safety.

Of particular importance is the Law 76/663 of July 19, 1976, as amended in 1992 and 1994 on classified installations (which replaced a previous law of 1917 on unhealthy and hazardous installations). This regulates the establishment, operation and closure of installations which might cause harm or nuisance to the environment or to public health and safety. It was implemented by the Decree of September 21, 1977, which refers to a list (the "Nomenclature") of "classified installations" ("installations classées") that come within the scope of this legislation and which are organised into categories, depending on their potential for causing environmental damage. This Nomenclature has been implemented by the Decree of May 20, 1953 as amended numerous times. Classified installations must either be licensed for the most polluting activities or notified to the administration for the less polluting activities. The Nomenclature is exhaustive and all facilities carrying out listed activities are subject to the legislation (unless they fall below certain thresholds) and, in certain circumstances, other installations capable of causing environmental damage can also come within its scope. Installations which require a licence should obtain a Prefectoral order which sets out conditions for the operation of the facility. The operation of a classified installation without a licence or in breach of the conditions attached to a licence are criminal offences (see below).

Where the operation of a classified installation is transferred, the new operator must declare this to the Inspector of Classified Installations. If there is to be a modification to the installation or the processes carried on there, the new operator may be required to apply for a new licence. For three types of classified installations, i.e. Seveso installations, quarries and storage of waste activities, the Law 92/646 of July 13, 1992 introduced conditions either for the obtaining of the licence and for the transfer of a licence to a new operator: the transfer is subject to prior authorisation and financial guarantees are requested from the purchaser in respect of his capacity to restore the site following the closure of the installation. Law 92/646 also contains provisions relating to waste disposal and recycling.
Under the provisions of Law 92/646, there is a statutory duty on the vendor of a site on which a licensed classified installation has been operated to inform the purchaser, in writing, of such past activity and, to the best of his knowledge, of any material threats or inconveniences which may have resulted from the activities carried on at the facility. This provision requires disclosure of environmental issues such as a contamination of the site which is known about. If the vendor fails to make this disclosure, the purchaser has a number of statutory options: to rescind the sale, demand reimbursement of a portion of the purchase price or require the clean-up of the land at the vendor's expense (although the cost of this must not be disproportionate to the purchase price). Moreover, the purchaser of a classified installation who discovers contamination at a site is obliged to inform the Inspector of Classified Installations under the provisions of the Decree of September 21, 1977, which require the notification of any accidents or incidents that may cause harm to the environment.

When public property is damaged, a proceeding called "contravention de grande voirie" is initiated before the administrative tribunals. The wrongdoer may then be fined and ordered, to reimburse the cost of clean-up of the contaminated site sufficient to restore the site to its original state.

The administration has powers to order the clean-up of contaminated land under both Law 76/663 as amended and Law 75/633 as amended.

The Decree of September 21, 1977 provides that the administration can:

- order the clean-up of a classified installation; or
- order the clean-up of a site not listed as a classified installation, where it is necessary to prevent environmental damage.

If the operator does not remediate the site of his own accord, the administration can impose a clean-up order and require the operator to clean-up the site within a specified time period. The licence of the classified installation can be suspended until the clean-up is carried out. Alternatively, the administration may undertake and finance the clean-up operation itself and recover the expense from the operator or other liable party (including the owner of the land if the operator is non-existent or insolvent), or require the operator to deposit sufficient funds into a special account to pay for the work. The administration may have recourse to the tax authorities to seize the amounts required.

An operator who wishes to close down a facility is obliged "to put the site into a condition where it no longer causes any danger or inconvenience to the environment", that is, the operator is required inter alia to remediate any contamination.

Similar administrative powers are found under the Law 75/633 on waste, which would apply where the Law 76/663 on classified installations does not.
Most case law on environmental matters has been decided in the administrative courts except for those which constitute criminal offences. The administrative courts have competence in relation to all matters involving public authorities except in "voie de fait" (ultra vires acts) and damage to private property of public authorities when the civil courts have jurisdiction.

**Criminal**

Where damage results from a criminal breach of law the plaintiff may claim civil damages before the tribunal which deals with the criminal issues (see 5). In such circumstances, the victim can obtain damages without bringing his/her own action before a civil jurisdiction. Since the majority of the environmental damage is in breach of specific environmental law and regulation, recourse by plaintiffs to the criminal jurisdiction is very frequent because, in such cases, the Public Prosecutor has broader powers with respect to the finding of evidence and the plaintiff is able to take advantage of such a situation. The Public Prosecutor will act on a complaint by private individuals (environmental organisations or the administrative authorities) but there is no scope for individuals to bring a prosecution.

An important principle of French law, with respect to liability is that whenever both courts (civil and criminal) have jurisdictional competence the civil procedure is stayed until the criminal judgment has been completed. Another principle of French law is that criminal judgments bind the civil courts. If the criminal court rules that the defendant is not at fault, the civil court is bound by the decision and cannot find fault liability. Also, any discharged person cannot be directed by the penal judge to pay damages to a third party on the basis of fault liability. Conversely, jurisdiction for strict civil liability can be retained by a civil judge as regards a person acquitted by a penal judge.

The state, to be a plaintiff, must have suffered direct damage to its private property. There is no recognition of the "ecological damage" as such in France. No action in civil liability is therefore possible for damage to the unowned environment except:

- if the pollution to the unowned environment has spread out and caused damage to the private property of third parties, or

- where action is taken by interest groups whose purposes are the protection of the environment in general or certain specific parts of the environment (rivers, landscapes, forests), and who aim at the protection of a collective interest (see 15); or

- where action is brought by any person using an environmental resource having suffered economic loss;

- in the case of damage to the environment punished by statute, the state can always take action in the courts via the intermediary of the
public prosecutors office, in order to start a public action. It cannot obtain any civil remedy in this situation;

- where certain statutes enabling certain public bodies to take action as a civil party.

In environmental matters the law expressly enables certain public bodies such as the Environment and Energy Bureaux, the Conserver of Coastal and Lakeside Areas and the Department of History and Heritage to exercise rights as private individuals with respect to those activities which present a direct or indirect danger to those areas which they are entrusted to protect and which constitute a breach of environmental legislation (Article 253 of the Rural Code).

There are various environmental law offences each carrying specific penalties for that offence. Once the offence has been recorded by the criminal investigation department or competent civil servants the Public Prosecutor or competent civil servants may initiate a prosecution.

There are a wide range of criminal offences but the most important has been Article L.232-2 of the Rural Code which relates to death of fish and is used in relation to water pollution.

The main types of criminal offence include the following:

- breach of consents or permits or procedures under such permits as issued by the regulatory authorities;
- breach of laws or regulations governing procedure for carrying on operations which may be environmentally damaging;
- non-implementation of administrative or court orders;
- causing damage to the environment which constitutes an offence;
- obstruction of the authorities in carrying out their duties.

Certain offences set out in the Penal Code, the Code of Public Domain and the Code of Maritime Ports cover dumping of waste.

**GERMANY**

There is significant overlap between the legal systems for criminal/administrative environmental liability.

**Administrative**

Under the old environmental liability law, claims for damages under paragraph 823(1) BGB existed only in the case of illegal action. It was generally held that an action was not illegal when it was covered by a licence. In this way the old environmental liability law is linked to administrative law. Under the UmweltHG, claims for damages exist even when damage comes about as a result of an action which had been licensed ("ordinary business", paragraph 6(2) UmweltHG)).
For claims under administrative law the competent administrative body is determined by whichever is the applicable law (BImSchG, nuclear law (AtomG), WHG, waste law (AbfallG) etc.). As a general rule the competent authorities are as follows:

- the rural districts or the chief administrative officer of rural districts which act as the lower administrative bodies;
- the administrative district or the councils of administrative districts which act as the higher administrative bodies; and
- the ministries of the states (Länder) or the federal ministries which act as the highest administrative bodies.

A connection between criminal law and administrative law exists under paragraph 14 BImSchG. A claim to force another person to refrain from damaging the environment is converted into a claim for compensation if the plant which causes the emissions is licensed.

To the extent that a licence contains conditions to protect a third party (for example limits on emissions), a breach of these conditions leads to a breach of a protective law pursuant to paragraph 823(2) BGB, which in turn leads to a duty to compensate for damages.

Criminal

Further, the criminal law contains various provisions for the protection of the environment (paragraphs 324 onwards of the Criminal Code (Strafgesetzbuch (StGB))). These include provisions on criminal liability for water, soil and air pollution, provisions on noise and vibrations and handling of waste. A number of the offences set out in these provisions require that administrative duties are breached for criminal liability to be imposed. Any person who offends against these provisions is subject not only to a fine or imprisonment, but also breaches a "protective law" (Schutzgesetz) pursuant to paragraph 823(2) BGB and is, therefore, bound to compensate any injured person for any damage arising therefrom.

ITALY

The existence of several jurisdictions (civil, criminal, administrative) does not imply that judgments or orders of any of them are directly effective in proceedings before any other one. A judgment (for example, conviction for criminal breaches) will be a basis and evidence for the claims of the private party damaged by the crime, but the damages will be finally assessed and awarded through a separate civil procedure and judgment.

Administrative

Inspection and control powers are normally carried out at the provincial level including the monitoring of waste disposal and of air pollution; municipalities are generally involved in the aspects connected with zoning plans and impact
assessments and have general and very wide discretionary powers over public health and safety, including environmental matters. They are the competent bodies to grant permission necessary to start up all "Unhealthy Plants" (which include most industrial activities) and may impose the closure or the relocation of such plants. Furthermore they have specific functions as to monitoring of noise pollution and the permitting and monitoring of waste water drainage.

Law 349/1986 provides that the State may claim damages from any person who has damaged, altered or impaired the environment through wilful misconduct or negligent behaviour in breach of environmental regulations (or administrative orders issued thereunder). According to the most current interpretation, the State has a direct action against those responsible, whether private person, corporation or public officer. Where there are criminal or administrative proceedings against a defendant the State may also enjoin the proceedings for damage to the environment pursuant to Article 18 of Law 349/1986 according to the principle of "costituzione di parte civile".

Article 19 of Decree 132/92, Article 14 of Decree 133/92 and Article 12 of Decree 130/92 also provide in substantially the same terms to oblige any polluter in breach of their provisions, to carry out the necessary measures to eliminate and prevent any damage to waters, soil, underground or other environmental resources.

**Criminal**

Criminal sanctions for environmental damage are provided for under a number of administrative statutes. Only the courts may impose the sanctions but the relevant administrative body can institute proceedings having assessed the damage and circumstances. An example is Law 319/1976 which provides criminal sanctions where there is pollution of an aquifer from which drinking water is drawn.

Criminal sanctions (imprisonment up to three years) are provided for in the event of lack of authorisations for industrial emissions into waters or sewers. For example, whoever discharges in waters without the said authorisation is subject to imprisonment for up to two years or a fine of up to ten million lire, while the non-compliance with the limits of acceptability fixed by the law is punished with an administrative fine of up to thirty million lire. This, however, is a criminal penalty which is not directly related to the cost or repair of environmental damage caused by the breach of the regulation.

In addition criminal sanctions are imposed where there is a failure to comply with the terms of orders or permits, for example Presidential Decree 175/88 implementing the Seveso Directive, regulates the activity of specific industries carrying out manufacturing processes which are considered dangerous and which could cause significant accidents. This legislation, however, imposes only criminal and administrative sanctions.

There is also a possibility of criminal sanctions under the general provisions of the Criminal Code if in a serious environmental incident parties behaved in such a way as to infringe those provisions.
THE NETHERLANDS

There is no direct overlap between civil liability and criminal or administrative liability. Damages must be recovered through the civil courts. These will take administrative or criminal court decisions as a strong assumption of proof. Some forms of injunctive civil relief are closely related to administrative orders which can be given (see below).

Administrative

The system of administrative environmental law is as follows: the General Administrative Code ("Algemene wet bestuursrecht") gives general rules on the formalities to which all administrative decisions, including those in the field of environmental law, must conform. It also provides general rules on the possibilities of review and appeal. The Environmental Control Act 1979 (as amended) ("Wet milieubeheer") operates within this Act as a general administrative environmental act, giving rules on the requirements for environmental impact reports, environmental permits and the implementation of their conditions. The Act deals with waste as well as some rules on administrative appeals particular to environmental cases. In each specific environmental field (soil protection, surface water emissions, nuclear energy, etc.) a more specific act exists giving detailed substantive rules.

The general rule applies unless a more specific rule ("lex specialis") can be found. This provides a clearly structured system of administrative environmental law; moving from general administrative procedural rules through more specific environmental administrative rules to specialised substantive rules.

The competent authorities which determine whether clean-up of soil pollution is necessary, are the regional authorities (provinces) and the four major cities (Amsterdam, Rotterdam, The Hague and Utrecht) depending on where the pollution is located. These authorities also determine before which date clean-up must ultimately take place, based on the actual risks for man, the ecological system or of the pollution spreading. Scientific criteria are currently given in governmental policy documents and will be included in a Decree in the near future. In these criteria, current use plays a role.

Administrative actions concentrate on the permissibility of conditions of environmental permits, violations of these conditions, etc. and are generally brought by those requesting environmental permits and environmental interest groups.

In the near future, administrative actions will probably also concern notices based on the Soil Protection Act 1994. These are likely to be brought by those who have received a notice as well as environmental interest groups and owners of neighbouring properties. Often, remedies in both civil and administrative law are open to the competent authorities. The authorities can generally choose which
method they wish to use, unless using civil law can be said to unacceptably
infringe on administrative powers open to the authority in question.

The Environmental Control Act 1979 (as amended) ("Wet milieubeheer") requires
all professional or professional scale undertakings to have an environmental
permit. Such a permit will contain various conditions to prevent environmental
damage occurring as a result of the undertaking's activities. If violations of the
conditions of a permit are found by the competent authorities, they may take
administrative steps to force the undertaking to comply with the terms of the
permit by imposing financial penalties. The authorities may also take steps to
restore the situation to the former state or state which would have been achieved
by compliance, at the cost of the permit holder. Ultimately, the authorities may
order an undertaking violating the terms of a permit to close.

There are various acts requiring special permits for specified activities such as the
production of nuclear energy, activities involving emission of pollutants to air,
fresh water or sea water, activities involving noise pollution, etc. The conditions
of permits for these activities can be enforced in the above-mentioned manner.

Special administrative measures to remedy environmental damage are included in
the Soil Protection Act 1994. Notices can be given to polluters, owners or users to
investigate or clean-up pollution. The hierarchy of persons to whom such a notice
can be given is set out in 8.

An undertaking may be required by the competent authorities to conduct
preliminary investigations into possible soil pollution if the undertaking belongs to
a certain category listed in the Compulsory Soil Investigation Decree of 25
September 1993. This list contains some 450 categories of undertakings ranging
from oil refineries and pesticide factories to advertising agencies and clog makers.

The Hoge Raad has decided that, if administrative powers exist, the authority
possessing these powers can only recover damages in civil law if this does not
overlap with the relevant administrative powers to an unacceptable degree. In
particular, the courts will not consider damages in civil law awardable if the same
effect can be achieved through use of these powers (HR 14 April 1989 in State -v-
Benckiser, HR 26 January 1990 in re Windmill).

With respect to liability for hazardous substances, a non-exhaustive list of
substances deemed to be hazardous, can be found in the Environmentally
Hazardous Substances Act ("Wet milieugevaarlijke stoffen"), which is based on

The administrative authorities also have the power to impose fines by
administrative order for delayed or non-compliance with another order. These
fines are, however, not criminal penalties and are not imposed in the courts.

Criminal
Environmental offences exist under Sections 172 and 173 of the Criminal Code and there is under Section 51 the potential for prosecution of a company and its directors even if the offence was committed by an employee acting within the normal activities of the company. A manager must be aware of the offence, accepting its commission and able to prevent it to be criminally liable.

Various environmental statutes impose criminal liability for non-compliance with permits or authorisations.

Criminal law arises under some violations of environmental statutes. The relevant provision outlines the offence and states it to be an economic offence. The penalties are set out in the Economic Offences Act 1950 which is frequently amended and up-dated to incorporate new penalties. An example of such an economic offence is Article 13 of the Soil Protection Act 1994 which imposes a general duty on persons not to do anything which will pollute the soil. This is a very broad offence.

Prosecutions are carried out by the special environmental division of the state prosecution service although reports of environmental offences may come from the police, environmental officers or the general public.

SPAIN

Administrative

Article 45 of the Spanish Constitution of 1978 establishes the framework of Spanish environmental law. According to this Article, everybody has the right to enjoy an environment adequate for human development, as well as the duty to preserve such an environment. The public authorities must watch over the rational use of all natural resources, in order to protect and improve the quality of life and to defend and restore the environment, supported by the indispensable collective solidarity. Article 45 ends by stating that criminal penalties and administrative sanctions, as well as a duty to compensate for damage, shall be established by law for infringements of the said obligations.

Administrative environmental laws include, as a general rule, a provision which states civil liability to be independent from administrative rules, and therefore, applicable notwithstanding the existence of, administrative sanctions. Therefore, specific attention must be paid to the activities governed by each of the specific administrative environmental rules to determine whether civil liability may also be established in the circumstances. It is possible for administrative and civil liability to be imposed in relation to the same incident but not possible for administrative and criminal liability to be imposed alongside each other.

An administrative body (usually the autonomous regions or the local authorities) may not take any action on behalf of a private person, however, from a practical point of view, this effect may be achieved by many environmental rules (both general and specific) that allow the authorities to request the polluter to repair the damage caused by them on a "polluter pays" basis.
General Rules include:

- the regulatory rule on Annoying, Unhealthy, Harmful and Hazardous Activities, enacted on November 30, 1961, which was issued to prevent and control all types of environmental pollution caused by any industry, establishment or activity which may be deemed to be annoying, unhealthy, harmful or hazardous; and

- Law 21/1992 on Industry which has as its main aim the regulation of the industrial sector.

Specific rules include:

- Law 38/1972, on the Protection of the Atmospheric Environment, which determines a general scheme for the surveillance and control of atmospheric pollution regardless of the causes of such pollution;

- Law 20/1986, the Basic Law on Toxic and Hazardous Waste, according to which in addition to usual licences, an authorisation from the Autonomous Region's authorities is required to start up an industry or activity that generates waste which includes in its composition any of the substances listed in the Annex to the Law. Similarly, managers of this type of waste also need a special authorisation.

- Law 42/1975, on Urban Solid Waste, which is mainly directed at governing the process of collection and processing of urban waste produced in the municipalities;

- Law 22/1988, on Coasts, which expressly provides for the protection of the seashore, which is considered to be public property;

- Law 29/1985, on Water, which is intended to achieve an adequate level of water quality, and prohibits any act that may cause pollution, such as introducing polluting substances into water, stockpiling solid waste and other dangerous substances near water, and conducting activities otherwise harmful to the hydrological environment.

Criminal

Article 347 of the Spanish Criminal Code relates to the "ecological criminal offence", which was first introduced in 1983. Article 347 determines that whoever infringes any kind of environmental regulations, and produces direct or indirect emissions or disposes of industrial waste into the atmosphere, on the ground, or in continental or maritime waters thereby creating serious danger to human health or serious prejudice to the conditions of wildlife, woods, natural space, or plantations,
shall be subject to a penalty, of between one month and one day and six months imprisonment ("arresto mayor"), and fines of 175,000 to 5,000,000 pesetas.

If the activities which cause the damage are performed secretly, without the appropriate authorisation or administrative approval, or where express orders of the administrative authorities for correction or termination of the polluting activities are disobeyed, or where false information about environmental aspects of the activity is presented, or where inspections by the Administration are hampered, the penalty of imprisonment shall be increased to a duration of between six months and one day and six years ("prisión menor"). This increased term of imprisonment shall also apply where the above-mentioned activities produced risk of irreversible or catastrophic environmental damage. In all the cases contemplated in Article 347, the Courts may order the temporary or permanent closure of the facilities. Civil liability is compatible with, and may thus be imposed together with, criminal environmental sanctions.

A criminal court may be competent to decide on the civil liability derived from the crime in question (applying special rules for this purpose which are contained within the Criminal Code), unless the plaintiff expressly declares that he wants the civil liability issue to be judged by the competent civil court. In this case, the civil court is bound by the decision of the criminal court only where it has decided that the alleged facts supposedly constituting the crime did not exist.

SWEDEN

Administrative

The primary legislation concerning protection of the environment is an administrative act, the Environment Protection Act 1969, SFS 1969/387 although the Environment Protection Ordinance, SFS 1989/364 is also relevant.

The Government Ministry responsible for the Environment is the Ministry of Environment and Natural Resources which has the Natural Resources Act matters within its remit and is the final appeal body for applications under the Environmental Protection Act. The National Environmental Protection Agency is the main administrative agency and regulatory body for the Environment and has considerable powers to issue regulations on environmental matters. The Chemicals Inspectorate has similar powers in relation to the Act on chemical products.

Each of Sweden's twenty four counties and each of the municipalities have bodies responsible for environmental protection. In the municipalities these bodies are local environment and health protection committees responsible for local administration and enforcement of the Environmental Protection Act 1969.

The Environmental Protection Act 1969 applies where there is a risk of pollution or nuisance from real or immoveable property. The person responsible for the operation has to use best available techniques not entailing excessive cost (BATNEEC) to prevent the pollution or nuisance. The principal aim of the 1969
Act is to protect the public interest. If a nuisance occurs, the relevant administrative body will first try to bring about its correction on a voluntary basis, but it will also have certain legal powers at its disposal, an injunction or a requirement on the court to impose a fine or other sanction.

The Environment Protection Ordinance SFS 1989/364 lists various types of operations (some 7,000 plants) which are carrying out hazardous activities and must be licensed or closed down. If an operation is licensed and fulfils the licensing requirements the administrative authority or the plaintiff cannot bring an injunction against the operator, but if the operation causes damage a plaintiff is entitled to compensation. After ten years the licence conditions may be changed. Operations are divided into those which should be licensed by the National Licensing Board for Environmental Protection (A-plants) and those licensed by the county administrative board (B-plants). Intermediate operations are only required to submit for registration to the municipal board (C-plant) and report to the county administrative board.

The Water Act 1983, SFS 1983/291 is also an administrative statute. Water being a national resource, building in water, diverting water or supplying water in a "water area" is not permitted unless the operator has a licence from the Water Court. A licence cannot be supplied if the project is in contravention of a "general plan" or a "city plan". It must also be shown that the advantages of the project outweigh its costs and other disadvantages. The Water Court also handles compensation to those suffering damage caused by a water project. The Water Act 1983 will not be discussed any further in this paper.

When Sweden first entered the EES and later the EU the Government went through all relevant legislation regarding EU. Generally the view was taken that Sweden already met EU environmental standards. Where this was doubtful Swedish laws were changed accordingly. For example, the Environment Protection Act 1969, SFS 1969/387 was changed so that the Government (through its various agencies) are able to impose on plants the emission standards designated by EU.

Criminal

Breaches of the Environment Protection Act 1969, SFS 1969/387 are punishable by fines and/or up to two years imprisonment. In addition an environment protection fine may be imposed for breaches which have provided an economic advantage for the polluter.

Under the Penal Code (Chapter 3, paragraph 8) anyone who intentionally pollutes soil, water or air, keeps waste or other substances which could lead to harmful emissions, or causes major damage to the environment by noise, vibrations or radiation may be imprisoned for up to two years if the action is not authorised by a competent body or if the action is deemed to be outside the norm.

A person who breaches the Penal Code by negligence is liable to a fine or imprisonment for six months. The fines in Sweden are fixed in a special way.
The fine is determined on the defendant's daily income on a unitary basis. The number of units are fixed according to the severeness of the crime and each unit ("dagsbot") is about 1/1,000 of the defendants yearly income. For example, an ordinary traffic accident caused by negligence will render the defendant a 30 unit fine. If he earns 200,000 SEK a year each unit will be 200 SEK making a total fine of 6,000 SEK. There are no cases from the Supreme Court.

Criminal cases are handled by the courts. If the regulatory body believes that someone has committed an environmental crime it is required to notify the Public Prosecutor who will then bring the prosecution. The regulatory bodies cannot themselves bring prosecutions. Individuals may bring private prosecutions, but that is unusual.

As far as civil liability is concerned, Sweden does not recognise penal damages. The overlap between the Environment Civil Liability Act 1986, SFS 1986/225 and the Penal Code or Environment Protection Act 1969 is that breach of the Penal Code and sometimes of a penalty clause in the administrative regulations carries with it civil liability for damage under the Environmental Civil Liability Act 1986 and the Civil Liability Act 1972. This is not the same as fault liability (intentional or negligent) in that it covers economic loss which is not connected to any bodily harm or damage to property and which may be minor.

UK

Administrative

England and Wales

The enforcement of environmental legislation is to a large extent in the hands of either statutory bodies such as Her Majesty's Inspectorate of Pollution ("HMIP") and the National Rivers Authority ("NRA"), or a variety of local authorities such as county councils, district councils, metropolitan district councils and London boroughs (the waste regulation authorities WRA's). Guidance notes and circulars (often not legally binding) are frequently issued by the Government to public authorities setting out how the Government wishes them to exercise their powers and advising them on procedures that should be adopted. Such guidance notes and circulars do not normally have the same authority as secondary legislation but the bodies to whom they are addressed tend to observe them quite closely. They are an important source of information on the practical application of environmental law in the UK.

The Environment Act 1995 has only recently been enacted and when its provisions are in force, will bring important administrative changes. A key change will be the consolidation of the NRA, HMIP and the WRAs, into a central Environment Agency.

Administrative liabilities may arise under one or more of the following statutes where the relevant authority determines that pollution on a site requires remediation. As referred to above, it should be noted that in general, breach of a
requirement by the regulatory authorities to remedy environmental damage is subject to criminal penalties.

Section 59 of the Environmental Protection Act 1990 applies where controlled waste has been deposited in or on land in contravention of Section 33(1) of the Environmental Protection Act 1990, which prohibits, amongst other things, the deposit of controlled waste on any land (or knowingly causing or knowingly permitting it) unless there is a waste management licence in force and the deposit was in accordance with the licence conditions.

By Section 59(1) of the Environmental Protection Act 1990, the WRA may by notice require the occupier of the land on which controlled waste has been unlawfully deposited either to remove it within not less than 21 days or to take such steps as may be specified with a view to eliminating or reducing the consequences of the deposit of the waste, or both. The occupier - who has the right to appeal to a Magistrates' Court within the 21 day period - may escape liability if it can prove that it neither deposited nor "caused or knowingly permitted" the deposit of the waste. Penalties for failure to comply with clean-up requirements include a fine. In addition the regulatory authority may clean-up the waste, and its consequences, and recover the reasonable costs of its necessary actions from the occupier.

Alternatively, under Section 59(7) of the Environmental Protection Act 1990, where the WRA thinks it necessary in order to remove or prevent pollution of land, water or air or harm to human health, it may again take the necessary remedial action itself, and recover its costs either from the occupier of the land (again unless the occupier can prove that it neither caused nor knowingly permitted the deposit) or from any person who deposited or knowingly caused or knowingly permitted the deposit of any of the waste.

Under Section 161 of the Water Resources Act 1991 where it appears to the NRA that any poisonous, noxious or polluting matter or any solid waste matter is likely to enter controlled waters or is likely to be or to have been present in any controlled waters the NRA may carry out works or operations to prevent entry of the matter into controlled waters and, where such entry has already, to remove it, to remedy or mitigate any pollution that it has caused and so far as is practicable, to restore the waters, including any flora and fauna dependent on them, to their state immediately before the matter entered the waters. This clearly could involve an extremely expensive operation in many cases. Where the work has been carried out the NRA may recover its reasonable expenses from any person who caused or knowingly permitted the matter in question to be present at the place from which it was likely in the NRA's opinion to enter controlled waters, or who caused or knowingly permitted the matter in question actually to be present in controlled waters.

Liability therefore clearly ultimately falls on the person who is responsible either by his act or omission for the polluting matter travelling to the point where it caused the pollution or was likely to do so. The liability for remediation costs to those who have knowingly permitted polluting matter to enter into controlled
waters would, in many cases, also apply to a person who has acquired responsibility for the land that has the polluting potential described, even though he had nothing to do with the creation of the problem.

As mentioned, Section 161 Water Resources Act 1991 empowers the NRA to carry out preventative or remediation works and to recover the costs of carrying out such works from any person who caused or knowingly permitted the pollution of or threat to controlled waters.

The Environment Act 1995 introduces new Sections 161A to 161D into the Water Resources Act 1991. These sections introduce a power for the Environment Agency to require persons who cause or knowingly permit pollution of or threat to controlled waters to carry out preventative or remediation works. Where investigations by the Agency lead to the serving of a notice requiring works, the Agency can also recover the cost of those investigations from the person required to carry out these works. Section 161B contains provisions to prevent anyone whose consent is required from obstructing the person required to do the work. Any person who is required to grant access or consent to the work being carried out may claim compensation from the person ordered to carry out the work.

Non-compliance with a Section 161 works notice is an offence punishable by fine and/or imprisonment. If the Agency feels that these proceedings will not be effective it may seek a civil remedy through the High Court.

The Environment Act 1995 introduces a specific system to deal with contaminated land by inserting new Sections 78A - 78YC into the Environmental Protection Act 1990 (that is, in front of the statutory nuisance provisions (see below)). Contaminated land is defined (see 11) with reference to the opinion of the local authorities which are under a duty to identify contaminated land. The local authority is then to identify the appropriate person and serve that person with a remediation notice. The appropriate person is the polluter or if the polluter cannot be found the owner/occupier.

Section 79-82 of the Environmental Protection Act 1990 the statutory nuisance provisions in the Environmental Protection Act 1990 also provide powers for clean-up of land where this amounts to an "accumulation or deposit which is prejudicial to health or a nuisance". It should be noted that there is a potential overlap between the statutory nuisance provisions and Sections 78A - 78YC. Schedule 22 of the Environment Act 1995 at paragraph 89, however, provides that no matter shall constitute a statutory nuisance to the extent that it consists of, or is caused by, any land being in a contaminated state. The aim of this amendment is to prevent the overlap between certain categories of statutory nuisance and the new provisions relating to remediation of contaminated land.

Where a local authority is satisfied that a statutory nuisance exists or is likely to occur or recur under Section 80 it shall serve an abatement notice requiring the abatement of the nuisance or prohibiting or restricting its occurrence or recurrence. The notice may also include a requirement to execute such works and to take any other steps, as may be necessary to abate the nuisance and/or to restrict its
recurrence. The provisions of Section 80(2) are important in that they require service of an abatement notice on the person responsible for the nuisance, who is defined as "the person to whose act, default or sufferance the nuisance is attributable". While this clearly covers the person originally responsible for the statutory nuisance, it also catches the person who simply allows the nuisance arising to continue to be in existence on his land. However, if the person responsible for causing the nuisance cannot be found, the abatement notice may be served on the current owner or occupier of the premises, so exposing subsequent purchasers to liability.

The categories of statutory nuisance are as follows:

- any premises in such a state as to be prejudicial to health or a nuisance;
- smoke (including soot, ash, grit and gritty particles in smoke) emitted from premises so as to be prejudicial to health or a nuisance;
- fumes or gases emitted from premises (private dwellings only) so as to be prejudicial to health or a nuisance;
- any dust, stream, smell or other effluvia arising on industrial, trade or business premises and being prejudicial to health or a nuisance;
- any accumulation or deposit which is prejudicial to health or a nuisance;
- any animal kept in such a place or manner as to be prejudicial to health or a nuisance;
- noise (including vibration) emitted from premises (not noise caused by aircraft except model aircraft) so as to be prejudicial to health or a nuisance;
- noise that is prejudicial to health or a nuisance and is entitled from or caused by a vehicle, machinery or equipment in a street;
- any other matter declared by any enactment to be a statutory nuisance.

The person liable for a statutory nuisance is "the person responsible" except where the nuisance arises from a defect of a structural character (in which case it is the owner of the premises) and where the person responsible cannot be found or has not yet occurred in which case it is the owner or occupier of the premises. The person responsible is the person to whose act, default or sufferance the nuisance is attributable. This can include the person whose actions resulted in the nuisance, whether or not he is in occupation of the land, and even though he may have sold or leased the land and have no right to re-enter it to do anything about the nuisance. It has also been held that an owner can be liable under these words for
failure to abate a nuisance on his land caused by the activities or omissions of another. It should be noted that where a nuisance arises from land which is contaminated, the statutory nuisance provisions are not applicable and the proper recourse will be to seek remediation under the contaminated land provisions of the Environment Act 1995, when it comes into force.

The statutory nuisance provisions will apply to contaminated land until the contaminated land provisions are in force. Also, the statutory nuisance provisions will be disapplied from any "harm" arising from substances in, on or under land, and not just from significant harm as covered by the contaminated land regime.

Under the Town and Country Planning Act 1990, where land is contaminated this may constitute a material consideration to which planning authorities must have regard when deciding whether to grant planning permission (Section 70(2)). Even if planning permission is granted for a contaminated site, an obligation to clean-up the contamination may be imposed under the Town and Country Planning Act 1990 as a condition attached to the planning permission for development on the site. Consequently, although a purchaser may have no direct responsibility for the presence of contaminants on the site it has acquired, if it wishes to develop it may find itself subject to substantial additional costs incurred in complying with a clean-up condition on a planning permission for the site which predates the acquisition of the site. No liability under any relevant planning permission will attach to the vendor in such circumstances; the condition runs with the land and takes effect only when the development is commenced, so implementing the planning permission. Sections 215 - 219 enable the planning authority to serve a notice requiring the owner or occupier to clean-up land if the land adversely affects the amenity of the neighbourhood. Non-compliance with the notice is an offence punishable by fine on summary conviction. Further fines may be levied if the offender persists with non-compliance. The imposition of the notice may be appealed to the magistrates court on certain specified grounds and then by either party further to the Crown Court.

If the notice is not complied with the local planning authority may enter the land, clean-up and reclaim from the owner any reasonable expenses incurred. The local planning authority can recover the expenses as a simple contract debt.

Scotland

At present the structure of enforcement of environmental legislation in Scotland is very similar to that in England and Wales being based on the same structure of media specific agencies and local authority departments. The Scottish Environmental Protection Agency established under the Environment Act 1995 will take over the functions of the majority of the existing regulatory agencies from 1st April 1996. At present however Her Majesty's Industrial Pollution Inspectorate (HMIPI) sets emission limits for air pollution and deals with radioactive substances and oil discharges. HMIPI also has input into management of hazardous waste through the Hazardous Waste Inspectorate. Along with the River Purification Boards (which control water pollution) it is responsible for implementing the integrated pollution control provisions of the Environmental
Protection Act 1990. HMIP also has the power to hear appeals against refusal of licences, variation of onerous conditions, etc..

Regional councils are responsible in Scotland for supply of "wholesome" water by virtue of the Water (Scotland) Act 1980. In Scotland there is no Drinking Water Inspectorate the equivalent functions being dealt with by the Scottish Office Environment Department.

District and island councils are responsible under the Environmental Protection Act 1990 Part 24 Waste Regulation and Disposal and Collection. These councils also control the handling of potentially more harmful special waste and administer controls over noise.

Northern Ireland

The administrative authorities in Northern Ireland differ somewhat from those of England and Wales. In Northern Ireland the main authority responsible for environmental matters is the Department of the Environment for Northern Ireland. The various regulatory authorities operate under control of and are sub-divisions of the Department. The Environment Service is responsible for provision of policy and legislation on a variety of matters relating to the environment with the purpose of protecting and conserving the natural and man-made environment.

The Alkali and Radiochemical Inspectorate (ARCI) is responsible for air pollution control from industrial sources and for use and disposal of radioactive material.

Water is controlled by the: Water Quality Unit, responsible for the aquatic environment by monitoring water quality and controlling effluent discharges; the Water Executive which is responsible for providing water and sewage services; and the four Divisional Water Service Offices.

Criminal

To date, environmental legislation is more commonly enforced by regulatory authorities through criminal proceedings. A conviction for a criminal offence may in some cases also found a civil action, but under several statutes, such as Section 85 of the Water Resources Act 1991 (see below) there is express provision that no extra civil liabilities arise as a consequence of criminal liability. It should be noted that criminal liability arises not only by way of breach of environmental regulation (including breach of permits/licences granted under such regulation) but also if an administrative order (for example, to cease a polluting activity or to remedy environmental damage) is breached.

Primary criminal offences are as follows:-

Environmental Protection Act 1990:

Section 23: offences concerning the authorisation of industrial processes under the regime of Integrated Pollution Control
covering what are considered to be the most polluting industrial processes, where one authorisation covers the management of the process and its overall environmental impact; offences broadly relate to carrying on the process without an authorisation or in breach of a condition;

Section 33: the offence of unlicensed disposal of waste or managing waste in a manner likely to cause environmental pollution or harm to health.

Section 34: the offence of breaching the duty of care in relation to waste.

Water Resources Act 1991:

Section 85: the offence of an unconsented discharge of "any poisonous, noxious or polluting matter" into controlled waters (including inland waters and groundwater), commonly subject to fines of up to £20,000 in the lower (magistrates) court and unlimited in the upper (Crown) court and/or custodial sentences. So far, in general, the level and enforcement of sanctions is relatively low.

"Owners", "occupiers", "persons responsible", "persons in control" (in most cases both current and former) may all be held liable, commonly subject to fines of up to £20,000 in the lower (magistrates) court and unlimited in the upper (Crown) court, and/or custodial sentences. So far, in general, the level of sanctions and enforcement is relatively low.

Evidence of a criminal conviction is admissible in any civil action to recover for damage which has resulted from the commission of that offence. The civil action should be based on an appropriate common law remedy.

Scotland

The situation in Scotland is very similar to that in England and Wales in that enforcement is mainly through criminal proceedings instituted by a regulatory authority. Again breaches of environmental regulation and also administrative orders give rise to criminal sanctions.

Legislation imposing criminal sanctions in Scotland differs slightly from England and Wales but practical differences are few. Integrated Pollution Control and Local Authority Air Pollution Control offences under the Environmental Protection Act 1990 apply in Scotland. The Water Resources Act 1991 does not apply but an almost identical offence to Section 85 of the Water Resources Act 1991 is being inserted into the Control of Pollution Act 1974 for application to Scotland by the Environment Act 1995.

Northern Ireland
The system in relation to criminal sanctions is largely the same as in England and Wales in that regulatory authorities may bring prosecutions for breaches of environmental regulation and administrative orders. As mentioned in legislation in Northern Ireland is somewhat behind England and Wales but it is planned to bring it largely into line in 1996.

**STUDY 2**

**AUSTRIA**

**Administrative**

The majority of Austrian environmental legislation aims to prevent the damaging effects of pollution on the environment. This is achieved in many cases through licences and controls. At present, there is a very complex system of administrative provisions relating to the environment which concern pollution of the atmosphere, water, soil and forests, levels of noise, hazardous substances, etc. As a general rule, each of these areas is governed by a number of separate pieces of legislation.

Various authorities are responsible for the enforcement of environmental legislation. Responsibility depends on the laws to be applied, the permits that need to be obtained and the administrative authorities (federal, provincial or municipal) with jurisdiction.

The most important authorities concerned with the regulation of environmental legislation are as follows.

- District administrative authorities: the bodies of the chartered towns. Unless expressly specified otherwise, they are the bodies of first instance in all matters relating to the federal and provincial administration.

- Provincial governors: responsible for all matters assigned to the provincial administrations by federal law, including matters in connection with the trade regulations, waste management and water rights.

- Provincial governments: the authorities which are the final court of appeal for matters relating to provincial laws, including nature conservation.

- Federal Minister of the Environment: the minister responsible for enforcing the Waste Management Act, the Ozone Act, the Smoke Alarm Act, the Chemical Substances Act and the Detergents Act.

- Federal Minister of Agriculture and Forestry: the minister responsible for enforcing the Water Rights Act and the Forestry Act. He is the last means of appeal in such matters.
Federal Minister of Economic Affairs: the minister responsible for enforcing the trade regulations, the Clean Air Act for Boiler Plants, the Mining Act and certain aspects of the Waste Management Act.

The authorities responsible for enforcing environmental legislation also have the right to inspect and supervise all industrial plants. In addition to the closure of a plant, materials and machinery may be impounded if they are felt to be breaching the regulations. The authorities are also able to instruct polluters to take precautionary and restoration measures where necessary.

The provisions in the Waste Substances Restoration Act 1989, the Water Rights Act, the Trade Regulations and the Waste Management Act 1990 are used effectively by the authorities. The administrative authorities work effectively as long as the damage is not excessive and/or the polluter is traced and is able to finance the clean-up operation (for example car accidents where oil pollutes the soil).

Criminal

In 1987 Austria incorporated specific offences relating to the environment into the Penal Code. However, very few cases have been decided by the Austrian courts under the Code. The penal courts will only act in instances of special breach of administrative regulations or an order issued by the administrative authorities. Criminal decisions are not binding on the civil courts but are persuasive and can be used in evidence.

In principle, any breach of administrative legislation is subject to sanctions. A large number of offences and penalties are provided for in administrative law. This part of the legislation is more or less "dead law". The administrative penalties are used more frequently, but again, this does not necessarily lead to environmental restoration.

Pursuant to a number of laws the administrative authorities have the power to ask the polluter or, under certain circumstances, the owner to clean-up. The authority also has the power to prescribe in detail how the clean-up should be carried out.

Where the authorities fail to take action an individual suffering damage can bring an action against the authority for failure to perform its legal duty. In the recent case, re Borax, owners of local property which had been damaged by the Borax factory, who were unable to bring an action in civil law against the insolvent company brought an action against the City of Vienna for not performing its statutory due with regard to the factory.

Pursuant to the Forestry Act 1976, the authority can order the owner of the forest, under certain circumstances, to take measures to minimise the damage to the forest. Based upon a decree from the authority, costs of these measures can be recovered by the owner of the industrial plant (Section 51).
Pursuant to Section 31 of the Water Rights Act, the authority has the right to ask the polluter to take the necessary measures to avoid pollution. If the polluter cannot be ordered to take these measures, the authority can instead order the owner of the real property to take the necessary measures if he has consented to the act which causes the danger or has tolerated this act and if he failed to take measures to stop it.

Furthermore, the authorities can also ask the polluter to arrange for the necessary clean-up.

**BELGIUM**

**Administrative**

Both municipal and provincial authorities are responsible for environmental regulatory controls, for example, granting licences etc. Also administrative services have been specially created within each regional ministry to regulate offences and specific institutions linked to those regional ministries have been established: Office Wallon des Déjàts, IBGE (Institut Bruxellois pour la Gestion de l'Environnement), OVAM (Openbare Afvalstoffenmaatschappij voor het Vlaams Gewest), SPAQUE (Société publique d'aide à la qualité de l'environnement). Rural police and forest wardens also have enforcement powers. Illegal activities are reported to the courts and tribunals and the state prosecutor decides whether an action will be pursued.

The regulatory authorities have powers to require clean-up under the following statutes:

- Flemish decree of February 22, 1995, Articles 10 - 17, clean-up can be required if the level of land contamination is higher than the clean-up standards adopted by the Flemish government or, where no such standards exist, where the contamination is a very serious threat. When the ground is the property of an innocent landowner, the OVAM (Openbare Vlaamse Afvalstoffenmaatschappij) shall clean it up and later recover the costs from the liable person.

- the Toxic Waste Law of 1974, Article 16, under which the Government of the Province can order the removal or the destruction of discarded toxic waste.

- the Flemish decree of June 2, 1981, Article 13 and 59, under which OVAM has the right to require the clean-up of contaminated land.

- the Walloon decree of July 5, 1985, Article 58, under which in cases dealing with illegal landfills, the judge can order the defendant to clean-up the land or at least to reduce the nuisance.

- the Brussels decree of March 7, 1991, Article 17b, under which in cases of a serious threat to the environment, municipal authorities
can require all necessary measures to be taken in order to prevent or remedy danger.

**Criminal**

Legislation on environmental matters includes criminal offences for breach of the provisions of the laws and penalties imposed include both fines and imprisonment.

Some of the general criminal provisions of the Criminal Code could apply to the environment. Most of the offences, however, under the environmental legislation come under the following categories:

- non-compliance with legal provisions or administrative decisions under those provisions;
- non-compliance with a licence or permit;
- preventing inspection of plants;
- operating or altering a polluting plant without a permit.

A civil party may join in the proceedings relating to a criminal prosecution to claim damages. Criminal offences arise out of breach of administrative provisions. It is also possible to bring a separate civil action in negligence (fault) either with respect to breach of the duty of care or in respect of breach of administrative provisions.

Concerning the relationship between administrative and criminal law there has been a recent case (case No. 865/93) decided by the Supreme Administrative Court concerning pollution of the sea. In that case it was decided that any penalty imposed under Article 13 of Law 743/77 which is an administrative penalty must be dealt with by the administrative courts. Any criminal penalty must be imposed by the criminal courts and would not be excluded because an administrative penalty has already been imposed.

**GREECE**

**Administrative**

Under Article 30 of Law 1650/1986, regardless of any eventual civil or criminal liability, the authorities may impose fines and/or temporarily or permanently revoke an operational permit.

The problem of environmental restoration is dealt with mainly in advance (in a precautionary way) by the Studies of Environmental Effects (Article 5 of Law 1650/1986, Common Ministerial Decision 69269/5387/90). The competent authority determines the terms for environmental protection during the construction or the development of various facilities or activities, which include conditions for environmental restoration.
There is no overlap of civil to administrative or criminal law, since civil, administrative and criminal liability are established by different articles (Article 29/30/28 L.1650) which are in force under different conditions.

Regardless of eventual civil or criminal liability, the authorities may impose administrative fines as well as temporary or permanent revocation of the operation permit.

It depends on the discretion of the authorities to determine whether or not and to what extent damages and costs will be imposed, without any restrictions as to the protected good, the character and the extent of the pollution.

In cases where damage is caused by an act or omission of an administrative authority, the injured party may bring an action for the annulment of the act or the omission before the Council of State, under the condition that he can prove legal interest. If the breach constitutes a material action, administrative courts of first and second instance are competent.

Specific legislation gives analogous powers to the competent authorities (that is, Article 11 of the Law 743/77 as amended, on the protection of the sea, Article 8.3 of Law 1428/84 as amended, about mines, etc.).

Criminal

Under Article 28 of Law 1650/1986 imprisonment and fines may be imposed as criminal sanctions. Any person polluting or damaging the environment by an act or omission, carrying out activities or running a business without having the required permission or failing to comply with the terms of a relevant permit is liable.

ICELAND

Environmental law is a new area and there was very little discussion on problems in this area until approximately ten years ago. In addition, the country has not been burdened with pollution that requires immediate attention. Accordingly, law and practice in this area is sparse.

Administrative

There is no general legislation on liability for environmental damage or actions for regulatory authorities. However, several statutes exist dealing with specific environmental matters. Examples of such statutes are: the Act on Protection against Pollution of the Ocean No. 3/21986; the Act on Water Resources No. 15/1923; the Act on Radiation Protection No. 117/1985; the Act on Planning No. 19/1964; the Act on Buildings No. 44/1978; and the Act on Evaluation of Environmental Effects of Projects No. 63/1993.

These statutes grant either the ministries, regulatory authorities or municipalities, the power to control environmental matters in certain fields, for example the right
to grant licences, stop projects and set certain standards that must be fulfilled before projects can be carried out. The legislation generally provides for penalties in cases of non-compliance but only in a few examples do they have special civil liability rules. The right of a regulatory authority to require clean-up depends on the provisions of each statute. If a statute prohibits certain behaviour, a defendant who breaches this and causes environmental damage, can be required to clean-up the pollution or restore the damage.

In cases of pollution of the ocean, the relevant municipality shall, in co-operation with the Institute of Maritime Affairs, supervise the clean-up. If the defendant does not clean-up the pollution by himself, the authorities are required to clean-up and they can then claim the clean-up costs from the defendant. The Institute of Maritime Affairs has this power by virtue of Chapter VII of the Act on Protection against Pollution of the Ocean No. 32/1986.

**Criminal**

The statutes dealing with environmental issues as stated above impose criminal sanctions for non-compliance with administrative licences and orders. The majority of environmental actions therefore involve criminal prosecutions for breaches of such regulations.

**IRELAND**

**Administrative**

The way in which environmental law is enforced will depend on the part of the environment to which it relates. Until recently, legislation has been media specific and in accordance with the principle of subsidiarity, enforcement of that legislation devolved largely upon the thirty nine local (planning, fishery, harbour and sanitary) authorities.

The Local Government (Planning and Development) Acts 1963 to 1993 ("The Planning Acts"), ensure proper planning and development of cities, towns and other urban or rural areas. These Acts define "development" as being the carrying out of any works in, on or under the land or the making of any material change in the use or structure of the land. The owner of land will be liable for failure to comply with requirements of an enforcement notice issued by a planning authority to enforce the planning code. In situations such as this, the planning authority enforces the law and can prosecute or carry out necessary work itself and recover the cost from the landowner. Besides examining and surveying current developments, the planning authority monitors and enforces compliance with granted planning permissions.

Breaches of the Air Pollution Act 1987 ("The Air Pollution Act") are actionable by a local authority or private individuals in either the locality of the premises from which the emission was made or in the area affected by the emission. The legislation and regulations made under the Act provide for the licensing of emissions into the air in accordance with specified threshold levels.
The European Communities (Toxic and Dangerous Waste) Regulations 1982 ("The Toxic and Dangerous Waste Regulations") makes local authorities responsible for the planning, organisation and supervision of operations for the disposal of toxic and dangerous waste in their areas and the authorisation of the storage, treatment and depositing of such waste. Enforcement of the regulations is the responsibility of the local authorities.

Under the Water Pollution Acts and the Air Pollution Act, the local and sanitary authorities have the right to take action and clean-up an unlicensed pollution discharge in the event that the person causing it fails or neglects to do so. The expenditure incurred by the authority in carrying out the necessary clean-up operations is without a ceiling or financial limit and can be recovered as a simple contractual debt. Third parties may also apply under these Acts for an order against an offender.

In relation to waste disposal, there are currently no provisions strictly related to restoration but it is proposed in the Waste Bill of 1995 to introduce regulations to enable any Minister or local authority to support or assist development of waste recovery activities and, if implemented, this legislation will enable the minister to make regulations governing the recovery of waste.

Most recently, the Environmental Protection Agency Act 1992 has been enacted, pursuant to which a number of the powers conferred on local, planning and sanitary authorities under the legislation referred to above, are being extended to, and will ultimately lie with, the Environmental Protection Agency.

The need for the Environmental Protection Agency arose from the recognition that local authorities were, very often, not in the best position to deal with large complex applications for licences for discharges to the environment. There are two reasons for this:

- lack of expertise - rather than having thirty nine moderately skilled units to monitor and enforce environmental protection, there is now one centralised, highly skilled unit drawing upon all the resources formerly available only in individual local authorities; and

- conflict of interest - for example, there may have been high unemployment in an area and the local authorities, run by locally elected representatives, would be anxious, therefore, to encourage large scale development to set up in their region, and would, perhaps, not pay as much attention to the environmental consequences of such development.

The Environmental Protection Agency is the only specialised supervisory environmental body. It acts as an independent supervisory body for the environment and operates in tandem with, and to a large extent above, bodies such as the local authorities, public authorities and other statutory bodies, in relation to their environmental functions. The functions and powers of the Environmental
Protection Agency are set out in the Environmental Protection Agency Act 1992. Among the most important of these are:-

- the monitoring of the quality of the environment;
- the promotion, co-ordination, commissioning and carrying out of environmental research;
- the provision and support of advisory services for local and other public authorities; and
- the establishment and maintenance of databases and information relating to the environment and the dissemination of such information to the public.

The Environmental Protection Agency, other than in connection with appeals in cases of integrated pollution control licensing, exercises no judicial or quasi-judicial function.

The Environmental Protection Agency Act 1992 abandons the old approach of requiring separate licences for discharges to different environmental media and introduces a new integrated pollution control licensing system which covers all environmental media.

Civil liability may flow from administrative liability in that it is possible to claim damages in judicial review proceedings.

Criminal

Where Irish environmental statutes are breached criminal liability is normally imposed. Criminal judgments do not bind the civil courts. Penalties imposed are fines or imprisonment or both. More recent environmental legislation imposes much higher penalties for infringement. Under the water pollution legislation offences for pollution of water from agricultural activities carry penalties on summary conviction of maximum £1,000 or six months imprisonment or both and £25,000 or five years imprisonment or both on indictment.

Under the Local Government (Water Pollution) Acts 1977 to 1990 ("The Water Pollution Acts") it is an offence for any person to cause or permit any polluting matter to enter water. Action for failure to comply with the Acts may be taken by a variety of different persons, including the local authority and private individuals. The legislation and regulations made under the Acts also provide for the licensing of certain emissions to the aquatic environment, subject to specific terms and conditions.

Under the Air Pollution Act there is the further penalty available of a daily fine of up to £1,000 or two years imprisonment or both where an offence continues to be committed after conviction. The daily fine can in theory be imposed for as long as the offence continues.

Under the Environmental Protection Agency Act 1992 a number of old environmental offences with relatively minor penalties had their offences
increased. Under Section 9 of the Environmental Protection Agency Act 1992 the maximum penalties for offences are following summary conviction of a fine of up to £1,000 or six months imprisonment or both or following conviction on indictment a maximum fine of £10 million or a maximum of ten years imprisonment.

The most comprehensive figures available to date relate to the enforcement of water pollution control provisions which have been the most effective and widely used. For example in 1991 there were 52 prosecutions of which 21 were successful, with fines varying from £5 - £1,000. In 1992 there were 13 successful prosecutions out of a total of 58, with fines ranging from £1 -£3,000. The levels of fines imposed can, in many cases, hardly be regarded as a deterrent. The Courts are, however, limited in the fines they can impose in cases prosecuted summarily.

No comparable figures are available for enforcement of controls in areas other than water but it is known that such procedures are widely used and are of some limited effect in terms of environmental restoration.

LUXEMBOURG

Administrative

The relevant administrative bodies are the Minister of the Environment assisted and advised by the Administration of Environment, whose decisions may be reviewed, on appeal from individuals, by the Council of State.

Major pieces of legislation governing environmental protection and permitting the administrative authorities to act with regard to environmental issues are set out below.

Air pollution is controlled by the law of 21 June 1976 on the control of atmospheric pollution and secondary legislation thereunder. The law defines the meaning of emission into the atmosphere. Various Grand-Ducal regulations have established the measures to be taken to prevent or reduce air pollution including controls over the sulphur content of gas oil, combustion plants which use liquid or gaseous fuels, and pollution from municipal waste incinerators.

It is a requirement that the most up-to-date technologies are used, insofar as their expense is not excessive. Licences issued to industrial plants whose activities may have an adverse effect on the environment are subject to the provisions of all relevant Grand-Ducal regulations. These include not exceeding maximum permissible emission levels, utilising equipment to prevent or reduce the risk of pollution and introducing guidelines for inspecting and supervising the plant.

These provisions do not provide for administrative fines but simply state that costs for certain works are at the defendant's expense.

Noise pollution is subject to the law of 21 June 1976 on noise pollution and statutory instruments thereunder provide that designated inspectors are in charge
of establishing any infringement of the noise legislation. They have extended powers to inspect establishments where excessive noise is believed to originate (Articles 3-6).

Where air or noise pollution is imminent, the Minister of the Environment may take urgent action necessary to remedy the situation. When an act of air pollution has been committed, the Public Prosecutor or plaintiff may request a magistrate to order whatever immediate measures are necessary.

Abstraction of groundwater, the spreading of chemical slurry on agricultural land and the discharge of sewage into rivers are subject to regulation, but existing controls are scarcely adequate to protect against water pollution.

The law of 16 May 1929 on clearing, maintaining and improving watercourses, prohibits the discharge of any substance into a watercourse that is likely to have an adverse effect on its purity. Breach of these regulations where the polluter had knowledge of the infringement will lead to civil and criminal liability, regardless of whether or not damage has been caused.

The law of 29 July 1993 on the protection and management of water introduces a system for protection against water pollution and different procedures of authorisation for:

- sampling of surface and undergroundwaters;
- sampling of solid or gaseous substances in surface or undergroundwaters;
- disposing of waste waters into surface or undergroundwaters;
- disposing of solid, gaseous or liquid substances, other than wastewaters into surface or undergroundwaters;
- fitting out and working of quarry or mines.

The law of 1993 provides also that the municipalities must collect and treat wastewaters produced on their territory.

The major piece of legislation governing waste disposal is the law of 17 June 1994 on the disposal, processing and storage of waste. It provides that the Minister for the Environment may grant authorisations to conduct business in this field, but stops short of creating administrative liability. This law does however, allow for the imposition of strict liability of a civil nature.

The law of 9 May 1990 concerning "dangerous and hazardous establishments" provides that an industrial, craftsman's or commercial establishment, in the public or private sector, which might cause a danger or inconvenience for security, health or comfort or the public, the neighbourhood or employees, for the natural and human environment, is subject to licensing or an administrative authority.

Depending on its classification as group 1, 2 or 3 establishment, the licence is granted by the Minister of Employment and the Minister of Environment or by the Lord Mayor of the municipality in which the establishment is located.
Under the law of 9 May 1990, the Minister of Environment has the power to inspect premises at any time to assure himself that the conditions of the licence are being complied with. The licence may be revoked if there is non-compliance with the obligations of the licence. The Minister may allow up to two years for the implementation of new obligations. Failure to comply with the new obligations may result in the full or partial suspension, either temporarily or permanently, of operations at the premises. Those held responsible may face criminal prosecution (imprisonment or fines).

Traditionally, environmental laws have not empowered the administrative and regulatory authorities to clean-up damage and restore the environment. However, more recently, a number of laws have been introduced which enable the administrative authorities to order that clean-up/restoration be carried out.

The law of 29 July 1993 modifying the laws of 21 June 1970 on noise and atmosphere pollution have empowered the Minister of Environment to take appropriate actions. Further, the law of 17 June 1994 referred to above contains a similar provision (Article 28).

Criminal

Breach of environmental laws is usually a criminal offence and protection of the environment is based mainly on criminal liability. The importance of administrative liability is limited. Some commentators have expressed the view that the administrative and civil liability systems of environmental protection in Luxembourg must be reinforced, but at present, the system in Luxembourg remains essentially based on criminal prosecution, which may be brought by administrative bodies. Civil liability may flow from criminal liability through the procedure of "constitution de partie civile" whereby an action for civil damages can be brought in criminal proceedings by a party to the criminal litigation. A civil action may be brought subsequent to a criminal action but the criminal judgment does not bind the civil court.

The basic principles of tort law ensure that the restoration will be executed by the plaintiff at the responsible party's costs. It is however also conceivable that the Court could order the restoration to be executed directly by the persons liable for the environmental damage and impose a daily fine ("astreinte") to ensure enforcement of its decision.

NORWAY

Administrative

A comprehensive set of laws regulates environmental damage and environmental protection in Norway. The main provisions are found in the Pollution Control Act, the Maritime Act and the Petroleum Act.
Other legislation of interest is the Seaworthiness Act 1903 Chapter 11 (this Act implements the MARPOL Convention), the Regulation of Watercourses Act 1917, the Cultivation of Land Act 1955, the Legal Situation between Neighbours Act 1961 (the "Neighbour Act"), the Exploitation of the Forest and the Protection of the Forest Act 1965 (the "Forest Act"), the Protection of Nature Act 1970, the Concession and on Public Right of Pre-Emption by Real Property Purchase Act 1974 (the "Licence Act"), the Product Control Act 1976, the Planning and Development Act 1985 and the Production and Use of Genetically Modified Organisms Act 1993 (the "GMO Act").

The implementation and enforcement of environmental legislation is the responsibility of several administrative bodies. At national level the regulations are enforced by the Government, the Ministry of the Environment ("Miljøverdepartementet") and the National Pollution Control Authority ("NPCA"). At county level, the authorities are the county council and the county governor. The local authority is the municipal council.

Some legal provisions are solely enforced by lower authorities, for example, the provisions of the Planning and Development Act 1985.

The different authorities are under a duty to coordinate their work in order to achieve the most effective protection for nature and the environment.

The tasks of the administrative bodies in this area include the granting of permissions to the public and the setting of conditions for their use, as well as controlling activities, collecting fees and compensation for damage, and managing rescue and clean-up operations in cases of environmental accidents.

In most cases concerning the environment, the administration has full discretionary power. The courts generally have no right to overrule administrative decisions. An appeal to the courts can only be based on error in legal interpretation, false factual premises, procedural breach or an abuse of authority. If the courts sustain an appeal, the administrative decision may be quashed and returned to the administrative body for new consideration.

The three main Acts mentioned above deal with the most common environmental issues and establish both civil and administrative liabilities. Furthermore, the procedures that they adopt are representative of most of the other statutes in the environmental area.

The Pollution Control Act sets out the underlying tenets of the Norwegian system for environmental protection and establishes a framework for pollution control. It embraces the concept of "sustainable development" by stating that its purpose is to:

"ensure adequate environmental quality, so that pollution and waste do not cause damage to health, adversely affect human well-being or damage nature's capacity for reproduction and self-renewal";
and that it shall be implemented so as:

"to achieve satisfactory environmental quality on the basis of a total appraisal of health, welfare, the natural environment, costs related to control measures and economic considerations."

It also adopts the "polluter pays principle", contains a licensing system and establishes general requirements for polluting activities aimed at preventing environmental damage.

With a few exceptions, the Pollution Control Act generally prohibits activities causing pollution. However, limited pollution from the primary industries (agriculture, the fishing industry etc.), private residences, offices, schools, hotels and the like, and from temporary building and construction work is permitted.

The administrative authorities may lay down general regulations for polluting industries, to allow pollution up to a certain level. Such general regulations have been issued for various industries.

If an activity is not allowed under the statutory exceptions or general regulations, an individual permit may be granted upon application. The permits may stipulate conditions, such as control or clean-up measures, in order to prevent damage from the polluting activity. Where it is uncertain whether an activity will cause environmental damage, a "consequence analysis" may be carried out to help determine its effects. Where any doubt remains as to whether pollution will result, there is a presumption that a licence is required.

The process of application for a permit is carried out in public and interested parties (private or public) may make submissions and have the right to appeal. For applications which involve a greater public interest, an impact assessment study may be required and public meetings may be convened. The decision to allow or refuse an application may be appealed to higher authorities.

Where research and/or experience suggest a permission is inappropriate or following a successful appeal, the authorities may revoke previously granted permissions, alter already existing conditions or provide new conditions for the permits.

The Pollution Control Act also provides regulations to limit pollution damage. If the pollution in question was not permitted, the polluter has a legal obligation to stop the pollution and commence clean-up operations. In situations where a large number of persons suffer damage, the clean-up operations will be carried out in co-operation with the responsible authorities. In cases of acute pollution, the Act stipulates measures that both private and public persons are obliged to take action in order to prevent or minimise the pollution.

Where the polluter is operating within the terms of his permit he will only be obliged to stop the pollution or initiate clean-up measures where the pollution actually caused by the permitted activity is considerably worse or different from
the pollution that it was anticipated would be caused when the permit was granted. However, as mentioned above, the permit may, as a consequence of the pollution, be withdrawn and the conditions altered.

The Maritime Act and the Seaworthiness Act Chapter 11 govern oil spills from vessels at sea and set out liability rules regarding actual oil spills. Possible rescue and clean-up operations are usually managed by the administrative authorities at the polluter's cost.

The Petroleum Act, like the Pollution Control Act, establishes a licensing system and sets out rules for imposing requirements in order to prevent pollution. The operator of a rig is required to have in place or implement effective emergency measures in order to prevent or minimise pollution. Furthermore, the operator is responsible for rescue and clean-up operations. During the rescue operations the Petroleum Directorate may take over the management of the operation and order other persons/enterprises to participate. In order to locate the cause of the accident, a committee of inquiry may be established.

Statutes other than the Pollution Control Act, the Maritime Act and the Petroleum Act are designed to deal with more specific environmental problems. A general overview of these is set out below.

Under the Planning and Development Act 1985, the authorities are obliged to control and regulate construction and building activities, and may place and organise polluting industries where they will cause the least harm to the environment. Under the regime established by the Act, the authorities may grant permits for new activities or construction work etc. subject to conditions designed to protect the environment.

The Neighbour Act establishes civil liability for the benefit of persons living close to a polluting activity (the "neighbours"). The Act establishes a general limit for tolerable levels of nuisance from neighbours (for example for pollution) which any person must accept. The levels vary according to the area in question, for example, whether the area is rural, urban or industrial. The injured party has the right to demand that the nuisance in question is stopped, remedied or compensated for. If the activity is performed under a permit required by the Pollution Control Act, the injured party cannot demand that the activity ceases but can still claim damages. The regulations in the Neighbour Act and the Pollution Control Act concerning damages are, therefore, harmonised with regard to this specific problem.

Criminal

The administrative authorities may also impose fines upon companies found to be in breach of the law. Serious breaches may render the offenders liable to criminal prosecution. The offenders may be punished with fines or imprisonment for up to three months. Infringement of the regulations may also render the persons or companies involved liable to pay compensation for the damage caused.
Criminal and civil liability are seen as two separate systems but evidence of criminal prosecution may be brought in civil proceedings. Criminal judgments do not bind the civil courts.

PORTUGAL

Administrative

The most important pieces of legislation concerning the administrative authorities in the environmental field are:

- Law No. 11/87, of 7th April 1987: Basic Law on the Environment;
- Regulation No. 347/87, of 4th May 1987: Disposal of industrial waste;
- Decree-Law No. 352/90, of 9th November 1990: Protection of the atmosphere;
- Decree-Law No. 488/85, of 25th November 1985: Disposal of solid waste;
- Decree-Law No. 74/90, of March 1990: Protection, preservation and improvement of water quality;

Compliance with administrative controls is ensured by the local administrative authorities (the municipalities) and the central administrative authority (the Government). As a rule, the authorities have a preventative policy to try to avoid breach of the law. If this purpose is not achieved, the restoration of the previous situation, whenever possible, is always the desirable alternative. The reason for the above is that the imposition of criminal sanctions jointly or not with civil liability will not re-establish the situation as it was before the damaging acts. In short, the main concern of the authorities is to avoid infringements of environmental law and the consequent violation of a citizen's right to a healthy and ecologically sound environment. Regulatory authorities must act whenever they discover pollution and are entitled to require clean-up whenever they take any action in relation to the activity carried out by the party that caused the damage.

The implementation of the law is thus basically effected through either precautionary measures or punitive measures.

Precautionary measures will apply in those cases where the individuals or companies intend to carry out any construction or initiate any activity that needs prior approval from any state department. Approval is only granted if all legal requirements, including those relating to the environment, are met by the applicant.

Criminal

On the other hand, if any law is violated, the most important punitive measures are the following:
- criminal sanctions (imprisonment and/or fines) (see below);
- in relation to industrial pollution, closure of the plant concerned or suspension of supplies (for example, gas and electricity); and
- civil liability, mainly indemnities and, if possible, restoration of the environment to the level in existence prior to the damage.

The current system has still not fully succeeded in the objective of protecting the environment, not because of shortcomings in the system itself, but mainly due to the attitude of the public, including the authorities, who are still failing to understand the importance of environmental protection.

In certain situations there may be criminal liability, but only when expressly provided for by law. The public prosecution department ("Ministério Público") is responsible for initiating the relevant enforcement procedure. The following environmental crimes are provided for under the Penal Code:

- exposure of people to radioactive gases;
- exposure of goods belonging to third parties to radioactive substances;
- emissions of toxic or asphyxiating gases;
- contamination or poisoning of water resources;
- propagation of infectious diseases;
- introduction of epizootics;
- deterioration of animal foodstuffs;
- deterioration of human foodstuffs and medicines.

Certain crimes are provided for by separate statutes, such as:

- intentional or negligent forest fires;
- illegal hunting of protected species;
- and crimes against public health.

A person who commits a crime will, in principle, be ordered to pay compensation and/or restore the site to its original condition and will also be subject to criminal sanctions (fines and/or imprisonment) and/or administrative penalties (fines, withdrawal of licences etc.).

SWITZERLAND

Administrative

The most important single piece of environmental legislation giving rise to administrative liability is the Environmental Protection Act 1983. It includes general principles and covers most important environmental issues, including air pollution, noise abatement, hazardous substances, waste, soil pollution, preventative measures relating to natural disasters and environmental impact studies. Implementation has been through a number of federal ordinances relating to the various sectors.
The three general principles are pollution prevention, the polluter pays and clean-up. Pollution prevention is achieved through the use of consents and emission standards and lists of pollutants and acceptable levels have accordingly been developed. The requirements of business and available technology are taken into account in granting consents. The object of the "polluter pays principle" is to ensure remediation by the responsible party, thereby avoiding the need for the authorities to carry out the clean-up operations. The clean-up principle involves requiring old industries as well as new to come up to required standards.

Administrative liability under the Environmental Protection Act 1983 is a form of strict liability. A direct causal link between the act or omission and the hazard or damage is enough to trigger liability. It is not necessary to show fault.

There is a proposed extension of the Environmental Protection Act 1983 to allow private claims for compensation under strict liability in relation to hazardous substances.

Further environmental law provisions exist in acts, regulations and official recommendations and instructions from federal, cantonal and community law. Environmental law is therefore somewhat fragmented.

The enforcement of environmental protection legislation is primarily a state function. Administrative bodies (cantonal administrative offices) enforce the standards as defined by federal legislation, for example, on pollution (car exhaust), noise, clean water protection etc.. The cantons have enacted procedural rules to implement this duty. The state's influence in achieving environmental protection objectives is far more significant than that of private persons/associations. Consistency of enforcement is ensured by the federal agency, the OFEFP. In addition, the decisions of the cantons in this regard are subject to judicial review by the Supreme Court.

Typical enforcement measures include administrative orders and injunctions. The standard of Swiss environmental legislation always includes clean-up. Environmental damage has to be removed or repaired. Restoration is specially enforced if the plant or equipment is unable to comply with regulatory emission limits which are determined by "critical limits of alarm" (for air pollution) and/or what is reasonably affordable.

Thus, regulatory authorities are explicitly given the power to:

- require clean-up;
- have the clean-up carried out by third parties if imminent damage or spread of damage must be avoided, and then recover the respective cost from the persons liable according to the specific legislation; and
- ask for financial security (with respect to clean-up cost) in the original authorisation (construction permit, permit to operate toxic waste disposal facility etc.).
Criminal

There are also various sources of criminal liability under Swiss environmental law. The Criminal Code (StGB), the Environmental Protection Act 1983 and various specific pieces of environmental legislation contain offences which punish non-compliance with the requirements of environmental laws such as non-compliance with administrative safety rules, operating without authorisation or breaching terms of authorisations. In addition the Environmental Protection Act 1983 contains environmental offences for causing damage to the environment. The whole of the natural environment is subject to protection and offences cover endangering as well as damaging.

As yet there is no specific environmental offence under the Criminal Code (StGB) but the general offences set out can apply to facts connected with the environment.

Criminal offences are divided under Swiss law into contraventions and misdemeanours and the level of punishment differs accordingly. Fines may, however, be unlimited for both categories where the perpetrator has benefited financially from committing the offence.

According to Article 53 Code of Obligations rulings in criminal cases are not binding the civil (nor the administrative) courts. Criminal Courts are bound by civil rulings as far as preliminary questions are concerned (property or a car etc., that caused damage) but not concerning the question of fault or guilt.

The injured party can join a criminal proceeding with a claim for damages ("adhesive procedure"). In administrative proceedings, the "adhesive procedure" is generally not possible.
4. PROPOSALS FOR CHANGE

STUDY 1

USA

Many proposals to change both CERCLA, state clean-up standards and state tort law are under discussion at the federal and state level. Key issues include whether retroactive liability for previously lawful activities should be abolished and reform of clean-up standards.

Two major issues are at the heart of the debate over the future of Superfund:

- are the environmental benefits from Superfund worth the price, or can more be accomplished for less; and

- are there any better alternatives for funding the clean-up of historically contaminated sites, particularly after fourteen years of Superfund's liability scheme?

Even so, during the 1994 Congressional session, a surprisingly broad coalition of interests (including the EPA, as well as many industry and environmental groups) supported the conclusion that no fundamental overhaul of Superfund's liability scheme was appropriate. This position was based on two major factors. First, Superfund's existing approach to clean-up and liability (based on an extraordinarily broad view of "the polluter pays" principle) is a politically powerful concept in the US and, therefore, difficult to change. Second, hundreds of millions of dollars have already been spent by the private sector under the existing Superfund process and it was seen as unfair to change that approach in mid-stream, effectively punishing the companies which did what the government asked them to do during the 1980s.

As a result, the focus of Superfund reform in 1994 was on improving the way the existing system works. The major goals of this effort were:

- more rapid and efficient clean-ups through greater flexibility in targets and methods, national risk assessment protocols and consideration of cost-effectiveness;

- less litigation through administrative liability allocation mechanisms, broader defenses for certain parties and establishment of a pool for settling certain insurance claims;

- more public involvement in the Superfund decision making process (in particular, responding to pressures for increased "environmental justice"); and

- more state responsibility for remediation, particularly for clean-ups in previously industrialised urban areas, through delegation of certain decision-making powers.

These reform efforts had broad support, but died in the late stages of the 1994 Congressional session. A host of explanations have been offered as to the reasons for their demise, including: the long delays by the Clinton Administration in introducing its initial reform package; a variety of last minute, "knotty" special interest issues (such as a minimum wage for clean-up workers); and efforts by the Republican Party to deny legislative accomplishments to the Clinton Administration prior to the autumn elections.

With the sweeping victories by the Republican Party in those elections, it is difficult to predict the future of Superfund reform. At a minimum, it will be difficult to keep the 1994 coalition together since advocates of more radical cut-backs to the Superfund program (for example, through the elimination of retroactive liability) have gained considerable power in Congress. At least in the House of Representatives, Superfund reform is the major environmental priority for 1995.

At the common law level, current proposals to reform state tort law go well beyond environmental damage cases to a more fundamental consideration of the
scope of the US tort system, and may have a profound impact on civil liability for contaminated sites. For the most part, this impact would be favourable to defendants. At the federal level, suggestions for tort reform have included: restrictions on punitive damages; making a losing plaintiff pay a portion of the defendant's costs, and statutes which cut off claims a certain number of years after a product is made or sold, irrespective of when the injury is discovered. Recent federal reform proposals specific to product liability have included: a defence for manufacturers who can show that their products conformed to the state-of-the-art; limitations on actions against manufacturers after their products have been on the market for a given number of years; and a defence for manufacturers whose products have received approval from EPA, the Food and Drug Administration or another federal agency, and which have manifest design defects rather than manufacturing defects. Some states have proposed the imposition of a proportionality requirement on the recovery of punitive damages in tort cases, and Arizona has enacted a statute which eliminates joint and several liability except in the case of liability for damage caused by hazardous waste. Several other states have also abolished joint and several liability or are currently considering doing so. Other state tort reform approaches include: restrictions on punitive damages, limits on "pain and suffering" damages; and making a losing plaintiff pay a portion of the defendant's costs.

DENMARK

The majority of statutes on environmental liability are from recent years. The Environmental Protection Act was adopted in 1991 and the Waste Deposit Act in 1990. In 1993 a new Act on the Protection of the Marine Environment, 476/1993 was adopted and recently Parliament adopted the Act on Compensation for Environmental Damage, 225/1994. It is, therefore, anticipated that no major changes in respect of environmental liability are in preparation.

Environmental legislation is however very dynamic and the Committee on Soil Contamination was set up under the Ministry of the Environment in 1994. The Committee is to consider how to solve problems concerning historic and current contamination, including whether it is appropriate to consolidate legislation concerning soil pollution into a single act. After a year and a half the Committee finally reached a conclusion on how present legislation should be interpreted, which should be published in early 1996. It will probably be the first in Denmark which concerns both civil liability and administrative liability and how they interact. In particular, the Committee is considering the question of strict liability for landowners in view of the fact that at the present time "innocent" landowners are entitled to compensation for clean-up.

FINLAND

There are no proposals for any major change, in view of the fact that the system of civil liability for environmental damage has recently been substantially modified. Finland is soon to ratify the 1992 Protocols to amend the International Convention on Civil Liability for Oil Pollution Damage and the International Convention on
the Establishment of an International Fund for Compensation for Oil Pollution Damage which will introduce changes to the relevant current legislation.

A committee has recently (28 March 1995) proposed that a new additional chapter covering certain provisions in order to implement the Lugano Convention should be inserted to the Environmental Damage Compensation Act, 737/1994. However, the Act already largely meets the requirements of the Convention.

FRANCE

A draft Bill harmonising the different criminal offences and sanctions with respect to the environment seems to be currently under discussion. Otherwise there are no other significant proposals for change.

GERMANY

The UmweltHG which came into force on 1st January 1991 was the result of lengthy debate which started in 1987. For the time being there is no plan for material change, although currently liability for damage caused by waste is being discussed.

It was anticipated that the UmweltHG would put pressure on organisations to comply with all the relevant environmental regulations and provisions. However, in practice, the UmweltHG has not achieved special importance. There appears to be only one decision relating to the UmweltHG.

Therefore, there is a rising tendency to believe that protection of the environment is more likely to be achieved by effective administrative control rather than by a system of civil liability.

Liability arises according to the UmweltHG when the environmental impact is caused by a plant named in Appendix 1 of the UmweltHG. Conversely, there is no liability if the damage is caused through waste. However, Appendix 1 of the UmweltHG refers to several plants in which waste is burned or processed (Nos. 68 to 77 of Appendix 1).

There is no certain insight into why the UmweltHG has not achieved great importance. It could be because the law only came into force in 1991. Experience shows that a new law only penetrates the public consciousness after about five years. It is therefore perhaps too early to make a final condemnation. This is particularly the case if one considers that court proceedings through all levels of courts can take anything from 3 to 5 years. Additionally, the plaintiff has retained significant difficulties in spite of the relief provided by the UmweltHG. For example, he must present a case which shows that the damage which he has suffered is capable of being caused by the defendant's plant. Just to establish this demands comprehensive and expensive research even before the claim is brought.

On the other hand, there are various statutory provisions for new administrative law regulation which strive towards stronger protection for the environment:
- The Law on Recycling and Waste (Kreislaufwirtschaft- und Abfallgesetz) of 27th September 1994 has as its goal the promotion of the recycling industry's protection of natural resources and the disposal of refuse by environmentally friendly means. Waste is to be dealt with in two ways: primarily by means of a reduction in its quantity and harmfulness, and secondarily by either utilising its materials or by obtaining energy from it. The Law comes into force on 6th October 1996;

- At the instigation of the government, experts have developed the notion that all environmental law (including the law concerning punitive measures against contravention of environmental laws) should be regulated in one comprehensive codification of environmental law (Umweltgesetzbuch), which would have a general and a particular section. The focal point of the codification are the administrative law provisions. Whether, when and with what content the codification will come into force remains open at present;

- The Federal Ministry for the Environment presented a draft of a law concerning Protection of the Ground, under which the care and defence and redevelopment of the ground is to be regulated for the first time for the whole of Germany. The law primarily regulates the authority of officials to demand that the parties responsible for polluting the air, or the owners or lessors of the land, investigate and redevelop the land which has been polluted. It is also unclear when the law will come into force.

ITALY

A Working Group in the Ministry of Justice is dealing with modification of the civil liability system in order to ratify the provisions of the Lugano Convention. Otherwise there are no proposals for change to the civil liability system.

In addition, there are no imminent proposals for changes in the administrative or criminal provisions relating to environmental law.

THE NETHERLANDS

Legislation dealing with civil liability for environmental damage has been widely implemented over the last few years, particularly with respect to soil contamination and hazardous substances. There is a proposal to extend the scope of liability for damage caused during the transport of hazardous substances by road, which will make insurance compulsory for environmental damage.

SPAIN
For the time being, there are no proposals for change, nor governmental decisions in this respect.

**SWEDEN**

There are no major changes proposed for the time being. However, the Government is looking into the possibility of bringing all the various laws that are related to the environment into one Code.

**UK**

The most significant recent development is the introduction of the Environment Act 1995 (which from July 1995 will be implemented in stages) which, among other things, establishes an Environment Agency for England and Wales from 1st April 1996. This will consolidate the functions of the National Rivers Authority ("NRA"), Her Majesty's Inspectorate of Pollution ("HMIP") and the waste regulation authorities ("WRA's") (see 3). Section 5 provides that the Agency's pollution control powers will be exercisable for the purposes of preventing, minimising, remedying or mitigating the effects of pollution of the environment. The Agency will compile information relating to pollution and will follow the relevant development of technology and techniques. This extends the existing remit of the NRA, HMIP and the WRA's. It also makes numerous amendments of various significance to existing legislation (see 3) giving the Environment Agency powers to serve notices requiring works to prevent or remedy pollution of water and establishing a system which is to be exercised primarily by local authorities (in conjunction with the Environment Agency) for remediation of contaminated land. The system is subject to guidance and it is as yet unclear quite when it will be implemented. Another development in the Environment Act 1995 Part IV is the provision for a national strategy for assessment and management of air quality again placing powers and duties on the local authorities (see 14). Amongst the miscellaneous provisions are also, provisions for the introduction of a national waste strategy and legislation preparing for implementation of EC Directives on packaging and priority waste streams.

Significant aspects of political policies are as follows: the Labour Party (the largest political party in opposition to the Government) has produced a document proposing environmental reforms called "In Trust for Tomorrow". This includes a proposal to establish an environment division of the High Court based along the lines developed in New South Wales, Australia. The division will consist of both lawyers, expert (technical assessors) and will cover all areas of environmental liability, including criminal prosecution and judicial review. It states, furthermore, that there will be no restrictions on locus standi but judges will have a discretion to refuse cases which they consider to be frivolous or vexatious. It also proposes a different costs system whereby, where a case is in the public interest, an unsuccessful plaintiff will not be made liable for the costs of the defendant. "Environmental Litigation : Towards an Environmental Court?" an academic publication by the United Kingdom Environmental Law Association considers the desirability of a discrete environmental court.
Further, in the Government's "Response to the Communication from the Commission of the European Community Green Paper on Remedying Environmental Damage" the Government puts forward its view that there is no need for community level legislation concerning the environment, but rather that it is a matter for individual member states on the basis of subsidiarity. It offers no fresh proposals on either remediing environmental damage or on establishing alternative tribunals etc..

Finally, the Lord Chancellor (who is the head of the Judiciary) has recently ordered a review of the current rules and procedures of the civil courts in England and Wales. The expressed aim of the review is to improve access to justice and reduce the cost of litigation; reduce the complexity of the rules and modernise terminology and remove unnecessary distinctions between practice and procedure.

His interim report was published in June 1995. Among the principles behind the report are accessibility and effectiveness of the civil (that is, "classical civil") litigation system. The report concludes that remedies should be accessible in response both to breach of legal or equitable rights and the adverse effects of breaches of public duty. In addition litigants should have equal opportunities regardless of financial resources.

The main problems highlighted are cost, complexity and slowness of the civil law system putting certain parties at a major disadvantage and detracting from "access to justice". These appear to arise from the adversarial nature of the system where judicial control is insufficient. The basic move would be to increase judicial control throughout the litigation process and reform procedures to improve speed, efficiency, reduce costs and prevent disruptive tactics.

The report recommends a more interventionist approach for judges where litigants in person are involved. Better advice centres and services are required for such litigants along with a clearer simplified procedure to prevent them being disadvantaged.

Improved procedural changes would include pleadings containing facts relied, reduced discovery, discovery adapted for each case and more efficient use of expert evidence particularly discouraging the partisan approach and encouraging the use of a single expert.

**STUDY 2**

**AUSTRIA**

After several proposals, in December 1994, the federal Ministry of Justice drew up a draft Environmental Liability Bill. This Bill is mainly based on the Lugano Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment 1993. The draft Bill was ordered by the Austrian Parliament to the government to implement such legislation in Austria. However, the draft Bill has yet to be passed on to Parliament and the final Bill is unlikely to be in the same
form as at present due to complex political manoeuvring between parties interested in the environment and the economy.

The proposed legislation provides for strict liability if a person is killed, injured or experiences harm to his health or if property is damaged because of: an act which is dangerous to the environment; substances or genetically engineered organisms or micro-organisms; or waste. The claim would cover loss of profit. Liability would not arise if damage were caused by: war or an act of God; the intentional act of a third person who is not involved in the dangerous act, despite adequate security measures having been taken; a specific order of an authority; impairment of the environment which is tolerable pursuant to the standard existing locally; or an act which had been performed in the interest of the injured person and which is reasonable even in view of the danger.

The burden of proof with respect to causation would also be shifted if an act which might have been dangerous to the environment is, under the given circumstances, possibly the cause of the damage. In these circumstances it would be assumed that the act had actually caused the damage. The defendant would be able to rebut this assumption by proving that it was likely that the damage was not caused by his act. The defendant would normally prove this by showing that his activities had been free of problems and that he had fulfilled all legal obligations or any instructions issued by authorities to prevent environmental damage.

The burden of proof on the plaintiff would also be changed insofar that in some circumstances he would have the right to be informed by an alleged defendant of the methods and substances used, in so far as this information was necessary to clarify whether the damage had been caused by the alleged defendant.

If damage to the environment were to be caused by an illegal act then, along with the injured party, certain organisations would be entitled to apply for an injunction and to claim that the defendant should take adequate steps to minimise the damage or restore the environment. Any potentially injured party or organisation would also apply for an injunction if there was a possibility of damage to the environment by an illegal act.

The organisations which would be entitled to file such actions are the Chamber of Employees, the Austrian Chamber of Workers and Employees, the Chamber of Agriculture and the Austrian Federation of Trade Unions. Furthermore, environmental lawyers and other persons who are ordered by law to preserve the environment and associations whose purpose is the protection of the environment (as far as the interest they are taking care of is affected by the damage to the environment both locally as well as materially) would be entitled to file claims. Such associations would have to give security for costs in the proceedings if so required by the defendant.

Further, the Ministry of Justice is intending to include a civil law mechanism within the Bill forremedying damage to the unowned environment. The Ministry of Justice wishes also to establish a right for groups, ombudsmen and labour unions to sue in cases where there is merely ecological damage, for example for
the extinction of species and destruction of habitats. The entity which took measures to minimise or remove the damage to the environment would be able to recover costs incurred in carrying out such measures.

Undertakings operating a dangerous plant within the meaning of Section 82 of the Trade Act 1994, mining plants within the meaning of Section 145 of the Mining Act and plants falling within Section 4 (6) of the Law on Genetically Engineered Organisms would be required to obtain insurance with a level of cover of not less than ATS 25 million. For all other activities the person liable would only be required to take the precautions required of a "prudent merchant" to ensure that claims for environmental damage would be met. Insurance cover would be just one of the ways in which this obligation would be fulfilled.

Only minor areas are planned in the area of administrative legislation as Austria has recently attempted to harmonise domestic legislation with EU Directives; indeed, some Austrian environmental laws are more stringent than the corresponding EU legislation.

**BELGIUM**

In Flanders, a special Commission has been created for the revision of Flemish environmental law (Voorontwerp Decreet Milieubeleid, Ed.Die Keure, 1995) and has produced a detailed analysis of liability issues including:

- non-retroactive no-fault liability resting with the operator;
- damage to the unowned environment for which damages shall be calculated on the basis of effective clean-up costs complying with the BATNEEC criteria. The right of action is vested in the Flemish Executive;
- compensation funds; and
- financial guarantees.

In recent advice on the legality of a future Walloon decree on waste management, the Conseil d'Etat/Raad van Staat has stated that the regions do not have competence for extensive reform of the liability system. This is a matter for the federal authorities. It is therefore unlikely that the Commission's analysis will lead to any radical changes in the near future.

At the federal level, the Ministry of Justice is currently working on the possible ratification of the Lugano Convention.

**GREECE**

Article 29 of Law 1650/86 (the basic environmental law) has been criticised for adopting strict civil liability for environmental damage. The criticisms are that the meaning of "environment" in Law 1650/86 is not narrow enough as it includes both the natural and artificial environment, and that adoption of strict liability without distinction, renders the rule in Article 29 too severe for people who cause
minor damage to the environment and not severe enough for people whose activities are particularly dangerous for the environment.

For these reasons, the introduction of a new general clause has been prepared that would impose strict liability on those sources of increased risk to the environment.

ICELAND

The Ministry of Environmental Affairs introduced a Bill to the Althingi in early 1994 which provided for some general environmental rules, including rules on civil liability. The Bill proposes definitions for certain environmental concepts, such as "environmental matters" and "environmental protection". A principal rule on the administration of environmental matters is incorporated into the Bill. The municipal authorities will be responsible for the administration of such matters under the Ministry's supervision. The Bill also includes provision for the rights of individuals in certain environmental matters.

As to civil liability, the Bill plans to confirm the *culpa* rule (fault-based rule) as the major liability rule in this area. In addition, it is proposed that a best effort clause should be enacted to avoid additional damage and to limit that damage. Finally, it is intended that the Bill will establish a special environmental pollution fund to finance necessary efforts to limit pollution or other environmental damage. Very few details have been published about the fund but it will probably be partly Government financed with other funding coming from environmental fines.

The Bill is now being revised by the Ministry of Environmental Affairs. However, whether it is advisable to present such general legislation or whether the rules should be incorporated into Acts on different fields is still being debated.

IRELAND

At the moment there is a Waste Bill passing through Parliament. It is presently at the Committee stage. The purpose of this Bill is to provide a modern and comprehensive legislative framework for the prevention, management and control of waste. In broad terms, the Bill provides for:

- improved public sector organisational arrangements for waste planning, management and control;
- implementation of measures designed to require/promote prevention, minimisation and recovery of waste; and
- a flexible statutory framework for implementing national and international, (including EU), requirements on waste management.

LUXEMBOURG

New laws are being introduced for the more effective remediation of environmental damage, for example, the law of 17th June 1994 regarding waste management and to allow greater and improved access to the courts for environmental groups.
NORWAY

The Ministry of Environment has proposed several minor amendments to the Pollution Control Act, published 20 October 1995. It is too early to know whether these changes will be implemented as suggested. The purpose of the amendments are, according to the Ministry, to make the wording of the Pollution Control Act accord more closely with practice, and to make the statute a more efficient tool for the authorities.

PORTUGAL

There are no proposals for changes in the legal liability system, since the rules governing the environmental liability system are rarely altered. The basic framework is laid down in the Civil Code, under the general terms of civil liability in tort.

SWITZERLAND

A reform of the federal Environmental Protection Act 1983 (which is currently subject to a referendum) contains a fundamental change, insofar as it explicitly introduces a special strict liability into the law with respect to plants whose operation represents a high risk to the environment. This Act will therefore be extended beyond purely administrative liability to introduce the possibility of civil claims. The only defences allowed would be force majeure or gross negligence of the injured party or third parties. The reform also contains a requirement for the operator to provide an insurance policy or bank guarantee to ensure compensation of victims.

The amendment is still subject to referendum. The most important proposals are:

- waste management shall be based on four principles: avoidance of waste wherever it originates; reduction of waste in the production of goods; reduction of waste by recycling; and ecological handling of waste and domestic deposition;

- the sales price of products requiring special treatment shall include a waste disposal fee. Trade in special waste (especially to third world countries) shall be under state control;

- a special tax shall cover the cost for old waste removal to relieve the cantons of this financial burden;

- market control mechanisms (Lenkungsmassnahmen/-abgaben) are also discussed (but very contested) in accordance with the principle that the polluter of the environment shall pay for the pollution in advance. Special taxes shall be charged on volatile organic compounds, fuel, fertilisers and pesticides; and
- the state shall be competent to financially support environmental technology.

- the purely ecological damage will still be excluded from the liability by owners or operators of industrial plants representing a high risk for the environment.
5. FAULT LIABILITY

Proof of fault (negligence) can be difficult for plaintiffs to the extent that it involves technical expert testimony that the defendant acted unreasonably or failed to conform with the state-of-the-art prevailing at a given time. The costs involved with providing such evidence are a further obstacle. The majority of environmental information is new and consultants and experts lack experience with it and therefore opinions differ.

Proof of causation (see 19) (that is, that the plaintiff was exposed to the defendant's pollutants and that these pollutants caused the plaintiff's injuries) is, however, typically the most difficult obstacle for plaintiffs in environmental litigation.

STUDY 1

USA

Fault-based liability generally arises from: negligence as at the date of the act or omission (that is, unreasonable conduct/lack of due care at the time of disposal or discharge); or nuisance (unreasonable or intentional interference with private property rights or public resources by virtue of pollution). Fault-based tort claims may be the only remedy for environmental damage to private property in some states.

Further, in some states (for example, New York), the State Attorney General's office pursues environmental damage claims under public nuisance theories, which typically include fault-based components (see for example, State of New York v. Schenectady Chemicals Inc., 103 A D 2d 33, 37, 479 N.Y.S.2d 1010,1014 (1984); see generally S. Cooke, The Law of Hazardous Waste paragraph 17.01[2][c][ii]).

Foreseeability

Under general principles of state tort law, most states apply a "reasonable operator" test for negligence actions and other fault-based tort claims. This issue is typically decided by a jury, rather than a judge. The "reasonable person" test imposes an objective standard of reasonable behaviour and foreseeability, which implies a duty to act with reasonable prudence under the circumstances and to anticipate the consequences of one's acts and omissions that a reasonably prudent person at that time and under similar circumstances would have foreseen. See generally S. Cooke, The Law of Hazardous Waste paragraph 17.01[4][b][ii]; M. Dore, Law of Toxic Torts paragraph 4.02 (Clark Boardman Callagan 1994); W. P. Keeton et al. Prosser & Keeton on the Law of Torts paragraph 32 (West Publishing Co., 5th ed. 1984 & 1988 Supp.). This standard takes into account the state-of-the-art and usual industry practices at the time of the waste disposal. For example, waste disposal into a pit or lagoon in the 1950's is likely not to be found negligent, because this was an accepted practice at the time and the resulting groundwater contamination was not reasonably foreseeable at that time.
Defences

Available defences to fault-based common law claims are:

- insufficient proof of causation;
- defendant took "reasonable precautions" or acted with "due diligence";
- defendant followed the state-of-the-art or customary industry practice;
- defendant complied with governmental permits;

In the past, it was a defence that the plaintiff was "contributorily negligent" or knowingly "assumed the risk", but these defences have been largely abolished in many states. Most of these "defences" are limited to fault-based tort claims, however, and do not apply to strict liability common law claims. See generally S. Cooke, The Law of Hazardous Waste paragraph 17.05 (defences to environmental tort actions).

DENMARK

Fault liability for environmental damage is not based on specific legislation on liability but on case law. This classical civil liability still applies in a number of areas due to the limits on the scope of the Environmental Damage Compensation Act, 225/1994. The courts have in fact refused to adopt strict liability in case law for contamination of land, groundwater, streams and lakes.

Despite the existence of an administrative law regime the regulatory authorities have in practice brought claims for liability under the fault-based system in negligence. This is due to continuing confusion over the scope and application of the administrative rules. In Purhus -v- Minister of Defence (UfR. 1995.5054) they did so successfully. The Environmental Protection Agency, however, still considers proving of fault to be an important obstacle to liability.

Regulatory authorities have therefore been bringing civil claims using evidence of breaches of administrative law to support their case. However in the Gram-case, (UfR. 1994.659) as well as in other cases it has been stressed that breach of administrative law in itself does not necessarily constitute negligence. On the other hand, breach of administrative law does seem to influence the burden of proof (see the Second Phöenix-case, UfR.1989.692H). Hazardous activities are not necessarily subject to strict liability but to a higher duty of care.

Foreseeability

The question of foreseeability in the past was often used as a defence that is, that the damage was not caused directly or was an unforeseeable consequence of the negligent act. Today it plays a much weaker role.
The degree of foreseeability depends on two factors: the time when the damaging activities took place and the level of danger posed by the activity.

The courts have accepted that contamination of groundwater from the deposit of waste was not foreseeable in the 1950's and 1960's (for example, the Gram-case, UfR.1994.659). In Vasby Grus case (UfR.1989.353) however a higher court upheld the position that contamination of groundwater which closed a drinking water supply drilling was a foreseeable consequence of landfilling in the 1970's. Currently the tortfeasor is not only supposed to foresee contamination of drinking water, but also expected to anticipate the lack of due care by third parties, which might cause a release of hazardous substances (for example, Purhus v. Minister of Defence (UfR.1995.505H).

Defences

Negligence is subject to taking due care. A higher standard of due care, as applied in recent cases of pollution leaves little opportunity for "reasonable precaution" as a defence. After the Supreme Courts ruling in Purhus v. Minister of Defence (UfR.1995.505H) reasonable precaution includes taking into account the behaviour of known third party actors.

Other types of defence used in court have been:

- pollution could have been caused by other factors - Hedensted water purifying plant v. Årup Mølle (UfR.1990.254H), not successful, but successful in M/T Corona (UfR.1982.630), where M/T Corona was found not liable for clean-up costs after oil-pollution of a beach, despite it being proved that oil was discharged from M/T Corona at sea, and evidence (on water currents and weather) indicated that oil from M/T Corona reached the beach;

- the plaintiff has partly caused the damage. In Vasby Grus (UfR.1989.353) this defence reduced compensation by a third;

- the defendant acted according to public standard at the time, when contamination was caused. This was successful in the Gram-case (UfR.1994.659) but the higher court stressed that this does not in itself prove that there was no negligence.

See also defences cited under strict liability (6).

FINLAND

Liability under the Tort Act 412/1974 is fault-based the necessary elements being a negligent act or omission, damage and causation. The plaintiff must prove these elements. There have been few cases on environmental damage under this Act however. As mentioned in 2, the new Environmental Damage Compensation Act 737/1994 establishes strict liability for environmental damage and largely supersedes the Tort Act 412/1974, but the latter can still apply in a few situations.
Liability for environmental damage caused during transport which is not covered by the Act on Liability for Damage Caused by Rail Traffic, 8/1898 or the Act on Air Traffic, 139/23 is regulated by the Tort Act, 412/74, or the Traffic Insurance Act, 274/59, under which liability is fault-based.

Foreseeability

In general, something is foreseeable if other persons/operators involved in similar activities would have foreseen under similar circumstances. A court will probably have most regard for what the operator knew or ought to have known/foreseen at the time when the harmful activity was carried out. If the damage is too remote, or occurred to an unforeseeable extent or in an unforeseeable manner liability may be denied.

In the Superior Water Court decision T:89/1993, a criminal case which also involved a civil claim for damage to groundwater contaminated by toxic chemicals from a sawmill, it was held that when judging the liability question, regard should have been paid, inter alia, to knowledge of the properties of the chemicals at the time when the harmful activity was carried out. At the time the polluting event took place there was no information indicating that the chemicals might have caused damage to groundwater if they had come into contact with the soil. Therefore the defendant was not liable.

Defences

Available defences include:

- insufficient proof of causation;
- the defendant used state-of-the-art technology;
- the defendant took all reasonable precautions.

Even if fault is proved, however, the right to compensation may be decreased or denied:

- if there is contributory negligence on the part of the plaintiff; or
- if the plaintiff condones the damage or does not mitigate; or
- if it is deemed unreasonable for the defendant ("adjustment of damages").

FRANCE

There are few fault liability cases relating to environmental damage which are dealt with by the civil courts as it is far more frequent for the victims, in such cases, to claim the damages before the criminal courts.

French environmental laws and regulations provide for a long list of offences and misdemeanours, and recently, the crime of "environmental terrorism". Thus, when damage to the environment occurs, it very often originates from a breach of a
mandatory provision by the wrongdoer. Such a breach, apart from constituting an
offence or misdemeanour, is a fault, in the civil meaning, and may therefore be
used as a ground for a civil action by any party who has suffered damage as a
result (before either the civil or the criminal courts).

Examples of legal provisions providing for criminal offences:

- Articles 18 to 22 of Law 76-663 of 19th July 1976:
  - operation of a listed site without obtaining the required
authorisation;
  - operation of a listed site infringing an administrative
injunction to close the plant or to suspend the activity;
  - continuation of the operation of a listed site without
complying with an administrative injunction to be in
accordance with the conditions set out in the authorisation.

- Article 24 of Law 75-633 of 15th July 1975 provides for, in
particular:
  - refusal to inform the public authorities as requested by
various articles of the law, or transmission of false
information;
  - unlawful abandonment or disposal of dangerous waste;
  - carriage of waste without fulfilling the conditions imposed
by the law;
  - elimination of waste without fulfilling the conditions
imposed by the law;
  - illegal import and export of waste.

Civil liability under Articles 1384 to 1386 depends on the following three
conditions:

- a harmful event which can result either (a) from a wrongful act or
omission [fault liability] or (b) from a potentially dangerous thing
or activity [non-fault liability];
- a prejudice suffered by the victim; and
- a causal connection between the harmful event and the prejudice
suffered.

Foreseeability

It seems that for the time being, the state of knowledge/foreseeability at the time of
the polluting event is not only that of a highly skilled person, but of a person
specialised in potentially polluting activities.

Defences

In the case of a fault liability action, the defendant, generally prefers to argue:
External cause is a potential defence to fault liability but is mainly used against strict liability (see 6).

GERMANY

Fault liability is only provided for in paragraph 823 BGB. To fulfil the requirement of fault the defendant must have acted on purpose or at least negligently, that is, without regard to the normally required standard of care.

Foreseeability

The duty of care required depends on the judgment of a level-headed and conscientious member of the relevant group of persons. Negligence, however, does not exist if the damage could only have been avoided by the most highly skilled person. The skill required depends on the sort of activity: the higher the level of danger of the activity under consideration, the higher the level of skill required.

Worldwide knowledge/foreseeability is therefore not required. Generally, the knowledge/foreseeability of a reasonable operator will be sufficient. The knowledge/foreseeability of a highly skilled person is only necessary if the activity under consideration usually requires such a qualification.

Problems occur in relation to damage being caused by a danger of the material used which was scientifically unknown at that time (a so-called development risk). As such damage was not foreseeable, therefore, the action could not have been negligent. (Negligence does, however, exist if such a risk was taken into consideration).

Defences

The available defences are:

- insufficient proof of causation;
- that he exercised due diligence or took all reasonable precautions;
- contributory negligence of the victim;
- contributory negligence of a third party; or
- force majeure.
ITALY

Fault liability arises generally from specific laws and regulations or administrative orders equivalent thereto:

- Article 2043 of the Civil Code, (see 2);
- Article 18 of Law 349/1986 on liability for environmental damage;
- Article 19 of Decree 139/92 which regulates the protection of undergroundwaters from pollution caused by dangerous substances;
- Article 14 of Decree 133/92 which regulates industrial emission of dangerous substances in waters; and
- Article 12 of Decree 130/92 which regulates the quality of fresh water for the purposes of protection of fish life.

Foreseeability

As there are no specific provisions on the state of knowledge/foreseeability of the polluting event, the ordinary civil tort rules apply and consequently, also non-foreseeable damages should be borne by the responsible party. The evaluation of the foreseeability of the event, and of the subsequent damage, can be made by the judge using the standard of a reasonable person. Where activities require specific technical knowledge, foreseeability will be applied on the basis of the technical knowledge that may be expected from a reasonably skilled operator.

A reasonably skilled operator is required to possess the technical knowledge needed for the exercise of a specific activity or profession.

The primary provisions covering the issue are the following:

- Article 1176 of the Civil Code (the general rule regulating "diligence" in the performance of obligations) provides that "in the performance of obligations the debtor shall observe the diligence of the bonus pater familias (reasonable operator). In the performance of the obligations relating to the exercise of a professional activity, diligence shall be evaluated with regard to the nature of the activity".

- Article 2236 of the Civil Code provides that in the performance of a professional activity the person carrying out the said activity "is not liable for damages, except in the event of fraud or gross negligence"..."if the professional services involve the solution of technical problems of considerable difficulty".

Accordingly, the courts have generally considered liable the professional who operates with lack of knowledge, violates its duties and does not adopt all the measures suitable for the exact performance of the obligation.

Defences
As the mere non-compliance with the legal provisions can imply fault liability, the evidence of having adopted "reasonable precautions" is not always sufficient to exclude responsibility, however, as with other defences, it can be taken into consideration by the judge when quantifying damages (see Article 18, n.6, of Law 349/1986). Other defences used include:

- contributory negligence as provided for under Article 1227 of the Civil Code;
- the defendant complied with the terms of its permit. This is not an automatic defence;
- use of state-of-the-art technology;
- use of technology levels customary in the industry. This may be a defence where customary technological levels are high;
- insufficient proof of causation.

Defences against charges of fault liability under Article 2043 of the Civil Code can be based upon the circumstance in which the defendant acted: liability may accordingly be limited because, for example, of (i) the exercise of self-defence or defence of a third party; (ii) the necessity to save himself or a third party from an actual danger of serious injury, neither voluntarily caused by him nor otherwise avoidable (in this case the damaged subject is entitled to an indemnity quantified by the judge on an equitable basis).

The (only) defence available in the event of performance by the defendant of a dangerous activity (Article 2050 of the Civil Code) is the giving of satisfactory evidence of having adopted all the measures capable of avoiding the damage; the adequacy of such measures is to be appreciated with respect to the specific contents of the dangerous activity involved and the degree of diligence required from persons or entities performing it.

**THE NETHERLANDS**

Fault liability arises if a tort has been committed of which the consequences can be reasonably attributed to the defendant (Articles 162 and 98 Book 6 Civil Code). The necessary elements are fault, damage, causation and relativity (Schutznorm-theory).

Fault liability for the costs of a technical investigation under the Soil Protection Act 1994 arises if a case of pollution has been deemed a "case to be investigated" by the regional authority (province). Fault liability for clean-up costs then arises if, on the basis of this investigation, the regional authority deems the case to be a "case of serious pollution".

**Foreseeability**

The state of knowledge at the time of the polluting event is objective; it is the knowledge of the average entrepreneur in a sector of industry. The polluter cannot
claim he did not know of the dangers involved with the substances or method of production used, as he did not have any specialised education, etc..

Occasionally, however, courts have held knowledge available from specialist literature irrelevant for small companies. On the other hand, with large companies, worldwide knowledge will be considered more relevant. Specialised knowledge of a large company is taken into account.

In cases of soil pollution cleaned up by the State and caused before 1 January 1975, the Soil Protection Act 1994 specifically states that knowledge of the serious dangers of the substances at the time as well as the state-of-the-art, state of the industry and possible alternatives are relevant for liability to be accepted.

For an example of liability under this provision, see Rb Zwolle, State -v- Bol, 28 December 1994 (see 13).

As foreseeability of damage to the state is generally only accepted from 1 January 1975 in cases of soil pollution, a problem of allocation exists if the polluting period lies partly before, and partly after this date. The approach taken by the Courts is discussed in 8.

Defences

Defences often used are:

- the pollution was not caused by the defendant;
- the plaintiff condoned the polluting action in some way or did not take reasonable preventative measures to limit his damage;
- the defendant acted according to the terms of environmental permits granted (this is not necessarily a valid defence according to the Hoge Raad; HR 10 March 1972 in re Vermeulen -v- Lekkerkerker);
- the defendant acted according to the (unwritten) norms at the time;
- the defendant acted according to the state-of-the-art or industry;
- the norm infringed did not serve to protect the plaintiff's interests (relativity);
- the plaintiff has foregone the right to claim by his action or negligence;
- the pollution caused is not serious enough to merit cleaning-up.

Spain

Article 1902 of the Civil Code contains the general principle on civil liability which imposes liability where the defendant acted negligently. The nature of this principle as a general rule has been supported by case law (for example, Supreme Court decision of November 12, 1993). This general fault liability rule applies in principle to environmental civil liability.

Foreseeability

(51998936.01)
Under Article 1104 of the Civil Code, the knowledge or foreseeability is that required by the nature of the obligation and corresponds to the circumstances of the actual people, time and place involved. Case law has added, as a further element to take into consideration, the type of activity that causes the damage (for example, Supreme Court decisions of March 23, 1982 and June 14, 1984). Decisions are taken on a case by case basis, but in practice knowledge/foreseeability in environmental cases is that of a highly skilled person.

In the Supreme Court decision of June 14, 1984 it was held that where a person carries out a dangerous activity he is liable for the consequences of the activity whether or not he has authorisation from the regulatory authorities. The Supreme Court also cited its own doctrine that when precautions are taken to prevent and avoid foreseeable and avoidable damage, but damage occurs, then the precautions taken must be insufficient. The third doctrine cited by the Court is that a person who creates a risk and benefits from the activity must take the consequences of the activity.

It should be noted that the Court decisions mentioned in this section do not refer to environmental questions, but to general civil liability.

Defences

In theory, the fact that the defendant has taken steps necessary to prevent any foreseeable damage should be a sufficient defence. However, in practice, under certain circumstances the mere existence of the damage is sufficient proof that there has been negligence on the part of the defendant, which makes the use of any defence almost impossible.

In other cases, the defendant may prove, to avoid liability:

- insufficient proof of causation;
- that he has taken all reasonable precautions (such reasonable precautions to be determined on a case by case basis, taking into consideration Article 1104 of the Civil Code).

SWEDEN

The general Civil Liability Damage Act, SFS 1972: 207 provides that anyone who causes personal injury or property damage on purpose or by fault (intentionally or negligently) is liable, which is reflected in the Environmental Civil Liability Act 1986.

The requirement of fault is not of major importance in relation to environmental damage as strict liability applies under the Environment Protection Act 1969 and most important areas of the Environmental Civil Liability Act 1986. Fault liability under the Environmental Civil Liability Act 1986 is only relevant if the damage is deemed to be "common locally" or "occurring generally" or the defendant is a private person not owning the land but just using it. Damage is "common locally" if it commonly occurs in the locality which may include a city or district of a city.
Damage which "occurs generally" is such damage as would normally be expected in view of the process and circumstances involved.

**Foreseeability**

Where there is a significant risk of damage being caused the operator must be more diligent and have more foresight than when the risk is lower. In deciding whether a diligent operator should have acted differently, the court is able to have regard to national or international level depending on the situation. Cases where the court has done this involve areas of law other than environmental law but the principle will also apply to environmental law.

**Defences**

The viable defences in cases of fault liability are:

- insufficient proof of causation;
- that the defendant took all reasonable steps to avoid the damage. The higher the risk the greater the level of diligence likely to be required;
- contributory negligence;
- state-of-the-art technology employed;
- acting in accordance with a permit;
- plaintiff condoned the polluting activity or did not mitigate.

**UK**

In common law, fault liability arises in negligence and nuisance. In negligence, it is necessary to prove fault by establishing a breach of duty of care. In nuisance, although the point is arguable, the element of fault arises in the need to prove that the interference with the use or enjoyment of land was unreasonable.

In addition, the requirement exists in negligence, nuisance and the rule in *Rylands -v- Fletcher* that the plaintiff must establish that the damage suffered was a reasonably foreseeable consequence of the breach and/or nuisance and/or may be said to contain at least an element of fault.

Relevant cases relating to breaches of duty of care in negligence are:

- *Toomey -v- London, Brighton and South Coast Railway Company* [1857] 3 C.B. (N.S.) 146;
- *Cornman -v- Eastern Counties Railway Company* [1859] 4 H.&N. 781;
- *Welfare -v- London, Brighton and South Coast Railway Company* (1869);
- and
However, it is not sufficient simply to show a breach of duty of care. At the same time, the plaintiff must establish that the defendant owed a duty of care in first place (Donoghue -v- Stevenson [1932] A.C. 562 and Hedley Byrne & Co Limited -v- Heller & Partners Limited 1964 A.C. 465) and that the breach resulted in damage/injury (Remorquage à Hélice SA -v- Bennetts [1911]).

In nuisance, the plaintiff must show that there has been (a) an unlawful act and (b) damage, actual or presumed. The unlawful act has been defined as: "the unreasonable interference by act or omission with a person's use or enjoyment of land or some right over or in connection with it." Damage alone does not give a right of action: it is always necessary to show that the defendant committed an unlawful act, and it is this that provides the element of fault in nuisance. Relevant cases include:

**Harrison -v- Good** (1871);

**Fishmongers Co -v- East India Co** [1752] Dick 163.

The following statutory provisions also impose fault-based liability in certain situations:

- The Gas Act 1965, which makes a supplier of gas liable in negligence;

- Section 10 and Schedule 4 of the Electricity Act 1989, which imposes liability for the faulty installation of public electricity supplies;

- The Merchant Shipping Act 1988, which imposes liability somewhere between fault-based and strict, for the discharge of oil from a ship;

- Occupiers Liability Acts 1957 and 1984, under which occupiers of premises owe a "common duty of care" to all visitors to ensure that they are reasonably safe.

**Foreseeability**

Broadly, the standard applicable will be that of a reasonable operator, taking into account the skills and knowledge of the particular defendant. This is in part an objective test and in part a subjective test. It is relevant to take into account the background and skills of the particular defendant; it is then appropriate to consider what a reasonable person with that background and skills would have done in those circumstances.

The most frequently quoted case on foreseeability is a nuisance case, Overseas Tankship (UK) Limited -v- Miller Steamship Co Property (The Wagon Mound) (No. 2) [1967], A.C. 617. The rule regarding reasonable foreseeability in The Wagon Mound case is that the test of remoteness of consequential damage is that
the consequences are too remote if a reasonable man would not have foreseen them. The position on foreseeability under the rule in Rylands *v* Fletcher was directly addressed in Cambridge Water Company *v* Eastern Counties Leather plc [1994] A.C. 264.

The question of foreseeability will be judged at the time of the breach of duty of care/nuisance/escape and will be dependant on the standards and legislation in force at the time. The problem of showing foreseeability is exacerbated by the general lack of guidelines and a lack of published figures.

**Defences**

In negligence, there are three main defences:

- consent by the plaintiff, express or implied;
- contributory negligence by the plaintiff; and
- inevitable accident.

**STUDY 2**

**AUSTRIA**

Liability based on the ABGB is fault-based and liability for environmental damage arises if the polluter has acted negligently or in breach of a regulatory provision. For example, there are certain provisions which prescribe how a person should act (say, how dangerous goods should be transported). If these provisions are disregarded, then the person responsible is deemed negligent.

**Defences**

The defendant has a defence if he can prove that he has acted with due diligence and that the damage was not foreseeable. Sometimes the defendant tries to prove that he has taken all possible precautions and has complied with current scientific knowledge. Another possible defence is that the damage was unavoidable.

The defence that the defendant is acting in compliance with all administrative orders and licences is no longer accepted by the courts in Austria.

**BELGIUM**

Fault liability is governed by Article 1382 of the Civil Code: any person whose actions, negligence or carelessness have caused damage to another person is liable to compensate that person.

Three key elements must be proved:

- the damage must be direct and personal, although the relevant criteria have recently been expanded by the courts (on the basis of Article 714 of the Civil Code concerning collective goods);
- the causal link (theory of the equivalence of conditions); and
- fault (breach of legal or regulatory provisions) or negligence (not acting as a bonus pater familias - a good and reasonable man).

Defences

Available defences are:

- state of necessity (the action which caused the damage was necessary to avoid a serious danger that was threatening the defendant or third persons); and
- honest mistake.

Compliance with an administrative authorisation, permit etc. and economic necessity are not valid defences.

GREECE

Fault liability under the Civil Code Article 914 states that anyone who unlawfully or culpably causes damage to another must make reparation for the damage caused. The plaintiff must prove that an act or omission of the defendant caused him damage with sufficient proximity and that the defendant acted negligently. Fault relates to the attitude of the person who intentionally or negligently committed the act or omission.

Defences

Defences available in cases of fault liability include:

- sufficient proof of causation;
- the action of the defendant was not culpable; and
- the plaintiff contributed to the damage.

ICELAND

It is normal for fault of the defendant to be based on the bonus pater familias (the good and reasonable man) standard. In evaluating how such a party should behave, it is necessary to find out if the defendant acted in accordance with the relevant provisions of statutes, if such provisions exist. If no help can be found in the statutes, a judge would try to establish whether the defendant acted in accordance with the usual custom in that field of business. The courts can, however, decide that customary behaviour in certain fields of business are not appropriate and uphold stricter standards. Finally, if those two methods do not lead to a conclusion, a judge must decide how a good and reasonable man should have acted under the circumstances leading to the damage. In deciding this, the judge must take account of all the circumstances. Authors in tort law have devised
certain criteria by which judges must evaluate the defendant's behaviour. These are, for example:

- how useful was the action by the defendant;
- how dangerous was the action;
- how much would adequate precautions have cost the defendant;
- how easy was it for the defendant to react to avoid the damage; and
- was the action by the defendant likely to cause damage?

Defences

Available defences include:

- the defendant acted in accordance with statutory requirements;
- the defendant acted in accordance with custom; and
- the defendant took all reasonable precautions.

IRELAND

As discussed in previous sections, liability for environmental damage under Irish law arises, almost exclusively, by virtue of the proof of fault on the part of the defendant, there being no statutory regime of no-fault liability. Thus, further examples of how such fault-based liability may arise are as follows:

- under the Planning Acts, where an enforcement notice has been served on a person who was, when the notice was served on him, the owner of the land to which the enforcement notice relates, and the steps required by the enforcement notice have not been taken, that person is guilty of an offence under this Act. Furthermore, fault liability will arise, for which the defendant will be liable, for example, for the removal of an offending structure;

- under the Water Pollution Acts, a person shall not cause or permit any polluting matter to enter waters. Fault liability will arise if this happens, with such a person being liable for the cost of clean-up; and

- under the Air Pollution Act, fault liability for environmental damage will arise if the air is polluted so that the pollutant is present in the atmosphere in such a quantity so as to be liable to be injurious to public health or to have a deleterious effect on flora or fauna, or damage property, or impair or interfere with amenities or with the environment. Here again, having proven fault on the part of a defendant, such a defendant can be made liable for clean-up costs.

Defences

(51998936.01)
A variety of defences are available to defendants under the legislation referred to above. Notably under the Air Pollution Act it will be a defence to establish that:

- best practicable means have been used to prevent or limit the emission concerned;
- the emission concerned was in accordance with the licence under this Act;
- the emission concerned was in accordance with an emission limit value;
- in the case of emission of smoke, the emission concerned was in accordance with regulations under Section 25; and
- the emission did not cause air pollution.

The Water Pollution Acts provide that defences are:

- that the person charged took all reasonable care to prevent the entry which is prohibited; and
- that the defendant had a "water pollution" licence and was operating in accordance with the conditions attached to that licence.

At common law, fault liability arises in negligence and nuisance and the position is basically similar to that in the UK (see above).

LUXEMBOURG

Under the rules of fault-based civil liability, the plaintiff (victim of the pollution or person(s) in charge of protecting the environment) will have to demonstrate that:

- damage to the environment (as the case may be, the property of the victim) has occurred;
- the defendant has committed a fault or negligence or has not taken reasonable care in conducting his activity to avoid such damage;
- his damage is the necessary result of the fault, negligence or lack of care.

The standard is the behaviour of a normally diligent and careful person in the same circumstances. Damage caused by professionals will be construed more strictly.

Defences

The party sued under Articles 1382-1383 of the Civil Code can defend himself by proving that such conditions are not fulfilled. He may also limit the extent of his liability by proving that the plaintiff contributed to the damage. The defendant will have to demonstrate that he has not committed any fault or negligence (that is, state of necessity, force majeure or that a third party is, in effect, responsible for the damage).
NORWAY

The liability system is primarily strict (see 2) in that the owner/occupier/holder is liable for the damage. However, where the actual tortfeasor is a party other than the owner etc., he may under certain circumstances be held responsible for damage caused by his fault.

The Pollution Control Act states that ordinary negligence is sufficient to impose liability upon contributing parties when it is evident that their actions have indirectly contributed to the pollution damage.

However, when assessing fault, the court must take into account whether or not the defendant has implemented such measures as the injured party could have reasonably expected from the activity.

The Petroleum Act 1985 ("Petroleum Act") states that the actual tortfeasor may be liable if intent or gross negligence is proved, in the following circumstances:

- when the holder of the petroleum production rights refuses to pay compensation;
- when specific measures are taken by the tortfeasor in spite of the express and proper refusal of the public authority (or in certain circumstances, of the owner or occupier) of the provision of such measures; or
- when the holder takes recourse against the tortfeasor, the tortfeasor being liable on the same basis as when the holder is the injured party.

If reasonable precautions are taken, gross negligence will never arise.

The Maritime Act 1994 ("Maritime Act") states that, in a rescue operation, persons involved in measures taken to prevent or minimise the damage, are liable only if the measures are taken in spite of the express and proper refusal of a public authority or of the owner of the ship or cargo involved. For recourse against these persons, intent or gross negligence must be proven while recourse against other contributors only requires negligence. Whether the party has taken reasonable precautions will become relevant in assessing whether or not the contributing party has acted negligently.

Gross negligence exists where the element of culpability which characterises all negligence is magnified to a high degree as compared with that present in ordinary negligence.

Defences

Where fault liability applies examples of available defences are:
the defendant took all measures which could have been reasonably expected;
- the defendant's act did not cause the damage. Under the Pollution Control Act the defendant must establish that another cause of pollution was more likely;
- the defendant employed the state-of-the-art technology;
- under the Pollution Control Act, the damage suffered was not unreasonable or unnecessary.

PORTUGAL

Liability for environmental damage arises whenever such damage is caused and the five demands detailed in 2 above are met and proved. They are:

- an act or omission;
- which is unlawful;
- attributable to the guilty party;
- the existence and proof of particular damage caused; and
- causal link between the act or omission and the damage.

Defences

There are no defences against liability such as "reasonable precautions", "due diligence" or "reasonable practicability". The unlawfulness of the act is, however, disregarded in cases of self-defence, direct action and flagrant necessity.

A party has acted in self-defence if the intention of his act was to stop an actual and illegal offence against the person or property of the party or any third person, provided that it was impossible to stop the offence by normal means (the police or local authority) and that the damage caused by the act was not manifestly higher than that resulting from the offence.

The defence of direct action is the use of force with the purpose of enforcing or assuring a personal right when it was impossible to obtain the immediate intervention of a public body and providing the party did not use unnecessary force to prevent any damage. Provided that all the above requisites are met, the defendant will avoid all liability for the damage caused.

The defence of flagrant necessity is the legal destruction or intentional damage to alien property in order to stop the actual danger of manifestly increased damage to the party or any third party.

SWITZERLAND

Generally to impose fault liability it must be shown that:

- the defendant was the author of an unlawful act or omission;
- the victim suffered damage;
- the act or omission caused the damage; and
the defendant was at fault.

See also 2.

Defences

Under fault liability, defences such as "reasonable precautions" etc. have an influence on the amount of damages. Where the causal link and the act/omission are established, the liability can only be avoided if the claiming party is itself at fault.
6. **STRICT LIABILITY**

**STUDY 1**

**USA**

The courts have interpreted CERCLA paragraph 107(a), 42 USC paragraph 9607(a), as imposing a strict liability standard as well as under other major environmental statutes (for example, RCRA). Many state superfund statutes likewise impose strict liability, (see generally Environmental Law Institute, An Analysis of State Superfund Programs. 50-State Study, 1993 Update (December 1993)).

Under general principles of state common law, strict liability for environmental damage tends to be imposed through either a theory of abnormally dangerous activities or nuisance. Strict product liability theories have also been applied with increasing frequency in the product liability context.

Strict liability is imposed for activities that are deemed "ultrahazardous" or "abnormally dangerous" which, in some states, have been held to include the storage and disposal of hazardous wastes particularly in residential areas, see for example, State Department of Environmental Protection -v- Ventron Corp, 94 N.J. 473, 492-93, 468 A.2d 150, 160 (1983); see generally S. Cooke, The Law of Hazardous Waste paragraph 17.01[5][c].

In general terms, the theory of "ultrahazardous" or "abnormally dangerous" activities derives from an expansion of the rule in the English case of Rylands -v- Fletcher, L.R. 3.H.L. 330 (1868), to encompass activities posing an unacceptable degree of risk to their particular surroundings. Should those activities be conducted, a defendant will be strictly liable for any damage caused thereby. "Ultrahazardous" and "abnormally dangerous" are subject to interpretation on case by case basis and decisions vary between states, with some states, for example, New Jersey applying a particularly broad approach to these terms. Typically processes using or producing hazardous material or waste will be included in this category.

Nuisance and trespass principles are also frequently applied in essentially a strict liability manner, where the use of one party's property unreasonably interferes with the use and enjoyment of a neighbour's property, or where pollutants from one party's operations physically invade another's property. For example, groundwater contamination or airborne pollutants that migrate onto another's property may give rise to a trespass claim. For a general discussion of toxic trespass, see M. T. Searcy, A Guide to Toxic Torts paragraphs 3.02[3], 3.05; M. Dore. Law of Toxic Torts paragraph 4.01.

Nuisance claims are divided into public nuisance, which involves a "substantial and unreasonable interference" with the rights of the general public (see 16), and private nuisance, which involves a substantial and unreasonable interference with an individual's right to quiet enjoyment of his/her land. Nuisance liability focuses
primarily on the plaintiff's injury rather than the defendant's conduct, although this injury must outweigh the benefit of the conduct for the claim to succeed. Environmental nuisance claims may involve groundwater and soil contamination resulting from waste disposal, or air or water pollution. See generally M. T. Searcy, A Guide to Toxic Torts paragraph 13.02[4]; M. Dore, Law of Toxic Torts paragraph 4.03. However, in some states, public nuisance includes fault liability.

Strict liability for sales of defective products, or misrepresentation in sales, has been applied in the environmental damage context. For example, plaintiffs have had some success in bringing suits against producers of hazardous substances sold to persons who later disposed of the products at Superfund sites. See for example, United States -v- Conservation Chemical Co., 619 F. Supp. 162 (W.D. Mo. 1985); United States -v- A & F Materials Co., 582 F. Supp. 842 (S.D. Ill 1984); New York -v- General Electric Co., 592 F. Supp. 291 (N.D.N.Y. 1984); see generally M. Dore, Toxic Tort Law paragraph 3.04[4].

Specific Legislation

There are, however, limitations on the scope of coverage of CERCLA and other similar federal laws. For example, CERCLA excludes from its definition of covered "hazardous substance" (and thus from liability) a number of materials and situations, including petroleum, nuclear material, agricultural pesticides, building materials in structures, etc. These are generally covered under specific statutes and regulatory schemes (for example, petroleum contamination under the Oil Pollution Act 1891 and under the Clean Water Act or as a "solid waste" under the Resource Conservation and Recovery Act, nuclear materials under the Atomic Energy Act and the jurisdiction of the Nuclear Regulatory Commission, pesticides under the Federal Insecticide, Fungicide and Rodenticide Act, etc.). Thus, while there are limits in coverage under particular federal and state environmental clean-up and liability laws, there are few, if any, types of pollution that are beyond federal and state jurisdiction.

Defences

Under CERCLA, paragraph 107(b), 42 USC paragraph 9607(b), several limited affirmative defences are enumerated. These include:

- act of God;
- act of war; and
- discharge caused solely by the act or omission of a contractually unrelated third party where the defendant acted with due care, etc.

Through its definition of "contractual relationship", CERCLA provides a limited "innocent landowner" defence, related to the "third party" defence, for persons who made "all appropriate inquiry" prior to the purchase of the property and had no knowledge of the contamination. CERCLA paragraph 101(35)(A), 42 USC paragraph 9601(35)(A); see also S. Cooke. The Law of Hazardous Waste paragraph 14.01[8][b][iv];
an additional exception to CERCLA liability is provided for "federally permitted releases" (that is, discharges authorised by permits under other federal statutes such as the Clean Water Act), although liability may still exist under other laws with respect to such releases, CERCLA paragraph 107(j), 42 USC paragraph 9607(j);

- statute of limitations defences are provided, principally in CERCLA paragraph 113(g).

Most courts have held that these are the exclusive defences to liability under CERCLA, although a few courts have allowed additional "equitable" defences (for example, laches, estoppel, unclean hands) in limited circumstances. CERCLA's defences are very narrowly construed and seldom succeed in practical application.

In addition, under the Superfund Reauthorisation Bill which came close to passage during 1994, a number of new defences were to be introduced to address "fairness" issues which had arisen from the application of joint and several liability to parties which had only made marginal or no contributions to contamination on a particular site. Included were new protections for generators of small amounts of waste, certain innocent landowners, lenders, municipalities, small businesses and non-profit organisations. In addition, the reform legislation would have encouraged the redevelopment of old industrial sites by providing a complete defence to liability for future purchasers of those sites (assuming certain due diligence investigations had occurred before purchase). These issues are likely to be reconsidered in the Superfund reauthorisation debates.

DENMARK

The Supreme Court in the Aalborg Portland case (UfR.1989.1108H) has upheld strict liability for personal injury to workers caused by exposure to asbestos. Strict liability has also been upheld in other cases where serious personal injury has been caused by hazardous activities.

Strict liability regarding clean-up costs incurred by authorities, as well as other economic loss, must be based on either the Compensation for Environmental Damage Act, 225/1994 or on other legislation which regulates specific types of activities such as the Act of the Sea, 205/1995, The Road Traffic Act, The Act on Compensation for Nuclear Damage, 332/1974 or other specific regulations. Furthermore, civil liability is supplemented by administrative liability which in some cases will constitute liability by a responsible party, although the responsible party is not to blame.

Despite the title of the new Act on Compensation for Environmental Damage, 225/1994, the scope of the Act is limited in various ways: only damage caused by commercial or public activities are covered; the Act only covers listed plants (see 2) and the only damage covered is that caused by one of the aspects of the plant causing it to be listed; only damage caused by stationary objects not by mobile
objects is covered; only the operator is strictly liable; the Act does not cover pollution caused before July 1994.

Under civil liability, the Supreme Court has recognised strict liability in several cases. These concern damage caused by electricity transmission cables and pipelines supplying water, heat, gas, oil etc. In Helsingor -v- Jonsbo, (UfR.1983.895H) a gas supply company was found liable for damage caused by exposure to gas from a leak in a gas pipeline, even though the court assumed it was impossible to discover the leak. The decision was upheld by the Supreme Court in Copenhagen Water Supply Company -v- Uniform, (UFR.1983.866H) regarding damage to a store caused by water from a leak in a water pipe.

Strict liability was also adopted in re Melbyhus Water Purifying Plant, (UfR.1983.714H) which concerned damage to houses in the neighbourhood caused by the draining of the area when the purifying plant was constructed; the court expressly stressed that this consequence was not foreseeable.

Strict liability was also applied in re Aalborg Abbey, (UfR.1968.86H) regarding disturbance of an old abbey caused by construction work.

However, in all cases concerning clean-up costs caused by contamination of land or by streams and lakes, the courts have rejected any strict liability regime. This position is not only upheld in respect of historic contamination of land (such as the Gram-case, (UfR.1994.659) and the second Phōenix-case, (UfR.1989.692H), but also the same position was maintained in cases involving recent contamination, for example, Hedensted Water Purifying Plant -v- Årup Mølle, (UfR.1990.245H), in Dan jord A/S -v- Århus (UfR.1995.255) and in Purhus -v- Minister of Defence (UfR.1995.505H). Strict liability based on case law has a very narrow scope. There is theoretical dispute as to whether the Act on Compensation for Environmental Damage, 225/1994 will expand the scope of strict liability based on case law.

Specific Legislation

Acts introducing strict liability are as follows:

- the Act on the Protection of the Marine Environment, 476/1993 covers pollution from ship and offshore drillings, and makes the owner of the ship or the owner of the oil drilling rig strictly liable for the preventative measures and clean-up costs of damages, caused by the ship or the oil drilling rig;

- the Act on the Establishment and Use of a Pipeline for Mineral Oil and Condensate, 292/1981 makes the state owned company, Danish Oil and NaturGas Limited strictly liable for damage caused by the pipeline;
the Act on the Underground, 292/1981, deals with underground activities. The owner of the right (licensee) is strictly liable for any damage caused by underground activities;

the Act on Naturalgas Supply, 294/1972 makes the licensee strictly liable for the damage caused by the pipeline;

the Act on Electricity, 251/1993 does not include any strict liability regime. Instead Section 17(1) includes a reversed burden of proof, where the supply company (defendant) must prove that the damage could not have been avoided. Furthermore Section 17(2) includes the only example in Danish law of statutory joint and several liability for damage caused. If the damage could have been caused by more than one power station they are jointly and severally liable for the damage, unless they prove they did not cause it (Section 17(2));

the Watercourse Act, 302/1982, provides that the person who, in using the watercourse, changes the stream or changes the level of the watercourse is strictly liable for damage caused;

the Drinking Water Supply Act, 337/1985 states that the owner of a drinking water supply plant is strictly liable for damage caused by the plant and under Section 28 the person who benefits from abstracting water is strictly liable for the damage caused by the abstraction, unless it is for agriculture.

Denmark does not produce nuclear energy. Denmark has however ratified and implemented the Paris Convention on Third Party Liability in the Field of Nuclear Energy, 1960 and the amending protocols from 1982 and the Brussels Convention on the Liability of Operators of Nuclear Ships, by the Act on Compensation for Nuclear Damage, 332/1974. Denmark has never ratified the Vienna Convention 1963. The Parliament rejected the use of nuclear energy in the late 1970's. Since then the issue on liability has not been further considered.

When damage is caused by marine pollution in accordance with the global Convention on Limitation of Liability for Maritime Claims, 1976, the defendant is protected against a claim for damage which exceeds the maximum limits, even for negligence. Only when the damage is caused by a wilful act or by extreme recklessness is this protection lost. The maximum limits under the Convention are formally implemented in the Act of the Sea, 205/1995, Section 194 in accordance with the 1969 Convention on Civil Liability for Oil Pollution Damage and the 1992 protocol. The maximum limits also encompass liability for damage covered by the Act for the Protection of the Marine Environment, 476/1993, as stressed by a court in Environmental Protection Agency _v_ DFDS, (UfR.1988.779). This case concerned clean-up costs after more than 80 barrels of dinoseb fell overboard during a heavy storm in the North Sea. Based on the evidence in the case, the damage might have been prevented if the barrels had been better secured. The court underlined that, even if the damage had been caused by negligence, the
The shipping firm, DFDS, was protected by the Convention on Limitation of Liability for Maritime Claims, 1976, implemented into Danish Law in the Act of the Sea, 205/1995 chapter 12. Consequently, instead of paying the clean-up costs of DKr 15 million, DFDS had to pay only DKr 800,000.

Defences

It is possible to identify five major defences to strict liability under both statute and common law:

- no causation. This defence was used successfully in re: M/T Corona (UfR.1982.630) where M/T Corona was found not liable for the clean-up of oil pollution on a beach, despite it being certain that oil had been discharged from M/T Corona at sea, and that evidence regarding the current and the weather indicated that oil from M/T Corona could have been the oil causing the damage.

- not a specified activity. Strict liability under statute law does not cover the defendant as such, but only specified activities. Furthermore, under the new Act on Compensation for Environmental Damage, 225/1994, strict liability does not apply to all environmental damage arising from the listed plants but distinguishes between the dangerous part of an industrial activity, which is the reason why the plant is listed, and other activities at the plant. Consequently, even when the damage was caused by the operator of the plant, the operator will not be strictly liable if the damage was caused by the "non-dangerous" part of the defendant's activities. However, because the Act is new, there is no practical experience to date on this distinction.

- no adequate damage. The damage only occurred because quite unusual circumstances existed. In the past this defence was successfully used in cases regarding damage to mink farms caused by noise from airplanes or explosions (UfR.1956.742H), but has been overruled in a number of cases since 1970 (for example, re Minister of Defence, (UfR.1981.415)). This defence is, in theory, considered relevant against claims by fishermen and tourist-businesses, but has not been tested in practice.

- contributory negligence by the plaintiff. This is an important defence. However, in the case of environmental damage, natural resources do not belong to any single person, not even the authority. This might be the reason why this defence was not accepted in the first Phœnix-case, (UfR.1958,365H) in respect of preventative measures taken by a drinking water supply company. Phœnix was found liable despite the fact that there was a well-known risk when the drinking supply was established that it might be polluted. However, this case was also influenced by the evidence of the negligence of Phœnix.
- no loss. There is no proof of economic loss either because the loss is speculative (a possible profit) or because the damage is too peculiar to be compensated (the damage can not be calculated in normal economic terms).

Compliance with permit conditions does not in itself preclude liability.

**FINLAND**

Strict liability arises in accordance with Section 3 of the Environmental Damage Compensation Act, 737/1994 if the plaintiff has proved that the causal link between the activity and the damage is probable. The plaintiff must also show that he has suffered damage.

Recently, the Supreme Court has held that strict liability will be imposed under the Tort Act, 412/1974 in relation to hazardous activities which lead to environmental damage. This was held to be the case in the Supreme Court decision 1995:108. In that case petroleum from an underground petroleum storage tank had contaminated the soil and the water and waste waterpipes. The Supreme Court held that the owner of the tank was strictly liable for clean-up costs, since the storage of petroleum is an activity which is hazardous to the environment. This decision should now be of historical significance only as the same result would be reached under the Environmental Damage Compensation Act, 737/1994.

The Neighbour Relations Act 26/20 provides, *inter alia*, for strict liability for certain types of enduring and unreasonable nuisance suffered by neighbours (Section 17). The Supreme Court has, for example, awarded damages for noise caused by granite quarrying (1982 II 109) and for damage to a stock of wood caused by soot from coal and coke (1962 II 26). Damages were, for example, not awarded for noise and smell from a poultry house, since the nuisance was not unreasonable (1936 II 87). In one case liability was based on fault despite the provision of strict liability (1976 II 60, 2.3.2 below). The Neighbour Relations Act 26/20 has now been superseded in relation to environmental damage by the Environmental Damage Compensation Act 737/1994 and therefore these examples should be of historical significance only.

**Specific Legislation**

As a rule, the Environmental Damage Compensation Act, 737/1994 is not applicable in areas which are covered by special legislation, such as nuclear damage, oil pollution damage or damage caused during transport.

Liability for nuclear damage is regulated by The Nuclear Liability Act, 484/1972 as amended, which is based on:

- the 1960 Paris Convention on Third Party Liability in the Field of Nuclear Energy (Finnish Treaty Series 20/1972; entry into force on 16 June 1972);
the 1963 Convention Supplementary to the Paris Convention (Finnish Treaty Series 4/1977; entry into force on 14 April 1977); and


Finland has also ratified the 1971 Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material (Finnish Treaty Series 62/1991; entry into force on 4 September 1991).

Liability for oil pollution damage is regulated by the Act on Liability for Oil Pollution from Ships, 401/1980 as amended, which is based on:

- the 1969 International Convention on Civil Liability for Oil Pollution Damage (Finnish Treaty Series 78-80/1980; entry into force on 8 January 1981); and


The Act on Liability for Oil Pollution Damage from Ships, 401/80, the Traffic Insurance Act, 279/59 and the Nuclear Liability Act, 484/72 allow for compensation liability to be limited to a given maximum.

Defences

The Environmental Damage Compensation Act, 737/1994 does not provide for any defences. However, under the general rules of tort, a force majeure exception may be available. In order to constitute force majeure the alleged event must have been caused externally, must have been unpredictable and must have been impossible (or at least impractical) to overcome or avoid. The Nuclear Liability Act, 484/72 and the Act on Liability for Oil Pollution Damage Caused by Ships, 401/80 list explicitly the available defences which are identical to those provided for in the relevant international conventions.

Case law on force majeure is to a large part relatively old. In most cases the defendant has failed to prove that the alleged event constitutes force majeure. See, for example, Supreme Court decisions 1933 II 492 (fire caused by short circuit), 1929 II 667, 1934 11 455 (storm), 1946 I 8 (transformer struck by lightning). However, the defendant has been exempted from strict liability in, for example, 1943 II 160 (fire caused by shelling during the war) 1968 II 88 and 1980 II 20 (flooding caused by exceptionally heavy rain).
The notion of force majeure, although interpreted narrowly at first, has become gradually more flexible. For example, it has been argued in modern literature that strikes and other labour conflicts may constitute force majeure. This interpretation is also, at least to a certain extent, supported by the Supreme Court decision 1984 II 156, although the defendant eventually was held liable in this case since he was aware of the threat of strike.

Honest mistake or instructions from an employer do not exclude strict liability. It is disputable whether compliance with the conditions of authorisation avoids strict liability for environmental damage. There is no case law on this matter. However, the preparatory documents state that it will not constitute an automatic defence.

FRANCE

Strict liability arises as soon as damage occurs and is proved. Under liability for things one has in one's custody (Article 1384 of the Civil Code) liability arises if it is proved that the defendant had the "thing" which caused the damage in his/her custody. Under the liability for causing disturbance in the vicinity established under Article 544 of the French Civil Code, liability arises when the abnormality of the disturbance is established, (see 2).

Administrative sanctions and liability, in the way they are applied by the administration and enforced by the administrative jurisdictions, operate as strict liability mechanisms. Thus, once a defendant is identified (generally the operator, or previous operator, or owner of the site) no defences are available to him (see 3).

Specific Legislation

The law of 28 Pluviose Year 8, relating to damage caused by civil engineering works and Article 751 of the Mining Code relating to damage caused by mining activities, both provide specific regimes of strict liability.

Regimes covering nuclear damage, oil pollution and aircraft damage (to soil) respectively, are as follows:

- Law 90-488 of 16th June 1990 modifying law 68-943 of 30th October 1968 relating to Civil Liability with respect to Nuclear Energy, (based on the Paris Convention of 29 July 1965) which imposes a specific regime providing for strict liability with no overlap with other liability systems so that there is no choice of system;

- Law 77-530 of 26th May 1977 relating to Civil Liability and Insurance Requirements of Vessel Owners with respect to damage due to Oil Pollution imposes a specific regime providing for strict liability with no overlap with other liability systems so that there is no choice of system; and
Article L 141-2 of the Civil Aviation Code introduces a specific regime with a slight overlap with strict liability and liability for disturbance in the vicinity because the judges require that the disturbance be "abnormal" but there is no overlap with other liability systems and consequently there is no choice of system.

**Defences**

In the case of strict liability provided for by a specific text, the defences, when available, are mentioned in the text. For example, in the case of strict liability for damage caused to the sea by oil pollution, it is expressly provided that the owner of the vessel may be exonerated if he proves that the damage is due to:

- war;
- force majeure (which is defined by the Convention of 1969);
- the deliberate act of a third party;
- or the fault of a government.

Under general principles of liability, force majeure (an external, unforeseeable and unavailable event, which can be the act of the victim or a third party) is a defence.

Compliance with an authorisation is not a defence in respect of civil liability towards third parties. This is expressly mentioned in Article 8 of Law 76/663 of 19 July 1976; "Authorisations [stating the conditions for operating a listed site] are granted subject to rights of third parties".

**GERMANY**

Strict liability exists under:

- paragraph 1 UmweltHG; and
- paragraph 22 WHG, (see 2).

**Specific Legislation**

There is a separate system of liability for nuclear damage (paragraphs 25 to 40 Atomic Energy Law (Atomgesetz)). It ensures that in principle the liability of the proprietor is in accordance with the Paris Agreement. The liability covers nuclear damage caused by the transportation of atomic material. If certain financial thresholds are exceeded, the Federal Republic of Germany releases the proprietor of the plant from his liability. Otherwise, the Federal Republic of Germany holds itself financially responsible for cross border nuclear damage which originates in one of the member states of the Paris Agreement.

**Defences**

Under UmweltHG strict liability exists even if the conditions of an authorisation have been met (so-called ordinary business or business in accordance with regulations, paragraph 6 of UmweltHG). This aspect was very contentious during
the legislative procedure. Liability exists in the context of ordinary business due to the fact that during the process of authorisation, consideration is given only to whether the plant meets the requirements of administrative law. In this process, however, there is no consideration given as to whether the plant could have civil law claims for compensation brought against it.

However, liability under paragraph 22 WHG is as follows:

a claim for compensation for detrimental effects suffered cannot be brought if the person who caused such effects had obtained an approval under the law on water and he is meeting the requirements of that authorisation (paragraph 11(1) WHG). Instead, a claim for compensation exists against the administrative body giving the approval. However, this claim has no practical importance, as approvals relating to law on water (a special form of authorisation) are nowadays hardly ever granted.

Under the UmweltHG, there is also liability for the so-called development risk, so that liability arises when a material used proves itself to be more dangerous than had previously been known by science.

Act of God is a defence in cases of strict liability. Only incidents not directly connected with the operation of the plant are regarded as being Acts of God, such as a hurricane, lightning or sabotage.

In the case of damage to property (as opposed to personal injury) liability does not arise under the UmweltHG if the object itself is only insignificantly impaired or only impaired to an extent which is reasonable according to local custom (paragraph 5 UmweltHG).

An honest mistake or instructions from an employer do not exclude strict liability.

The aforementioned principles apply to civil environmental liability. In addition, there is also an administrative environmental liability which is not subject to fault. The restrictions which apply to strict liability in civil law do not apply to administrative environmental liability. For administrative environmental liability, it is only decisive if a person or an object (property, plant) causes danger to public safety and order. Such a danger to public safety and order exists in all cases in which administrative rules are contravened or in which objects of legal protection which serve the public are in danger (for instance danger to groundwater, which is used as a drinking water reservoir, by ground pollution). On the one hand, the conditions which have to be fulfilled to enable the administrative bodies to take appropriate measures are small. On the other hand, however, the administrative bodies are not entitled to claim damages but are only entitled to claim for the removal of this danger. Therefore, ground pollution which causes a danger to drinking water has to be removed, but no compensation is payable for damage, which has been caused by the polluted groundwater (for instance, pollution of mineral water wells).
Under administrative environmental liability, the person who has caused the pollution (for example a manufacturing operator) is liable, as well as the person who exercises actual control over the object which causes the danger (owner, tenant). The liability of the person who has caused the damage, the operator (Handlungsstörer), arises with the damaging act and is not statute barred. Fault is not a condition for this liability. The liability of the owner/occupier (Zustandsstörer), exists as long as actual control over the object exists. As a consequence, the purchaser of polluted property is liable for the pollution, regardless of whether he has caused the pollution or whether he knew about the pollution.

A comparison of defences in civil and in administrative liability clearly shows that administrative liability is much stricter.

ITALY

Whereas, in general, civil liability is fault-based under Article 2043 of the Civil Code, there is a presumption of somewhat stricter liability under Article 2050 and 2057 of the Civil Code for activities specified as "dangerous" and for "things" in one's custody. Further strict liability is imposed under specific laws, as set out below.

Specific Legislation

Examples are:

- Law 31.12.1962/1860 which provides for liability of the operator of nuclear plants for any damage caused by a nuclear accident, except when they are due "directly to armed fights, hostilities, civil wars, uprisings, or exceptional disasters".

- Law 6.4.1977/185, Presidential Decree 27.5.1978 n. 804 and Law 25.1.1983 n.39, which implements the International Convention on Civil Liability for Damage caused by Oil Pollution, provides that the ship owner "is responsible for any damage caused by oil pollution into the sea, with some strict exceptions".

- Law 31.12.1982/979 ("Rules related to the protection of the marine environment") which obliges jointly and severally the owner and the shipowner to restore damage to the state caused to the marine environment by oil or other harmful substances, and this responsibility is strict and does not allow any defence.

- Presidential Decree 224 of 1988 which implements EC Directive 85/374 on product liability and which sets a strong presumption of liability on the manufacturer, in the event of any accident.

The principle of *lex specialis* applies, so that liability for nuclear damage and damage caused, for example, by oil pollution or by transport of dangerous
substances and the rules related to the protection of marine environment can be considered as ring-fenced.

**Defences**

Generally the defences to strict liability must be considered as really exceptional and limited in most cases to Acts of God.

Honest mistake and compliance with an order may reduce the weight of the "subjective element", but not necessarily avoid liability (in the latter case, liability may be shifted on to the person issuing the order).

**THE NETHERLANDS**

Strict liability arises if the conditions of the relevant section of the code or act on which liability is based, are met. For instance, in the case of strict liability for hazardous substances (Article 175, Book 6 Civil Code), liability generally arises if:

- a person professionally uses or stores a substance;
- it is known this substance poses a certain serious danger to persons or objects (certain substances are deemed to pose such known serious dangers); and
- this danger materialises.

**Specific Legislation**

There is an overlap with the special civil liability system for remedying damage arising from certain specified activities, such as the strict liability system for nuclear damage under the Nuclear Accidents Liability Act and the modified strict liability system for damage relating to transport created in the Civil Code. Special acts exist creating strict liability for damage arising out of certain activities. This special legislation is often an implementation of international conventions.

- the Oil Tanker Liability Act 1969 ("Wet aansprakelijkheid olietankschepen") is an implementation of the Civil Liability Convention of Brussels (1969) which creates strict liability for oil pollution arising from the transport of oil in bulk by ship;
- the Mines Act 1810 ("Mijnwet 1810") which creates strict liability for the operator of a mine for damage caused at the surface by underground activities;
- the Groundwater Act 1981 ("Grondwaterwet") and Water Companies Groundwater Act ("Grondwaterwet Waterleidingbedrijven") which create strict liability for permit holders pumping up groundwater. These Acts may be relevant in cases of dehydration of the environment;
- the Nuclear Accident Liability Act 1979 ("Wet aansprakelijkheid kernongevallen") is an implementation of the Paris Convention of 1960 and the Brussels Convention of 1963 on Third Party Liability in the field of Nuclear Energy, which creates strict liability for the operator of a nuclear installation in case of accidents at the installation, or in respect of the transport of raw materials or waste to and from the installation;

- the Nuclear Ship Liability Act 1974 ("Wet aansprakelijkheid Nucleaire Schepen") is an implementation of the Brussels Convention on the liability of operators of nuclear ships of 1962, which creates strict liability for the operator of a ship powered by nuclear energy in case of nuclear accidents. This Act is not greatly relevant in practice as the Netherlands does not have any nuclear powered ships at the present time;

- the Pernis-Antwerp Pipeline Act 1972 ("Wet buisleidingenstraat Pernis-Antwerpen") which creates strict liability for the operator of the Pernis-Antwerp pipeline for substances escaping from the pipeline or installations connected to it.

Generally, the plaintiff can choose between claiming under special legislation or in tort. As special legislation is usually to his advantage, the plaintiff will claim under special legislation. This is not always the case. For example, under the Oil Tanker Liability Act 1969 the ship owner can form a fund with the "Arrondissemensrechtbank" in Rotterdam, in case of an oil spill. The plaintiff can then only claim against this fund.

Defences

The following defences to strict liability for environmental damage are available:

- commercial users of hazardous substances, operators of landfills and operators of drilling holes:
  - damage was caused before 1 February 1995;
  - act of war, civil war, insurrection;
  - natural phenomenon of an exceptional, inevitable and irresistible character (except subsoil natural forces in case of operators of drilling holes);
  - compliance with a specific order from a public body to take a compulsory measure;
  - act or omission done with intent to cause damage by a third party despite safety measures appropriate to the type of dangerous activity in question;
  - caused by pollution at tolerable levels under locally relevant circumstances;
  - caused by a dangerous activity taken lawfully in the interest of the person who suffered the damage.
operators of closed landfills:
- damage was caused by use of ground in violation of regulations;

operators of ships (both sea-going and inland navigation), vehicles and trains with hazardous substances on board:
- damage was caused before 1 February 1995;
- act of war, hostilities, civil war, insurrection or natural phenomenon of an exceptional, inevitable and irresistible character;
- act or omission done with intent to cause damage by a third party;
- the operator was not given information on the hazardous character of the substances and neither operator nor subordinates etc. knew or had to know;

operator of Pernis-Antwerp Pipeline:
- natural phenomenon of exceptional character, act of war, hostilities, armed commotion or act of sabotage;

**SPAIN**

Strict liability is generally limited to those operations or sectors governed by specific rules in which strict liability is expressly established (for example, nuclear activities) or those operations or sectors to which the criteria mentioned below may apply.

Article 1908 of the Civil Code (in particular, sections which concern damage caused by excessive fumes and by deposits of infectious substances) has been held by the courts to be an example of strict liability (Supreme Court decisions of October 30, 1963 and May 24, 1993, and of June 28, 1979, respectively). Article 1908 states that:

- "owners shall be held liable for the damage caused:
  - by the explosion of a machine that has not been maintained properly, and the combustion of explosive substances that were not located in a secure and proper place;
  - by excessive smoke that is harmful to people or goods;
  - by falling trees in transit yards except where caused by force majeure; and
  - by discharge from sewers or deposits of infectious substances without proper precautions."

Article 45 of Law 25/1964, on nuclear energy, expressly provides for strict liability.
In addition to the foregoing, case law has applied strict liability to certain cases of environmental civil liability. The "risk theory" (the person who carries out hazardous activities is liable for any damage arising) is applied in the Supreme Court decisions of May 8, 1986 (on damage caused by flooding), and of May 24, 1993 (on damage caused by toxic gas). The case of March 15, 1993 involved a site with orange trees damaged by the emissions of gases and dust from nearby industries. The court referred to Article 1908 subparagraph 2 on excessive emissions of smoke harmful to people or goods and imposed liability on the basis of the risk created by the harmful emissions.

The principle of *cuius est commodum eius est incommodum*, (a person who derives benefit from an activity must also pay for resulting damage) is the basis of Supreme Court decisions of April 9, 1866 (damage caused by a mine), November 10, 1924 (damage caused by waste), April 28, 1992 (damage caused by loss of water) and May 24, 1993 (damage caused by toxic gas).

**Specific Legislation**

Apart from the Civil Code, other rules exist which directly govern specific cases of civil liability concerning the environment, or other rules indirectly related thereto. These rules are Law 25/1964, and Royal Decrees 938/1987 and 2994/1982. Law 25/1964 on Nuclear Energy establishes specific rules on civil liability of persons operating a nuclear installation or any installation that produces or works with radioactive materials or that has devices that may produce ionising radiation. Spain is also a party to the Paris Convention, of July 29, 1960, on civil liability for nuclear energy. Royal Decree 938/1987 on compensation for costs expended on the extinguishing of forest fires, and Royal Decree 2994/1982 on the restoration of the void space caused by mining activities contain provisions similar to the civil liability regime.

**Defences**

Any defence materially affecting any of the essential elements of civil liability (act or omission, damage, causal link) will suffice for avoiding civil liability. In practice, there will not be many of these types of defences:

- force majeure ("caso fortuito o fuerza mayor") - under Article 1105 of the Civil Code);
- any circumstance which justifies the damage caused ("causas de justificación"), such as the legitimate defence ("legítima defensa");
- consent of the victim.

The decision of March 10, 1992 (concerning a claim for damages caused by a flood) is an example where the Supreme Court has admitted the existence of force majeure.

No examples of circumstances which justify the damage caused in a case of civil environmental liability have been found. However, there are cases where the behaviour of the victim has allowed the (total or partial) reduction of the liability
of the victim: in the decision of the Audiencia Provincial of Valencia of March 18, 1981 (a case of damages to crop caused by industrial dust), compensation was reduced from Ptas. 868,211 to Ptas. 600,000, since the lack of due care on the part of the owner of the site also had (in addition to the defendant's activity) an influence on the damage caused.

Similarly, the Supreme Court decision of November 14, 1984 confirmed the opinion of the lower court in the sense that the lack of due care of the plaintiffs justified the distribution of liability equally between them and the defendants.

Compliance with an authorisation is not a defence.

In relation to risk theory and to a person who derives benefit from a certain activity must also pay for damage resulting from it, the only defence is to show that the defendant took all reasonable precautions. The courts will not always, however, admit evidence on this point.

SWEDEN

Strict liability is an established rule in case law in relation to operations that typically carry with them a great risk. For examples in cases involving extensive digging or blasting work causing vibration and flying stones, it is often very difficult for the plaintiff to prove fault and the defendant can factor into his cost, protection against a high level of liability commensurate with the risk (Hellner, p.129 onwards).

Under the Environmental Civil Liability Act 1986, paragraphs 3-5, strict liability arises if the defendant causes damage or disturbance by:

- polluting watercourses, lakes or other water areas;
- polluting groundwater;
- changing groundwater level;
- air pollution;
- soil pollution;
- noise; or
- vibration.

or damage by:

- blasting work; or
- excavation that is extensive or for some other reason is deemed to carry considerable risk of damage.

An example of strict liability being applied under the Environmental Civil Liability Act 1986, is a case concerning blasting work carried out by the City of Stockholm authorities in laying a pipeline. A house about 100 metres from the trench developed cracks and the owner sued. The City authorities sought to claim that the age of the property and frost had been the cause. The Court, however,
held that there was a prevailing probability that the cracks had been caused by blasting and therefore the City authorities had caused the damage and were liable.

Specific Legislation

The nuclear industry, electricity generation and traffic (by road and by air) are each subject to a different regime, and are not covered by the Environmental Civil Liability Act 1972 (which only covers damage to real property), nor the Environmental Civil Liability Act 1986 (which covers roads and airfields, as real property).


There is also legislation regarding transport of hazardous goods: Lag om transport av farligt gods (1982:821) and Förordning om transport av farligt gods (1982:923). There are regulations regarding responsibility for oil damage at sea which have been incorporated into Chapter 10 in Sjölagen (1994:1009). In addition to this there is also various legislation regarding chemical products (such as Lag om kemiska produkter (1985:426) and Förordning om kemiska produkter (1985:835)), hazardous waste (such as Förordning om miljöfarligt avfall (1985:841)), etc.

The Act on Liability for Oil Pollution at Sea implements the Brussels Convention of 1969 on Oil Pollution Damage at Sea. Accordingly shipowners are strictly liable for releases and must insure and maintain ships.

Defences

Where damage has occurred there is no defence under the Environmental Civil Liability Act 1986, not even compliance with licensing requirements. If a third party intervenes and thus causes damage, he will carry the cost of his part of the damage. If his part cannot be established or the intervention is deemed to be foreseeable, the operator will probably carry joint and several liability. According to the Civil Liability Act 1972, the remedy may be modified if, for example, the person is under the age of 18, is physically unfit or possibly on the grounds of hardship in the case of a small business. Ordinary and large businesses should carry insurance to cover environmental damage. The remedy cannot be modified in these cases.

UK

Under common law, strict liability at civil law arises under the rule in Rylands -v- Fletcher. This has been reinforced by the judgment in Cambridge Water Company -v- Eastern Counties Leather plc. However, although liability is strict in the sense that the rule provides that a defendant will be liable without proof of fault in certain circumstances, it is still necessary to establish that the resulting damage
was reasonably foreseeable. This is the second key principle to emerge from the Cambridge Water judgment. Thus, in order for strict liability without proof of fault to arise, the plaintiff must show that:

- the defendant accumulated material on his own land that was not naturally there;
- the material was accumulated for the defendant's own purposes;
- the material was likely to do mischief if it escaped; and
- the material did escape and caused damage to the plaintiff's property.

It could well be, therefore, that the rule in Rylands -v- Fletcher will come to have a much wider application in the environmental sphere. Although the concept of "accumulation" and "escape" may on an initial reading seem to have a narrow interpretation, in fact the operation of most industrial plants which use chemicals and other "dangerous substances" could well be interpreted as being an accumulation and, where they cause pollution to a third party, this may amount to an escape. Thus, for example, the incidents at Chernobyl and Bhopal would both almost certainly give rise to liability under this definition.

However, the principle may go further than this. For example, the bursting of an underground pipe has been held to be an "accumulation" and "escape" within the definition of Rylands -v- Fletcher which has implications for the oil, gas and electricity industries.

In addition, liability under statute for administrative provisions and environmental offences (see 3) in many cases effectively imposes strict liability depending on the offence/provisions in question, for example under Section 85 of the Water Resources Act 1991, a person is guilty of a criminal offence if he "causes or knowingly permits" polluting matter to enter controlled waters.

Similar wording is used in determining who is an "appropriate person" for service of a remediation notice under the contaminated land provisions of the Environment Act 1995 (not yet in force). Under those provisions a person who has caused or knowingly permitted contaminating substances to be in, on or under land thereby causing land to be contaminated may be an appropriate person for the service of a remediation notice.

Further, under administrative clean-up provisions, liability is often equally strict: for example under Section 161 of the Water Resources Act 1991, where anti-pollution works are carried out for example, to remedy pollution of controlled waters, the authority carrying out the works is entitled to recover the costs of remediation works from the persons who caused or knowingly permitted the pollution of the controlled waters.

Specific Legislation

There are a number of statutes imposing strict liability to compensate for environmental damage in certain circumstances, for example:
- the Nuclear Installations Act 1965, Section 1, imposes strict liability to compensate in respect of certain occurrences relating to the use of licensed nuclear sites. It provides for compensation for damage arising from a nuclear incident. Section 12 requires the payment of compensation for damage arising from a breach of duty imposed by Sections 7, 8, 9 and 10. These include such duties as maintenance and ensuring safe storage etc.. Compensation is based on the imposition of strict liability and is capped at £20 million per incident, although the Government covers damages up to £300 million.

The system is not, apparently, ring-fenced although given the nature of the compensation, that is, strict liability, it is likely that a plaintiff would proceed under this regime.

- the Reservoirs Act 1975, Section 28, relating to the escape of water from a reservoir.

- the Gas Act 1965, Section 14, imposes absolute liability on public gas suppliers for loss of life, personal injury or damage to property caused as a result of the underground storage of gas.

- the Merchant Shipping (Oil Pollution) Act 1971 implemented the Convention on Civil Liability for Oil Pollution Damage 1969. The 1971 Act was prospectively modified by the Merchant Shipping Act 1988 to give force to a Protocol effectively implementing the International Convention on Civil Liability for Oil Pollution Damage 1984. The 1988 Act also prospectively amended the Merchant Shipping Act 1974 to give effect to a 1984 Protocol to the International Convention on the establishment of an International Fund for Compensation for Oil Pollution Damage 1971, which had been implemented by the 1974 Act. The two protocols did not, however, enter into force internationally and consequently the provisions of the Merchant Shipping Act 1988 were never brought into force. The 1971, 1974 and 1988 Acts were further modified by the Merchant Shipping (Salvage and Pollution) Act 1994 which implemented the 1992 Protocols of the Convention on Civil Liability for Oil Pollution Damage and the International Convention on the establishment of an International Fund for Compensation for Oil Pollution Damage. These Acts have since been consolidated into the Merchant Shipping Act 1995 Chapters III and IV. The 1995 Act comes into force on 1 January 1996. The main provisions of the 1995 Act will enter into force on a day to be appointed and until then the transitory provisions set out in Schedule 4 of the 1995 Act will apply. These provisions reflect the 1971 Act without the 1988 amendments but including the 1994 Act amendments in Schedule 3 Part 1 of the 1994 Act.
Under the regime currently in force the owner of a ship from which any oil is discharged or escapes is liable for: any damage caused outside the ship in the area of the United Kingdom by contamination resulting from the discharge or escape; the cost of any measures reasonably taken to prevent or minimise any damage resulting from the discharge; any damage caused by preventative measures taken.

The scope of the liability is limited to loss of profit resulting from the incident and the cost of any reasonable reinstatement measures. There would appear therefore only to be protection of the environment where a party has suffered loss (for example, loss of livelihood to fishermen) and this requires reinstatement of the environment to rectify it. There is no liability, however, where the discharge results from war or hostile action, a deliberate act of a third party intending the damage, or failure of the authorities to maintain navigational aids.

Under this system liability is capped at 133 Special Drawing Rights multiplied by the ship's tonnage or 14 million Special Drawing Rights where the tonnage would result in a greater amount the only available exception being damage due to the shipowners' intentional or reckless action knowing that the damage would result. This will in practice be very difficult to prove. The Special Drawing Rights referred to are those referred to in the Articles of Agreement of the International Monetary Fund.

Insurance must be carried up to the maximum liability figure and any claimant can pursue the insurer directly.

If a claimant cannot fully recover loss under the Merchant Shipping Acts either because the shipowner cannot pay or can rely on the exception and recovery from the insurer is not possible or the damage exceeds the liability limit, then the claimant may claim under the Convention against the International Oil Pollution Compensation Fund (IOPC Fund), (see also 12).

**Defences**

Under the rule in *Rylands -v- Fletcher*, the following defences are available:

- act of God;
- consent by the plaintiff, express or implied;
- contributory negligence on the part of the plaintiff;
- the accumulation is maintained for the benefit of both parties;
- the act of a stranger caused the escape (provided the act was of a kind that the defendant could not reasonably have contemplated and guarded against);
- an act or default of the plaintiff led to the damage; and
Compliance with regulations does not constitute an automatic defence.

Under administrative provisions, liability for clean-up is in some cases subject to defences, for example where in proceedings for an offence under statutory nuisance, it is in certain cases (namely on industrial, trade or business premises and an abatement notice is served) a defence to prove that the "best practicable means" were used to prevent or to counteract the effects of the nuisance. "Practicable" means reasonably practicable having regard, amongst other things, to "financial implications".

Although not strictly a defence, liability for clean-up costs is usually restricted to liability for costs which are reasonably incurred. For example, under Section 81(4) of the Environmental Protection Act 1990, only expenses reasonably incurred by a local authority in abating a nuisance are recoverable. Similar provisions exist to restrict liability to those costs reasonably incurred in clean-up under Section 161 of the Water Resources Act 1991, under Section 59 of the Environmental Protection Act 1990 and under the new contaminated land provisions under the Environment Act 1995.

It should be noted that compliance with a permit is frequently a defence to criminal liability, even where the offence is not directly related to the permitted activities; for example, compliance with a waste management licence is a defence to the criminal offence under Section 85 of the Water Resources Act 1991. Further, having carried out "due diligence" or taken "reasonable precautions" is often a viable defence (see, for example Section 33 of the Environment Protection Act 1990).

**STUDY 2**

**AUSTRIA**

Strict liability for the pollution of forests has been incorporated into the Forestry Act 1976. An owner of an industrial plant emitting hazardous substances into the atmosphere which cause damage to forest areas will be liable for such damage in the absence of a licence under the Forestry Act or where the emissions exceeded the maximum permissible levels. Compliance with the conditions of the licence and taking all necessary precautionary measures will avoid liability.

The Mining Act 1975 provides for liability for damage caused by mining regardless of fault. Only in the event of unavoidable circumstances is there no obligation to pay damages.

Section 26 of the Water Rights Act provides for liability regardless of fault for damage caused by the lawful operation of a water treatment plant if the damage was unlikely to occur at the time the licence was granted.
Strict liability also arises under Articles 364, 364a and 365 of the Austrian Civil Code and certain specific legislation concerning dangerous activities.

Defences

Based on the Forestry Act the defendant has a defence if he can prove that the pollution was caused by an unavoidable act which was neither a construction defect nor a failure of the industrial plant and the owner and/or his employees have acted as carefully as necessary under the circumstances. The Act stipulates no obligation to pay damages in the event of unavoidable circumstances.

Under the Water Rights Act the defendant has a defence if he can prove that the pollution was caused by an act of God or the plaintiff has neither registered nor applied for registration of his right to use the water with the relevant water authority.

BELGIUM

Strict liability arises under the following legislation:

- Article 1384 of the Civil Code when the damage has been caused by the defect of a good. The "guardian" of the good (the person having control of it) must compensate the victim;

- Article 544 of the Civil Code and Court of Cassation, April 6, 1960 under the theory of "nuisance due to the vicinity" ("troubles de voisinage"), the owner of land, having unreasonably disturbed the relationship between his property and the neighbouring properties, while acting lawfully, must compensate the victims of his acts;

- The Toxic Waste Law of July 22, 1974 under which the producer is liable for any damage caused by the toxic waste, even when he has handed over the waste to processing operators;

- The Budgetary Law of December 24, 1976 (Article 85) under which liability is imposed on the owner of polluting products;

- The Law of July 20, 1976, which implements the International Convention of Civil Liability for Oil Pollution Damage, under which liability is imposed on the owner of the ship;

- The laws on civil liability in the field of nuclear energy: under the Law of August 9, 1963 the liability rests with the operator of the nuclear ship; under the Law of July 22, 1985: the liability rests with the operator of the nuclear plant;

- The Walloon decree of October 11, 1985 on damages due to the abstraction of groundwater, under which the operator is liable for any damage due to the lowering of the groundwater;
- The Flemish Decree of February 22, 1995 on contaminated land, under which two types of liabilities may be identified:

- the obligation to clean-up the land by the operator of an installation or by the owner of the contaminated land (except if he proves that he did not have effective control of the land) with the exception of the following:

  - they had not caused the pollution;
  - they were not aware of the pollution;
  - no polluting activity has been carried on since 1 January, 1993 (a list of potentially polluting installations and activities to be established by the Flemish government).

- liability for contamination:

  - where pollution occurs after the Decree (October 29, 1995) enters into force, the person responsible for the "emission" is liable for costs identified under the Decree and all damages without any fault to be proved. If a licence has been granted to the plant from which pollution is emitted, liability will be channelled to the operator;

  - for soil pollution having occurred before the entry into force of the decree ("historic pollution"), classical rules of fault liability shall apply.

Defences

Defences are:

- force majeure; and
- negligent act of a third party or of the victim.

GREECE

Under Article 29 of Law 1650/1986, which covers most sectors of the environment and is mainly administrative in scope, there is a form of strict civil liability. A polluter is liable to compensate the victim where he has caused damage unless he can show force majeure or an intentional act of a third party which caused the pollution. More specific legislation is also in force such as Law 314/76 which ratifies the Brussels International Convention.

Defences

Defences are:
- force majeure; and
- intentional act of a third party.

"Force majeure" is an incompletely identified term in Greece and according to the prevailing opinion in the jurisprudence it refers to facts that are unpredictable and inevitable however diligently and cautiously one acts. Such as the sudden illness of the beneficiary, because of which he becomes incapable of acting.

**ICELAND**

There is no general rule of strict liability for environmental damage but some cases have applied strict liability and various statutes introduce strict liability which may apply to environmental damage (for example the Act on Product Liability No. 25/1991, the Traffic Act No. 50/1987, the Maritime Act No. 34/1985, the Air Traffic Act No. 34/1964 and the Act on Condominiums No. 26/1994).

Article 15 of the Act on Protection against Pollution of the Ocean No. 32/1986, provides that a party which causes pollution of the ocean around Iceland is liable without fault for environmental damage.

**Defences**

Defences are:

- that all necessary precautions to avoid the damage were taken;
- unavoidable accident.

In product liability, defences such as the product was not intended for a business purpose (for example, it was a prototype), that it was made according to official standards/requirements or was used in a different manner than intended, may be used. In addition, one can generally claim that the plaintiff has caused the damage to occur intentionally or with gross negligence. This defence may lead to either no compensation or a reduction of the claim.

**IRELAND**

In Ireland strict liability arises from the rule in Rylands -v- Fletcher which was reconsidered in the Cambridge Water Company case (see UK above).

In a claim for compensation for environmental damage caused by an occupier of land who brings and keeps anything on that land which, if it escapes, is liable to do damage (the rule in Rylands -v- Fletcher) is the only example of where strict liability arises, although the courts are enforcing liability for environmental pollution more and more strictly.

**Defences**
The primary defence would be that the use made of the thing brought on to the land was natural. It will, however, be a matter for judicial interpretation whether the use is natural or non-natural but the factors taken into account will include the nature of the activity taking place, the time for which it has taken place and the location or disposition of the persons likely to come into contact with it.

**LUXEMBOURG**

Apart from Articles 544 and 1384 of the Luxembourg Civil Code, only Article 29 of the law of 17th June 1994 concerning the disposal, processing and storage of waste referred to above provides a case of strict liability.

Article 29 requires the victim to prove the following elements:

- the existence of a damage;
- the existence of waste; and
- a causal link between the waste and the damage.

**Defences**

To avoid liability, the defendant will have to demonstrate that:

- the damage has occurred as result of an independent, distinct act, an act of a third party or circumstances beyond his control (this is interpreted strictly by the jurisdictions);

- in case of Article 1384 of the Civil Code, that the object under his control has not caused any damage.

Articles 29 to 34 of the law of 17 June 1994 on the administration of waste, have created particular instances of strict liability. Defences for this liability are the same as for the common law.

**NORWAY**

Strict liability for compensation for environmental damage arises most importantly under the Pollution Control Act 1981 at Section 55. Damage to the environment, caused by the defendant, leading to economic loss or damage, or loss of amenity as regards exercising of common rights must be shown.

Under the Pollution Control Act, the liability of the owner/occupier is strict. The liability of other persons who may have contributed to the damage is fault-based.

Under the Petroleum Act/Maritime Act, the liability of the holders of the petroleum production rights, including the operator/shipowner, is strict. The liability of other persons who may have contributed to the damage is fault-based. The liability of persons from whom the holder/shipowner may seek recourse, is fault-based.
However, the following elements must be proved for strict liability to apply:

- damage to the environment;
- caused by the activity, property etc. in a sufficiently proximate manner; and
- leading to economic loss.

Defences

The Pollution Control Act states that the owner/occupier is only liable for pollution damage which is prohibited by the authorities or by law and regulation. Therefore, an injured party is not entitled to any compensation for permitted pollution, which is pollution is permitted under licence or under the general exceptions in the Pollution Control Act for primary industries, private residences etc. An exception is made to the extent that such pollution is unreasonable or unnecessary in terms of the provisions in Section 2 of the Neighbour Act.

The Petroleum Act includes a defence for war, act of God, governmental actions etc. if such incidents have contributed considerably to the damage. The owner/occupier is normally not exonerated totally, but will only be held responsible for what is deemed reasonable in view of the size of the relevant operation, possibility to insure the loss, and other relevant elements in a given situation.

The Maritime Act includes defences for act of war or similar acts during an armed conflict, act of God, damage wholly caused by an act perpetrated by a third party with intent to cause damage, or damage wholly caused by the negligence or other wrongful acts of any government or other authority in connection with the maintenance of lights or other navigational aids. Furthermore, the owner's liability may be subject to reduction due to the injured party's own behaviour.

PORTUGAL

In accordance with Article 41 of the Basic Law on the Environment, strict liability arises whenever someone causes significant damage to the environment as a result of a particularly dangerous activity (see 2).

Defences

The available defences are those detailed for fault liability, namely self-defence, direct action and flagrant necessity (see 5).

It is also necessary to construe the generic concepts of "significant" and "particularly dangerous" very carefully. Such interpretation will mainly be made by the courts.

SWITZERLAND
Strict liability arises under Article 58 of the Code of Obligations and Article 684 of the Swiss Civil Code, with significant statutory provisions under the Environmental Protection Act 1983 and the Water Pollution Control Act 1991 (see 2).

Where strict liability applies, it is sufficient for the damaged party to prove damage and a causal link between that damage and the act or omission of the defendant, without proof of fault, on the sole condition that the (federal) legislation deduces liability from specific circumstances or behaviour (for example, liability for pets, liability of owners/operators).

In "strict liability" cases, the defendant can escape from liability if he can prove that he has applied the care usually considered as sufficient. In "special strict liability" cases where the (federal) legislation imposes strict liability in the technical sense (special or absolute liability), the defendant may not make use of the defence that he followed the rules of reasonable care. In cases of multiplicity of liable parties, such a defendant bears a part of the damages. Examples for special strict liability are: car owner liability, systems for electricity distribution, nuclear power plants, railroads, hydrocarbon pipelines, aircrafts etc.

Defences

The defences available are specified in each piece of legislation (such as legislation on liability for nuclear energy, energy distribution systems, car traffic, operation of chemical plants, construction, environmental protection, clean water etc.). Under the system of special strict liability (alternatively described as "absolute liability") almost no defences are available. For example, under the federal law on liability for nuclear energy, the only defence is that the person injured or damaged has wilfully or intentionally caused the damage himself. Even the right of recourse is narrowly limited.

In this context, it is very important to note that the principle of cooperation (between the state and the potentially liable individuals) is a fundamental element of Swiss legislation on environmental protection. This means that protective or preventative measures are very often agreed between the parties, taking into account considerations of "reasonable practicability" or other concepts of reasonable behaviour, affordable cost and the balancing of protective measures against "damage".

Acts of God and compliance with authorisation conditions can, theoretically, serve as a valid defence. Practically, however, there always seems to be a combination of elements and facts (such as act of God not being the single cause of the damage, but combined with non-compliance with authorisation conditions).

Honest mistake is a concept unknown to the Swiss strict liability legislation.

Instructions from an employer are not relevant with respect to civil or administrative liability; they can be of importance under criminal law.
USA

Not applicable.

DENMARK

Denmark has not signed the Lugano Convention. The Convention was considered when the Parliament adopted the Act on Compensation for Environmental Damage, 225/1994, but it was rejected, mainly for two reasons: indirect retroactive liability for the deposit of waste and compulsory insurance. Also the right for environmental organisations to take legal action under Article 19 of the Convention was rejected, mainly because of the risk of competitive enforcement with the regulatory authorities and the doctrine of res judicata.

FINLAND

Finland has signed the Lugano Convention and preparations for ratification are under way.

FRANCE

France has not signed the Lugano Convention. There are no plans to incorporate its principles into the national system.

GERMANY

Germany has not signed the Lugano Convention and there are no plans to incorporate its principles into the national legal system because it introduces comprehensive strict liability in general terms. While the UmweltHG also contains strict liability, it only applies to particular types of environmental damage (that which is caused by one of the plants named in Appendix 1 to the UmweltHG). The federal government has decided against comprehensive strict liability, and it is unlikely that this situation will change in the near future.

ITALY

Italy has signed the Lugano Convention. A working committee made up of the Ministry of Justice is dealing with the method of ratification in view of the fact that strict liability, joint and several liability and compulsory financial security are new to the Italian legal system.
THE NETHERLANDS

The Netherlands has signed the Lugano Convention. Legislation to implement the Convention in the Netherlands is currently being prepared, although much of it is reflected in the Act of 30 November 1994.

SPAIN

Spain has not signed the Lugano Convention and there are no proposals for its principles to be incorporated into Spanish law.

SWEDEN

Sweden has not signed the Lugano Convention. Current information suggests that it will not be signed in the near future. The reason for this is the limitation period of 30 years and the standing of certain organisations.

UK

The UK has not signed the Lugano Convention and there are, apparently, no immediate plans to sign.

STUDY 2

AUSTRIA

Austria has not signed the Lugano Convention. However, the basic principles of this Convention are contained in the proposal put forward by the federal Ministry of Justice for an Environmental Liability Bill (see 4).

BELGIUM

Belgium has not signed the Lugano Convention there are currently no proposals for it to be ratified.

GREECE

Greece has signed the Lugano Convention, but it has not yet been ratified. The main difference between Article 29 of Law 1650/86 (see 2) and the liability system of the Convention is the extent of liability and the extent of protection.

ICELAND

Iceland has not signed the Lugano Convention but currently there are no proposals for it to be ratified.
IRELAND

Ireland has not signed the Lugano Convention and there are currently no proposals for its principles to be incorporated into the national legal system.

LUXEMBOURG

Luxembourg has signed the Lugano Convention but has not yet implemented it into national law.

Luxembourg has, however, adopted a law of 17th June 1994 regarding the administration of waste (Mém.1994, 1076). This legislation has created a system of strict liability (Article 29) and was inspired by the Convention (Parl.Documents, Projet No. 3667).

NORWAY

Norway has not signed the Lugano Convention.

In September 1993, the Justice Department issued a proposal for the Convention to be signed by Norway. However, no final decision has been reached. As Norway already has a strict liability regime with regard to pollution, the provisions in the Convention on strict liability are not contentious. The rule of strict liability in the Convention has a more limited scope, being applicable only to certain types of activities, whilst strict liability in the Pollution Control Act applies to all pollution damage (except pollution damage which is covered by other liability regimes, such as the Maritime Act). Norway intends to retain the more extensive rules of the Pollution Control Act even if the Convention is signed.

PORTUGAL

Portugal has not signed the Lugano Convention and there is no known proposal for its principles to be implemented in Portugal.

SWITZERLAND

Switzerland has not signed the Lugano Convention. Ratification is planned if the amendment to the federal Environmental Protection Act 1983 is enacted.
8. LIABLE PERSONS (UNDER CIVIL, ADMINISTRATIVE AND CRIMINAL SYSTEMS)

STUDY 1

USA

Civil

Under general principles of state tort law, parties who cause personal injury or damage to private property through their handling of hazardous substances are generally liable for that damage, whether the damage result from current or historic pollution.

There is considerable variation in interpretation, rights and remedies among the fifty states. The general principles of the common law of tort are set out in the American Law Institute's Restatement (Second) of Torts.

Administrative

Under CERCLA paragraph 107(a), 42 USC paragraph 9607(a), the following categories of parties are liable for both clean-up costs and natural resource damages associated with the site upon which hazardous substances have been released or are threatened to be released:

- current owners and operators of the site;
- past owners and operators of the site (with a few exceptions);
- producers of hazardous substances (either as wastes or products) who "arranged" for their disposal on the site (usually referred to as "generators"); and
- transporters of those materials who chose the disposal site.

The extent of potentially responsible parties who are liable under CERCLA, while based on a few statutory definitions of terms such as "owner," "operator" or "arranger", has been largely clarified through court decisions. For example, numerous judicial decisions have addressed the question of what circumstances constitute "arranging for disposal" of hazardous substances, thus creating liability for producers ("generators") of waste. See, for example, US -v- Aceto Agricultural Chemical Corp., 872 F. 2d 1373 (8th Cir. 1989); Florida Powers & Light Co. -v- Allis - Chalmers Corp; 893 D 2.d 1313 (11th Cir. 1990); General Electric Co. -v- AAMCO Transmission Inc; 962 F. 2d 281 (2d Cir. 1992); AM International Inc. -v- International Forging Equip. Corp., 982 F. 2d 989 (6th Cir. 1993). See generally, S. Cooke, The Law of Hazardous Waste paragraph 14.01[4][d][ii] (Matthew Bender & Co., 1994).

Under CERCLA, there is no hierarchy of responsibility at law, as the liability of responsible parties to the government is joint and several (except in rare cases where the harm can be shown to be "divisible").
All parties referred to above are liable for cleaning up both historic and current pollution of soil and groundwater.

**Criminal**

Persons causing environmental damage are liable to criminal prosecution under various provisions such as failure to report discharges of hazardous substances to the environment and breaches of licences and permits, subject to fines and/or imprisonment.

**DENMARK**

**Civil**

Under ordinary civil liability for environmental damage anyone who fulfils the relevant requirements as referred to in 2 may be held liable. Statutes providing for strict liability will indicate which are the potentially responsible parties. In the Compensation for Damage to the Environment Act, 225/1994 the operator is liable. In the Road Traffic Act it is the driver and the owner, but supported by compulsory insurance. In the Act of the Sea 205/1995 it is the shipping firm. The potential responsible parties for the strict liability for damage caused by abstraction in the Drinking Water Supply Act 337/1985 is defined as the party which benefits from the abstraction.

An owner of land may be liable for pollution caused by activities carried out by a contractor on his land. A higher court found the company Pindstrup Moseburg Ltd liable where it used a small company to spray pesticides on the land, holding that it should not be able to escape liability by using a small contractor (re. Pindstrup Moseburg Limited UfR.1981.564).

A producer of hazardous waste may be held liable for unauthorised disposal of waste by a transporter to whom the producer passed on the waste. A company, Horn Belysning, was convinced by a waste transporter that it had an arrangement with a licensed waste undertaker. The transporter dumped the waste illegally and was prosecuted. The court found Horn Belysning liable for clean-up costs and disposal expenses holding that it had the power to ensure the waste reached an authorised undertaker and could not escape liability by using a waste transporter (re. Horn Belysning, unpublished, Western High Court, 6 division 10th June 1993).

**Administrative**

The "liable person" under the Environmental Protection Act, 358/1991 is the "responsible party" (including those in possession of contaminated land), but under other legislation (for example, the Planning Act or the Nature Protection Act of January 3, 1992) the current owner of the property is liable. Under administrative law the polluter's liability only extends to monitoring and clean-up costs within the boundaries of his property. Offsite liability is dealt with under civil law.
The innocent purchaser will not be held liable for contamination of his land if he notifies the public authority of the contamination when he discovers it. If he does not, he (at least in theory) might be held liable after he knew about the contamination.

**Criminal**

Where criminal sanctions are imposed liability is normally placed on the operator (usually a company) of the polluting process and where there is a clear intention of an illegal act by the company, then on directors and managers. Other parties such as carriers of waste are less likely to be subject to criminal liability unless their act is clearly criminal and intentional as was the case with the fraudulent waste carrier in the Horn Belysning case (see above) who was in fact imprisoned for his offence.

**FINLAND**

**Civil**

Section 7 of the Environmental Damage Compensation Act, 737/1994 provides that liability is assumed by the operator, (that is, the person who carries out the activity which causes the environmental damage). Further, persons comparable with an operator are also potentially liable (see below). The injured party is entitled to choose against whom, of several liable persons, he wishes to pursue his claim.

For current pollution, the operator of the polluting activity is responsible and not the owner of the site on which the polluting activity is carried out, provided he is not regarded as an operator.

The question of liability for historic pollution is more complicated. The Environmental Damage Compensation Act, 737/1994 provides that in cases where the polluting activity has been transferred, the transferee is also liable for damage which occurred before the transfer, provided that he knew or ought to have known of the damage or the risk.

There is no provision in the Environmental Damage Compensation Act, 737/1994 defining a "transfer" of the polluting activity. The only example mentioned in the Government Bill is the sale of a company or a part of it.

A transferee of an activity may also be liable if he knew or ought to have known about the damage or disturbance (or the risk of it) at the time of the transfer.

In assessing whether a person is comparable with an operator, the following issues would be taken into account:

- decision making power;
- economic relation to the operator; and
the economic benefit which the person gains from the activity.

Further, although the Waste Act, 1072/93 is of a public law nature, its provisions on the obligation to clean-up polluted soil are in fact related to the corresponding provisions on transfer of activity in the Environmental Damage Compensation Act, 737/1994. According to the Waste Act, 1072/93 the new owner of a land area can be obliged to clean-up the soil contaminated by one of the previous owners.

In cases where the site at which the activity causing damage took place is transferred to another person who does not continue the activity, the new owner is (in theory) not liable. However, under the Environmental Damage Compensation Act, 737/1994, the term "activity" also covers, for example, the storage and installation of harmful substances. Thus a new owner of an area who continues to store substances without operating the factory could also be held liable.

Administrative

Finland has a variety of administrative laws concerning the various sectors of the environment. Operators of industrial processes are normally the parties regulated under the administrative laws. The Air Pollution Act 1982 lists the type of plants which it regulates and which must furnish information on their activities. Under the Water Act 1961 plants which use certain hazardous substances or may cause pollution of water are subject to regulatory requirements include the need for a permit to operate. The regulations on waste impose duties and obligations on those producing, treating, holding or transporting waste. A further example is the Chemical Act 1984 which requires importers and manufacturers of chemicals to have information about the chemical in question and to comply with a notification procedure. Breach of regulations and licences will lead to administrative liability for the party subject to the regulation.

Criminal

With the reform of the Criminal Code in Finland new environmental offences have been included which interact with the existing laws on the different sectors of the environment. The offences of Impairment of the Environment and Negligent Impairment of the Environment are broad in scope but specifically refer parties who:

- release, emit or dispose of substances;
- produce, convey, transport, use, handle or store substances; or
- import, export or transport waste.

Under these provisions alone a wide variety of parties are potentially liable, encompassing all aspects of processes which may cause environmental damage.

FRANCE

Civil
When the basis for civil liability is nuisance to the vicinity, the liable person is normally the owner (because such a liability is incurred as a result of an "abuse" of ownership rights).

Further, under Article 1384 Line 1 there is a presumption of liability on the party using or holding an object. In relation to objects or substances which are dangerous per se the courts have developed a distinction between danger which is intrinsic to the object or substance and danger which stems from the way in which the object or substance is used. The operator or user of the dangerous substance or object must show that the damage resulted from an external cause in order to escape liability.

Administrative

No specific hierarchy of responsibility is established between owners, occupiers, operators, carriers or other persons responsible.

However, certain persons are more exposed than others to a potential liability, namely, those on whom major environmental protection laws impose specific obligations, in particular, Law 76/663 of 19th July 1976 relating to listed sites and Law 75/633 of 15th July 1975 relating to the disposal of waste. Under Law 76/663, the operator (exploitant) and, to a lesser extent, the "détenteur" of the listed site are likely to be liable, while under Law 75/633 the producer and the "détenteur" of waste are most likely to incur liability. "Détenteur" has a broad definition and it can mean the owner, the occupier, the receiver in bankruptcy or, in the case of waste, it can be any intermediary involved in the waste disposal process (namely, collector, carrier, etc.).

The circular of 9th January 1989 mentions that clean-up measures may be imposed by the "Préfet" (administrative head of the "Département") on:

- the person responsible for the contamination; or
- the producer(s) of the contaminating waste; or
- the owner of the site acting in bad faith.

Article 11 of Law 75/633 on waste provides that any person who disposes of or causes to be disposed of certain categories of waste and all operators of listed waste disposal installations can be held jointly liable for damage caused by the waste. This therefore imposes liability across the chain of waste disposal from the producer to the disposer.

Also, in relation to mining and quarrying activities, there is a presumption of liability on the last operator with regard to damage connected with the activity. His liability does not derive from the mine or the quarry but from his own activities but he cannot rebut the presumption of liability unless he can show that the damage was caused not by his activities but by his predecessors.

In cases of strict liability, the liable person is:
the operator of the nuclear plant;
- the owner of the vessel shipping hydrocarbons in bulk (the definition of "owner" is given in Article 1 of the Brussels Convention of 29 November 1969);
- the carrier (operator) of the aircraft.

A summary of the administrative case law in respect of contaminated land and remediation measures imposed by public authorities for both "listed sites" under Law 76/663 and unlisted sites is as follows:

- if the plant is still active, the current operator will normally be the one required to clean-up, even if the contamination is not due to his activity. If there had been a change of operator since the contamination occurred, and if the new operator has not been substituted "regularly" for the previous operator, then the latter will be required to clean-up. Administrative jurisdictions have defined criteria for the substitution to be "regular". They are that (a) the activity of the previous operator must have been regularly carried on, (b) the new operator must carry on the same activity, and (c) the change of operator should have normally been declared to the administration (but this latter condition is not strictly applied by the judges);

- if the site is no longer operated, the last operator will normally be responsible for the clean-up. Where the last operator is unknown, has disappeared or is insolvent, the owner of the site (when identified) may be required to clean-up. Administrative case law on this is still not clear. Most of the pertinent court decisions require, as a condition before imposing remediation measures on the owner, that the operator be insolvent or unknown; a recent decision however accepted the principle that remediation measures could be imposed, jointly and severally, on the operator and the owner even when it was not established that the operator would be insolvent;

- because Law 76/663 on listed sites allows for public authorities to impose, in particular, remediation measures most easily, they try to find a link between the contaminated land and the activity which produced the contaminating substances. In practice, such an activity will most probably fall within the scope of Law 76/663 because nearly all the potentially polluting activities are listed. Once this link, which is referred to as a direct extension of activity ("prolongment direct de l'activité"), is established between the contaminated land and the listed site which produced the contaminating waste or substances, then remediation can be imposed on the basis of Law 76/663 upon the operator of the site who will be either the current operator or previous operator where the plant is closed, and possibly the owner (but case law is indecisive in this respect). Bearing in mind that the operator is also the producer this case law tends to show an evolution towards a
strict liability regime applicable to the producer. This case law is criticised on the basis that it applied the "deep pocket" principle.

Criminal

There is in theory no limit to the type of person who can be criminally liable including companies, directors or managers, employees and even heads of public authorities.

In relation to water pollution, Article L232-2 of the Rural Code states that anyone who directly or indirectly discharges or permits the flow of any substance into water which may kill fish or affect their nutrition, reproduction or quality as a food source shall be liable to punishment.

Water legislation dating from 1992 contains a provision at Article 22 imposing criminal penalties on any person who causes or allows, directly or indirectly, harmful substances to enter surface, ground or sea water which cause damage to flora or fauna (except that covered by L232-2 of the Rural Code) or a health hazard or restricts the supply of water as a source of food or for bathing.

In relation to listed sites the operator may be criminally liable if emissions into air exceed the levels stipulated in his permit.

There are various criminal provisions on waste, including rules imposing liability on anyone who breaches rules on: transport and brokerage of waste; processing and destruction of waste; and import and export of waste. Such provisions are likely to affect waste transporters, disposal businesses and brokers.

GERMANY

Civil

Under paragraph 1 UmweltHG and paragraph 22 WHG the proprietor of a plant is liable for damages. Under paragraph 823 BGB the tortfeasor is liable for damages. The claim to compel another person to refrain from emissions pursuant to paragraph 906 BGB is directed against the interferer.

The Proprietor (Inhaber): according to the UmweltHG, the "proprietor" of a plant is bound to compensate another person for damage caused (paragraph 1 UmweltHG). The UmweltHG does not provide for a legal definition of the term "proprietor". It is understood to be the person who uses the plant (see Appendix to the UmweltHG) for his own purposes, who possesses the right of disposal and who raises the costs of maintenance. The proprietor of a plant is usually its owner, and so generally the owner of the land (according to German law the fixtures form a part of the land and therefore belong to the owner of the land). As a general rule, someone will also be considered to be the proprietor of land if it is leased to him or her, or if he or she uses it for business purposes. The person who supplied and installed the equipment is not its proprietor. Similarly, someone who has taken on the task of maintaining the equipment is not thereby a proprietor.
The proprietor is also liable for damages according to paragraph 22 WHG. A body of case law has developed concerning this term which can also be used in the context of paragraph 1 UmweltHG.

Tortfeasor (Täter): according to paragraph 823 BGB the person who caused the damage is bound to compensate for the damage caused. This person is described in case law to the BGB as the tortfeasor even though this term is not defined in the statute as such. Regulations under the BGB concern a tortfeasor who is a joint offender or a participant in the act (paragraph 830 BGB) or the situation when several individuals are responsible for the damage (paragraph 840 BGB).

There are considered to be joint tortfeasors (Mittäter) when several people have consciously and willingly worked together; it is not a question of who caused the damage personally and how much he contributed thereto. A participant (Beteiligter) is the person who instigates the action (a managing director who orders the foreman to put oil in the sewage system) or the person who provided help to undertake the task (physical or psychological support of the offender).

If several offenders cause damage independently of one another (dust or poisonous gas is released from several different plants, controlled by different people, and causes the damage), the tortfeasors are joint and severally liable (Gesamtschuldner).

Interferer (Störer): the claim to compel another person to refrain from damaging the environment pursuant to paragraphs 906, 1004 BGB is directed towards the interferer. The term interferer is not defined by statute, but is, to a great extent, by case law.

A distinction is drawn between an interferer by way of action (Handlungsstörer) and an interferer by way of condition (Zustandsstörer). The interferer by way of action is the person who causes the emission (for example, the operator of a plant which releases poisonous gases). The interferer by way of condition, on the other hand, is the person who has control of the object which releases the emission for example, the owner of the land on which the aforementioned plant stands, when the owner did not personally operate the plant, but leased it out.

The claim under paragraphs 1004, 906 BGB is to be brought by the owner of the land which is affected by the emissions.

Purchasers of property are required to make diligent enquiries of the land they are buying. The sale includes implied warranties of one year duration as to the quality of the land. These are usually excluded by the contract of sale and purchase. However, the vendor is still under an obligation to inform the purchaser if the land is likely to be contaminated. If he fails to do this, the exclusion of warranties by contract becomes invalid and the purchaser is given a limitation period of 30 years within which he may bring an action for damages.
There is no hierarchy of responsibility under the civil liability system. In principle, the injured person is entitled to choose against whom, of several liable persons, he wishes to pursue his claim.

**Administrative**

It is at the discretion of the administrative body as to whether it makes its orders against the operator or against the owner/occupier or against them both. The most important criteria for that decision will be that the danger to public safety has to be removed as quickly and as effectively as possible. As a result, in practice, administrative bodies make their orders most commonly against owners or tenants of the property, as these persons are known to the administrative body and often have the necessary financial resources to remove the danger. A defence for the owner/occupier against such an order only exists if the operator is equally as capable of removing the danger as the owner/occupier. However, this will not be the case if the operator does not have the necessary financial resources or if there will be problems in proving that he actually caused the pollution (for instance if a property has been used by several businesses over the years). In practice this tends to make the owner primarily liable introducing *a de facto* hierarchy.

**Criminal**

Under the criminal provisions of the StGB paragraph 324 onwards the liable person is usually the operator or whoever causes the pollution. In relation to water pollution it is the polluter. For soil pollution it is whoever, in breach of administrative duties, causes soil pollution. The provision on air pollution imposes a penalty on the operator of a plant who, in breach of administrative provisions, causes air pollution outside the site. For noise and vibrations the same person is liable. Again in relation to waste it is whoever handles dangerous waste in breach of recognised procedure or in breach of consents or prohibitions. The range of persons potentially liable is generally expressed in broad terms and liability depends on the requirements of each paragraph of the StGB.

**ITALY**

**Civil**

The person potentially liable is in principle anyone whether private person (individual or corporation) or public officer who carries out any negligent or unlawful activity (act or omission, commercial or not) in violation of existing regulations or of orders issued thereunder, resulting in any damage or alteration to the environment. Identification of the liable person is in every case made by the competent judicial authorities on the basis of the damage caused by the negligent or unlawful activity.

The person liable for historic pollution could be the owner, the user, the occupier at the time at which the pollution occurred, provided an assessment of this nature is possible (for example, in the event of succession in the ownership of a site on which different activities were performed).
In a recent case before the Supreme Court (September 1, 1995) it was held that the producer of toxic waste is liable for environmental damage when the related activity of storage and disposal is delegated to third parties; in fact anyone who is involved in the waste production and disposal cycle is jointly and severally liable.

Administrative

Article 18 of Law 349/1986 gives a broad definition of the person liable as everyone who, by fault or wilfully, breaches provisions of law or orders issued in accordance with the law, thus impairing or damaging the environment through alteration, deterioration or destruction thereof in whole or in part. The existence of both substantial elements (wilful or negligent violating behaviour and impairment of or damage to the environment) is required. Examples are as follows:

- individuals: the owner, the occupier, the person who has the right of usufruct or use of land for any reason (such as a licensee or person in de facto occupancy) or acts under a contract, the carrier;

- companies and their representatives: managing directors, officers responsible for the environment and safety pursuant to delegation of specific powers;

- activities: building in a national park or protected area, illegal waste disposal, oil spillage through tank-washing or following a maritime accident, etc.

In a judgment of the lower court ("Pretore") of Lucca (December 9, 1991) concerning the moving of soil in construction works it was held that not only was the person who "physically" acted responsible, but also the owner of the site involved, insofar as he did not prevent the carrying out of the works and had derived a profit from it. The Accounts Court (May 14, 1987, No. 28) stated that the public authorities with regulatory control over the site could also be made liable in damages.

In a 1994 case before the Supreme Court, a site which had been heavily contaminated by a ceramic factory was purchased and the purchaser was deemed not liable for clean-up simply by buying the property. Here the purchaser was the so-called "innocent purchaser". In transfers of property, the onus is on the purchaser to use due diligence to ascertain obvious defects. Latent defects discovered after purchase are to be reported to the vendor within eight days of discovery, subject to the limitation period of one year from the date of purchase. Where defects have been wilfully concealed then there is no limitation.

Recent regional legislation, concerning remediation and clean-up plans for waste contaminated sites, being drafted (although no general framework legislation is provided at the state level for either the identification and "seriousness" of pollution, nor for the clean-up criteria nor costs):
- Article 6 of Tuscany Regional Law 29 of May 12 1993 states that the costs for clean-up under a plan approved by the regional authorities shall be jointly and severally borne by the polluter, the owner and the person who has a licence or other rights of use on the property; and

- Article 33 of Emilia Romagna Regional Law 27 of July 12 1994 provides that the Mayor or the President of the Region may issue clean-up orders against the polluter or, if he cannot be identified, against the owner of the contaminated land.

In addition, the Public Administrator (the Mayor) is entitled, in extraordinary situations or emergencies and in the event of risks concerning public health, to issue contingent orders ("provedimenti contingibili e urgenti") against the current occupiers of a contaminated or dangerous site, independently from their title or actual liability. In practice, the administrative authorities impose the cost of remediation, indirectly (in the form of zoning contributions, based upon technical assessment) upon a party wishing to, for example, expand or restructure an industrial site.

Article 3 of Law 549 of December 28, 1995, which provides for a special levy for the "deposit in discharges of solid waste", states that whoever manages the discharge is liable for the payment of the tax jointly with anyone who has the right to "use" the discharge and with the owner of the site.

Criminal

Criminal sanctions under environmental law are normally aimed at the polluter or person not complying with an administrative order or licence. However an owner of a site, if different, may be held secondarily liable if he had knowledge of the pollution and did nothing to avoid it. The laws general require intentional or wilful behaviour to impose criminal liability although gross negligence is sufficient in some cases. Examples of typical environmental offences are:

- in relation to air pollution under DPR/203 anyone who operates a new plant without giving the requisite prior notice to the authorities is guilty of an offence. Similarly any operator who does not file the necessary authorisation petition within the correct time is guilty of an offence under DPR/203;

- under the waste law DPR/915 owners of institutions or businesses involved in waste disposal or the treatment of waste without authorisation will be criminally liable. Another provision under DPR/915 makes it an offence for anyone involved with the disposal of toxic or hazardous waste at any stage of the process to operate without the requisite authorisation or in breach of such authorisation.

THE NETHERLANDS
Civil

Any person or entity who has committed a tort which has caused environmental damage is liable. Usually, this will be the polluter. An intermediate owner who sells contaminated land for which it was not responsible may be liable but mainly through normal property law. This has arisen a number of times where municipalities have sold land which turned out to be contaminated. The burden of the diminution in value and costs of clean-up will depend on the facts and the duties of the buyer and seller to investigate the land and disclose relevant information.

In principle, anyone who causes damage to the owned environment is liable to the owner. The question of whether the pollution is historic or current is generally only relevant as an action may be time-barred after a certain period.

There is no hierarchy of responsibility in tort. Any person who has committed a tort may be liable. This is different if the case involves strict liability. In cases of strict liability, other potentially liable persons exist:

- defective structures: the possessor, the operator (if used by a company);
- defective movables: the possessor, the operator (if used by a company);
- employees: the employer;
- non-employees: the instructor;
- representatives: the person represented;
- products: the producer;
- hazardous substances: the user, holder, pipeline-owner (for Pipelines); this liability takes preference over more general liabilities (such as liability for defective movables if both apply);
- landfills: the operator (permit holder or, if no permit has been given, the actual operator);
- drilling holes: operator (permit holder or, if no permit exists, the actual operator);
- ship carrying hazardous substances: the operator; (during loading and unloading, the person responsible for loading and unloading);
- vehicle carrying hazardous substances: the operator; (during loading and unloading, the person responsible for loading and unloading);
- trains carrying hazardous substances: the operator; (during loading and unloading, the person responsible for loading and unloading);
- mines: the operator;
- groundwater pumping installation: the permit holder;
- nuclear installations: the operator;
- nuclear powered ships: the operator;
- ships carrying oil in bulk: the owner.
If contaminated property is cleaned up by the State under the Soil Protection Act 1994, the owner of the property can be liable under the doctrine of so-called "unjust enrichment", statutorily laid down in the Soil Protection Act 1994 and the Civil Code, on the basis that the owner has the benefit of a more valuable property afterwards. The "enrichment" of the owner can be claimed by the State if it is deemed reasonable to do so. This will usually be the case if there is some connection between the owner and the polluter (for example companies belonging to the same group), or if the present owner has bought the property with knowledge of the pollution. The period of pollution is not relevant for this action. Few cases have been brought before the courts on this matter to date.

In cases of soil contamination on property not belonging to the State but cleaned up by it as a result of the Soil Protection Act 1994, the polluter is generally liable for pollution caused after 1 January 1975. Under special circumstances the polluter can be liable for pollution caused before 1 January 1975. For pollution caused partly before and partly after the first of January 1975, the lower courts have used a pro-rata-parte allocation of liability. The "Hoge Raad" has not yet given a decision on this matter.

Administrative

Under administrative law a person who has infringed upon an act which provides for administrative sanctions is liable. In general, there is no hierarchy for persons liable. However, in administrative law concerning soil pollution the following hierarchy of responsibility exists:

- the major polluter;
- possible minor polluters;
- the owner of the largest property on which the cause of the pollution is located;
- possible owners of smaller properties on which the cause of the pollution is located;
- the owner of the largest property on which the case of the pollution is not located;
- possible owners of smaller properties on which the case of the pollution is not located.

In using this hierarchy, the "travaux préparatoires" of the Act state that attention must also be paid to the question which of the possible recipients of a notice will be best equipped to comply with the notice. This probably refers to financial considerations. No notices based on the Soil Protection Act 1994 have been given yet, as the Act has only recently come into force. Therefore, no practical experience using this hierarchy currently exists.

An innocent purchaser of land will not be liable to administrative sanctions under the Soil Protection Act 1994. To be an innocent purchaser the Soil Protection Act 1994 stipulates the purchaser:
- must have had no direct or indirect legal relationship with the polluter when the pollution was caused;
- must have had no direct or indirect involvement with the polluting process; and
- did not and could not reasonably have known of the pollution at the time it was occurring.

Criminal

Certain criminal provisions are expressed very widely such as for example the economic offence of Article 13 Soil Protection Act which imposes a penalty should anyone do anything which causes soil pollution. Other criminal provisions are less broad, however, they are directed generally at the operator of a process, the polluter or in the case of transport of hazardous waste for example the transporter.

SPAIN

Civil

In principle, the person liable is the one that has caused the damage, since liability arises from the causation of such damage. Where environmental civil liability is expressly provided for in specific situations by an express law, this rule may vary.

There is no hierarchy of responsibility between the possible liable persons, since either each person is responsible for the part of the damage he has caused, or all persons are jointly and severally liable.

In addition, and although it has not been expressly debated before the courts, it could be argued that, apart from the person that actually produced the pollution, the owner could also be held liable for any environmental damage caused by his polluted property. This would be based on the principle by which the owner must take whatever action is necessary to stop damage produced by his property (see Supreme Court decision of June 23, 1913 and December 23, 1952). The liability would therefore be based on the omission of this duty of the owner. In this case, it could be further argued that the owner could have a right of recourse against the person that actually produced the pollution.

From a practical point of view, however, private citizens or administrative authorities (depending on which type of liability is enforced) may tend to claim from the person with the closest relationship with the damage and its possible origins (for example, the owner or lessee of the property from where the contamination came, the person that conducts the activity that has caused the damage, etc.).

Administrative

Administrative law liability will very much depend on which specific rule applies. For example, in the case of Law 21/1992 on Industry, Article 33 establishes that
the person liable for contraventions to the Law shall be those that have conducted the activity in question in breach of the law, in particular:

- the owner, manager or officer of the industry where the contravention has taken place;
- the persons that participate in the installation, reparation, maintenance, use or inspection of industries, equipment and devices, where the contravention is a direct consequence of their intervention; and
- the producers, sellers or importers of products, devices, equipment or elements that do not comply with the applicable regulation.

Law 20/1986, on Toxic and Hazardous Waste, on the other hand, establishes (Article 14) that, the "holder" of the waste will bear the liability, (either the producer or the manager of the waste).

It is theoretically possible that the liability under this Law might be applied to hold the owner of a contaminated piece of land liable. The courts have, however, not yet applied the Law in this way.

**Criminal**

Under Article 347 of the Spanish Criminal Code whoever infringes environmental regulations, produces emissions, disposes of industrial waste causing damage to human health or the environment is guilty of an offence. This is expressed widely but will tend to attach mainly to operators of industrial processes or those handling, transporting or disposing of hazardous materials, especially in the case of unauthorised operations.

**SWEDEN**

**Civil**

Under the Environmental Civil Liability Act 1986, a landowner or leaseholder, corporate or individual, is strictly liable for damage caused by ongoing pollution from the property. Also, anyone who uses the property in the course of business or for public works is also liable; private individuals who use the property are subject to fault liability. There is no evident hierarchy of liability.

An owner of property will however not be responsible for damage caused by a tenant if the owner is not commercially involved in the tenant's business. It is not enough that the landowner just receives rent from the tenant; the owner must take a share of the tenant's revenue or be a major shareholder of the tenant company.

For historic pollution the answer is rather more complicated. As a rule the one who has caused the pollution carries the responsibility and not the one who for example owns the real property at the time of the occurrence. However if, for example, an old landfill continues to leak, a new owner will probably be
responsible for at least the damage that has been incurred during his time. He may also carry a joint and several liability, according to general principles of liability, with the person who deposited the polluting material.

Administrative

A "liable person" under the Environment Protection Act 1969 is "someone who performs or intends to perform a polluting activity". Action is not always necessary to incur liability; ownership may be enough. An owner of land on which there is landfill is deemed to be taking care of the landfill which is a "performance" of an activity under the Environmental Protection Act 1969.

Under paragraph 5 of the Environmental Protection Act 1969 and cases from the Licensing Board, the last landowner always carries a risk of having to clean-up for previous owners. Liability is actually that of the "operator" of an activity, but an owner is deemed to be an operator, in the sense that it "stores" or "keeps" the contamination on its land.

An innocent purchaser of land which is contaminated may be liable to clean-up that land if he ought to have known about the contamination. Further, previous owners who knew of but did not cause the contamination could be open to claims by purchasers who were not informed.

There is also evidence that the Licensing Board tries to find "deep pockets". On the other hand many local and county environmental officials believe that the Licensing Board does not take a firm enough stand against the "polluters". For example, it will not impose on a bankrupt's estate the cost of cleaning up contaminated soil but only requires the estate to take away and pay for destruction of dangerous substances which are stored on the estate's land. The same principle seems to be applicable if the owner, instead of the polluter, has to clean-up.

Criminal

The persons held liable in criminal law are usually the operator or persons associated with the operator such as directors or managers or certain employees. An owner could be potentially liable in general criminal law if collaborating with the operator who is carrying out criminal activity.

UK

Civil

Civil liability generally does not create a formal hierarchy of persons liable for damage. The main tortious heads are negligence, nuisance and the rule in Rylands v Fletcher.

If a plaintiff can establish liability against a defendant under one of these heads, then the defendant will be liable. It does not matter whether the defendant is owner, occupier, operator or carrier. So for instance, it is quite possible for a new
owner of contaminated land to "adopt" an existing nuisance and be liable for damage resulting from the nuisance if it is allowed to continue. In most cases however, because the element of fault and foreseeability is important, it will be the original polluter who is liable.

Administrative

In relation to administrative law, however, statute has imposed a hierarchy of responsibility in certain circumstances.

- under Section 80 of the Environmental Protection Act 1990 abatement notices in respect of statutory nuisances are served by the local authorities (the regulatory authority) in the first instance on the "person responsible for the nuisance". Where this person cannot be found or the nuisance has not yet occurred the notice is served on the owner or occupier of the premises.

- the contaminated land provisions in Part II of the Environmental Protection Act 1990 introduced by the Environment Act 1995 (but not yet in force) provide a hierarchy of "appropriate persons" for bearing liability for remediation of contaminated land. In the first instance, liability for contaminated land is imposed by the enforcing authority (that is, either the local authority or the new Environment Agency) on those persons who "cause or knowingly permit" substances to be in, on or under land by reason of which the contaminated land in question is such land. If such person cannot be found the appropriate person is to be the owner or occupier of the land.

Criminal

There are a wide range of criminal offences throughout environmental regulation in connection with carrying out a specific activity (for example, disposal of waste) without a licence or in breach of licence condition. In these cases it will be the licence holder (usually the operator of the activity or owner or occupier of the premises) who will be liable. Criminal liability may also lie with persons who "cause or knowingly permit" environmental damage (for example, under Section 85 of the Water Resources Act 1991, "a person contravenes ...if he causes or knowingly permits any poisonous, noxious or polluting matter ...to enter controlled waters"). Breach of administrative orders and notices (see above) is usually a criminal offence.

STUDY 2

AUSTRIA

Civil
Under the provisions of the ABGB any person who has unlawfully and negligently caused damage may be liable. Similarly the rights of plaintiffs to demand cessation of any activity which results in emissions of waste, water, smoke, gases, heat, odours, vibrations etc are directed against anyone causing such releases above levels customary for that region. Accordingly operators of processes or owners of land which are causing the pollution are most likely to be liable in practice.

Under Section 53 of the Forestry Act the owner of a factory or industrial plant may be liable to pay compensation for damage caused to forests.

Any person carrying on extraction, exploration, processing of raw materials in relation to mining activities or who is storing hydrocarbons may incur liability to pay compensation if his activities caused damage. If the party who caused the damage is not the licence holder the licence holder may be held jointly liable.

Water treatment plant operators may incur liability under the Water Rights Act where they cause damage through the lawful operation of the plant where damage was unlikely when the licence was granted.

**Administrative**

Under many laws the person who has actually caused the pollution is liable in the first instance. The owner of property is liable only if he sanctioned or tolerated the pollution, but an owner will usually only be acted against as a second resort. In practice, it is usual, where there are several liable persons, to proceed against the one with the most money.

For example, Section 18 of the Waste Substances Restoration Act provides that a person who has illegally and negligently either caused pollution or, as the owner of the property, has consented to or tolerated the pollution, is obliged to reimburse the Republic of Austria for all costs necessary in connection with the clean-up operation. The person who has not caused the pollution has a claim of recourse against the actual polluter.

Pursuant to Section 32 of the Waste Management Act, the authorities must order the person responsible for the waste to remove the waste and to carry out the necessary clean-up operations. Only if this person cannot be traced may the authority, under certain circumstances, order the owner of the property to remove the waste and to arrange for the necessary clean-up. The owner of the property may only be ordered to take the above mentioned measures if he has consented to the deposit of the waste or has tolerated the deposit of his free will and has not taken adequate precautions against the deposit. This obligation is transferred to the purchaser of the property if he had knowledge of the deposit or could have had knowledge had he been diligent.

In most cases the owner of land is only liable if he consented to or tolerated the pollution. Therefore, the owner of the real estate at the time when the pollution
occurred (however, there is argument as to when pollution occurred) is liable if he tolerated the pollution or sanctioned the pollution.

The purchasers of land may be held liable if they had prior knowledge of the pollution (Water Rights Act) or if they were aware or should have been aware of the existence of the deposits (Waste Management Act 1990) but the innocent purchaser cannot be liable for historic pollution.

However, these rules only apply since the relevant act was enacted. Only the Water Rights Act provides for retrospective pollution prior to 1 July 1990. Therefore, a landowner will be held liable if he expressly sanctioned the activity causing the pollution in question or benefitted financially from allowing such activity to take place.

**Criminal**

Section 180 of the Penal Code provides that the person who pollutes water, soil or air against any legal provision or the instruction of a public authority, in a way that might endanger the life or health of a large number of people or give rise to danger to animals or vegetation in a large area, shall be imprisoned for up to three years or fined up to 360 daily rates (the amount of the daily rate depends mainly on the income of the defendant).

**BELGIUM**

**Civil**

No hierarchy of responsibility exists under civil law in Belgium. Under Articles 1382 and 1383 of the civil code any person who acts negligently and causes damage may be liable regardless of whether he is an owner, occupier, transporter etc.

Operators of plants which cause pollution are generally the liable persons under Article 1384 while under Article 544 an owner would be strictly liable.

**Administrative**

Under the Toxic Waste Law of 1974, the producer remains the main person responsible. See also the rules of liability under the Flemish decree of February 22, 1995, where the operator is liable.

**Criminal**

Most criminal offences of environmental law in Belgium impose liability for operating plants without permits or non-compliance with permits or regulatory orders. Under general principles of Belgian criminal law, companies cannot be held liable for criminal offences. This has evolved somewhat so that now legal entities are recognised as committing criminal offences, but it remains impossible to punish them.
The courts accordingly seek the individual who is actually responsible by act or omission for the offence. If the individual can be shown to be at fault he can be personally liable. Employers are vicariously liable for fines levied upon employees.

**GREECE**

**Civil**

Under Article 914 of the Civil Code anyone who unlawfully and *culpably* causes damage to another is liable.

In principle, no hierarchy of liability exists and a company is responsible for acts or omissions of its employees (CC922).

**Administrative**

A court imposing a fine for pollution under an administrative act, does not necessarily have to prove that the pollution was caused by the particular person on which the fine was imposed, as long as the pollution is proved to be deriving from a defined source and the person is among those that the law considers to be liable for the pollution and on whom a fine may be imposed for this reason (EN1991, 1333, 13).

**Criminal**

Under the Law 1650/1986 infringements of environmental law which are sufficient to be misdemeanours are criminal offences. The type of person liable will in practice tend to be operators of industrial plants or owners of land. However, the potentially liable persons are not restricted and release of substances beyond permitted levels may lead in certain circumstances to criminal liability for whoever causes the pollution.

A further and important category of liable persons under criminal law may be people who have important positions in public bodies. A duty is imposed on such people to abide by all provisions for the protection of the environment. These people may be held criminally liable alongside other persons or independently where they breach this broad obligation.

**ICELAND**

**Civil**

Any defendant causing environmental damage is liable to the plaintiff. There is no general rule on hierarchy of responsibility. It depends on the obligation imposed by separate statutes or general standards of reasonable behaviour as to whether a particular party will be liable.
Administrative

Statutes do not provide for a rule making new owners liable for historic pollution and the courts have not decided on such a rule. However, new owners may be ordered to clean-up pollution from their property. In general, the owner/occupier is obliged to keep the property from endangering third parties. Therefore, it would not matter if the new owner had contaminated his land or it had been contaminated previously because the existing owner/occupier will be liable if he allows substances to escape.

Criminal

Liability under criminal law will similarly be imposed on any person or company breaching a regulation. This might include manufacturing companies or owners of land or ships from which substances are discharged breaching criminal law. Where they have given orders to employees for action which leads to a criminal breach of the law directors or managers could be held liable.

IRELAND

Civil

Under the different areas of civil law there are no formal rules establishing which parties may be liable for environmental damage. Accordingly as long as the requirements for establishing nuisance, negligence or liability under the rule in Rylands -v- Fletcher (1868) LR 3HL are fulfilled any person may be liable whether owner or occupier of land, or transporter or holder of substances.

Administrative

The polluter pays principle has been firmly enshrined into Irish law by Section 52(2)(d) of the Environmental Protection Agency Act 1992, although other legislation is more precise in allocating responsibilities.

The occupier's liability relates to the premises from which the pollution originated. An action for damages may also lie against any person who permits the entry into water or air of polluting matter in a manner which contravenes the relevant legislation, regardless of ownership or occupation.

Criminal

Liability for environmental offences tends to be imposed on occupiers of premises in the main although other provisions refer to owners or even "any person".

An example of this is the Air Pollution Act 1987 where under most provisions compliance is required of the occupier. Under Section 24 the occupier of premises must notify the authorities of any pollution incident. The operator of a plant is the party who under Section 30 must obtain a licence for air pollution.
In relation to water pollution any person who causes or permits pollution to enter water is guilty of an offence.

The offences under the European (Toxic and Dangerous Waste) Regulations 1982 are aimed at any person who breaches the regulations however the regulations cover persons holding, transporting, collecting, storing or depositing the toxic and dangerous waste. The holder of waste is liable under the European Communities (Waste) Regulations 1984 and the European Communities (Waste Oils) Regulations 1992. Carriers of waste are the liable persons under the European Communities (Transfrontier Shipment of Hazardous Waste) Regulations 1988.

**LUXEMBOURG**

**Civil**

No hierarchy exists between defendants under laws on environmental issues and tort. The identity of the defendant will vary depending on the legal basis of the recourse undertaken. Under Articles 1382 and 1383 of the Civil Code, the person or persons against whom fault or negligence can be demonstrated will be liable, whether or not he/she is owner(s) of the property from where the pollution originated; Article 1384 provides that the "caretaker" of an object which has caused pollution is liable. Under Article 544 of the Luxembourg Civil Code the owner of the property from which damage has been caused is liable.

**Administrative**

The person liable for restoration is the person who has been held responsible for the pollution. However, the state has ultimately been held responsible for pollution and clean-up of the environment (Aff. Goudron Gasperich) by an establishment operating under its licence (granted on the basis of the law of 1990 on dangerous and hazardous establishments referred to above), now somewhat changed by the requirement to take out insurance.

**Criminal**

In Luxembourg most breaches of environmental law give rise to potential criminal liability. Under sectoral legislation a variety of authorisations and licenses are granted to operators of certain activities. Breach of the terms of licenses or operation without a licence will give rise to criminal liability for the operator of the process. Other offences such as under the Law of 16 May 1929 on water courses impose liability for the act of discharging substances or causing pollution. Again, however, operators of processes or also landowners will be liable.

**NORWAY**

**Civil**

Under the Neighbour Act 1981 there is no defined list of liable persons. The nature of the liability, however, makes it most likely for owners or occupiers of
land from which pollution is emanating to be liable. An owner of land may indeed be liable for pollution which was in existence before he became owner. This is also the case under the Pollution Control Act 1981.

The Pollution Control Act at Section 55 sets out those persons who may incur civil liability. This section states that an owner of real property, or of any object, installation or undertaking which causes pollution damage is liable if also operating or using or in possession of the property. If the person in fact operating, using or in possession of the property is not the owner, that other person is liable unless the damage is due to matters which the owner is also liable pursuant to other provisions on compensation.

Further under Section 55 any person who by providing goods or services, exercising control or supervision or in any similar way has indirectly contributed to pollution damage shall be liable if he has acted wilfully or negligently.

Administrative

Under the Pollution Control Act, the owner or occupier of real property, or of any object, installation or undertaking which causes pollution damage is subject to strict liability. If the occupier is liable, the owner may also be liable pursuant to other provisions concerning compensation.

Contractors, controllers, supervisors or other persons who may have indirectly contributed to the pollution damage will be held liable only if they have acted wilfully or negligently.

The Petroleum Act states that the holders of the petroleum production rights, including the operator, are strictly liable. However, contractors, employees and suppliers can be held liable if they caused the damage when acting intentionally or with gross negligence, and the holders of the rights are unable to (or in certain, limited circumstances refuse to) compensate the damage.

Persons involved in measures to prevent or minimise the environmental damage or loss may also be held directly liable if such measures were taken in spite of the refusal by a public authority (or by the proper and express owner or occupier where such measures were taken by anyone except a public authority) to accept the provision of such measures by that party. In practice, such a refusal is usually made on the basis that the measures are too expensive in comparison to the benefit gained although no specific grounds for refusal are set out in the Act. An appropriate ground, for example, would be that the authority (or the owner or occupier) would conduct the clean-up itself.

If the holder of the rights compensates the damage, he may take recourse against a tortfeasor who caused that damage either wilfully or with gross negligence. The same applies where the holder suffers damage.

The Maritime Act provides for the strict liability of an owner whose vessel causes oil pollution damage or loss. However, persons involved in the salvage or the
measures to prevent or minimise loss or environmental damage may be held directly liable for the loss, if the salvage is done or measures taken, in spite of the refusal of a public authority, or if performed by any person except a public authority, against the express and proper refusal by the owner of the ship or cargo. No claim can be brought against the operator or the manager of the ship who is not the owner thereof, the charterer, the shipper, cargo supplier or cargo receiver, or any person working in the service of the ship. However, if some of these individuals have acted negligently, the owner may take recourse against the actual tortfeasor. Furthermore, the owner may take recourse against the persons involved in the salvage, or the measures taken to prevent or minimise the environmental damage, if the persons in question have acted wilfully or with gross negligence.

It is unclear under the relevant statutes whether a current owner can be liable for pollution which existed before he became owner. Such liability has been successfully established in the courts under both the Neighbour Act and the Pollution Control Act, but these rulings do not form binding precedents and, therefore, cannot be relied on.

Otherwise, the person who caused the pollution is liable. However, with regard to very old pollution, it may sometimes be difficult to find a responsible party, that is, the polluting company may no longer exist or it may be impossible to prove who is responsible for undertaking and funding the clean-up. In such cases, the administrative bodies will probably be responsible for both undertaking and funding the clean-up operation.

Whether or not the authorities may be liable for compensation in case a decision to permit pollution was wrong, has not been clarified in Norway. It would seem that the authorities may only be liable if they have acted with negligence and/or if the decision was invalid. However, the authorities may in any case accept to compensate the loss and/or damages.

**Criminal**

The Pollution Control Act 1981 Section 78 sets out the basic criminal offences. The wording is general in terms of the liable party and accordingly covers:

- amongst others anyone who possesses, does or initiates any activity which may lead to pollution in violation of the Act;

- a person responsible for pollution who fails to take measures to prevent it, or does not establish a contingency plan, or does not take action to remedy damage caused;

- anyone who breaches conditions of permits, approved contingency plans, or special orders;

- anyone who does not comply with instructions of the authorities in relation to monitoring of pollution or waste;
- anyone who is a party to certain offences under the Section.

Similar provisions are set out which apply specifically to waste management. Also Section 80 provides for liability of a company, association or public agency where a person acting on behalf of the relevant body commits an offence.

**PORTUGAL**

**Civil**

There is no hierarchy of responsibility between those who are liable for damage to the environment. Everyone who has caused the damage is liable, for example, the owner of the property and/or those authorised by him to use the property.

**Administrative**

Liability under administrative law will attach to parties who breach regulations or licenses and will therefore apply mainly to process operators. An example is under Portaria No. 374/87 which regulates waste disposal and forbids disposal by incineration, burial or disposal at sea. If this is infringed fines may be imposed or the plants closed.

**Criminal**

The persons liable under criminal law will simply be the person who it is shown committed the relevant act constituting the offence. The types of offence in question are referred to in 3 and will normally attach to certain persons involved with the substances or activities which are regulated such with the offence of exposing people to radioactive substances.

**SWITZERLAND**

**Civil**

The Code of Obligations does not specifically apply to environmental law and therefore anyone who breaches its provisions may be liable.

Under Article 55 of the Code of Obligations the owner of a plant may be liable for acts of his employees in carrying on tasks in the course of their employment.

The owner of property may be liable under the Swiss Civil Code Article 684 where hazardous substances are released from the property.

Operators of claims causing a high risk of water pollution may be liable under the Water Pollution Control Act 1991.

**Administrative**
The general principle applicable under administrative law is the polluter pays principle. The Swiss courts have developed a concept of a "polluting agent" which includes both active and passive polluters. Passive polluting agents are persons with a close relationship to the source of the pollution. An owner who has leased the property to a lessor is a person who by an act or omission causes damage. Where a direct causal link exists between the active or passive polluter and the hazard or damage, liability under administrative law will arise.

Normally the active polluter will be held liable. However if the polluter cannot be identified or a specific duty is imposed by the regulation, a passive polluter such as the landowner who leases the property may be liable. In a 1992 case, the Supreme Court found a site owner liable for clean-up costs for hazardous waste even though the owner had not produced or deposited the waste. This particular decision was based upon a provision of the Environmental Protection Act 1983 imposing clean-up costs on the party holding hazardous waste.

The operator ("Inhaber") is, according to most legislation, the responsible person.

The current owner of a site is responsible for historic pollution (old waste deposits), as well as current pollution. However, legislation on waste disposal and liability for all waste removal is under legislative review.

Criminal

The criminal offences of environmental law are to a large extent intended to add weight to the system of administrative sanctions. An important difference exists in the type of person liable under administrative and criminal law. As explained above the owners and operators of plants tend to be the liable persons under administrative law. Owners and operators are most likely to be companies. Criminal law is generally directed at individuals involved in a business which breaches criminal environmental provisions. This occurred following the Sandoz chemical spill where directors and managers were held criminally liable.

Specifically with regard to the Environmental Protection Act 1983, that Act states that Articles 6 and 7 of the Federal Administrative Criminal Law Act (VStR) apply to offences under that Act. Article 6 states that the criminal offences only apply to individuals who commit the offence when acting on behalf of a company business or legal entity or when providing a service to another individual. In addition an employer, owner or principal who intentionally or negligently omits to prevent the offence or its consequences shall also be liable. Where the employer, owner, or principal is a company or other legal person it is the directors or managers who are held responsible. Article 7, however, provides that the company or legal person can be required to pay for or on behalf of the liable individual, if the penalty is CHF 5000. - at most and if the investigation would be disproportionate.

The environmental criminal offences tend to be phrased widely in terms of the liable person but the terms and subject matter of the offence will govern who in practice incurs liability. It is, for example, an offence for anyone to import or
accept dangerous waste without authorisation. This will clearly tend to catch waste disposal or transport businesses. Similarly offences relating to storage of dangerous substances in contravention of safety instructions will affect industry involved in handling dangerous substances.
"CHANNELLED" LIABILITY (DIRECTORS, MANAGERS, LENDERS, PARENT COMPANIES)

STUDY 1

USA

While not expressly provided for in the CERCLA statute, the courts have interpreted CERCLA's liability provisions to cover a wide range of individuals, lenders, parent companies, corporate successors, and other related parties arguably falling into one of the statutorily defined liable groups.

Directors and managers

Individuals may be liable as owners, operators or generators depending upon their status and activities in connection with the contaminated site or with companies involved in the site. (This will include officers, directors, controlling shareholders, managers and others who controlled operations and waste disposal activities).

Lenders and parent companies

Lenders may be liable as "owners" of a contaminated site should they take title to it through foreclosure proceedings or as an "operator" of a site, if they become involved in the detailed management of the borrower's site operations. Similarly parent companies may be liable as "operators" of sites in which their subsidiaries are involved should the parent company actively direct the subsidiary's activities related to the contamination.

Great concern has been raised over the potential unfairness and uncertainty caused by these extended liability theories. In addition to the new defences contemplated under the proposed Superfund Reauthorisation Act, a variety of other steps have been taken to put limits around and add some certainty to the risks posed by CERCLA's liability regime. For example, the EPA issued regulations attempting to define and limit the conditions under which lenders could be held liable. In essence, the regulations attempted to distinguish between "traditional" lending activities and those more active "management" activities whereby the lender stepped out of its traditional role and into that of an investor. EPA's lender liability rule was, however, annulled by a 1994 court decision, (see Kelly -v- Envtl. Protection Agency, 25 F.3d 1088 (D.C. Cir. 1994)).

Successor companies may be liable for contamination released by their predecessors' owners and operators, either where the successor purchases all stock of the prior company or when it purchases all of the assets and substantially continues the business.
DENMARK

Directors and managers

The only provisions for "channelled liability" with regard to environmental liability arise under criminal liability, where there is clear intention to commit an illegal act. Although theoretically possible, to date there are no examples of directors or senior officers of companies being held responsible for environmental liabilities under private or administrative law. The only example on channelled liability is in the Product Liability Act, 371/1989 which gives manufacturers joint and several strict liability for damage caused by their products.

However, when the administrative authority fails to enforce the standard and the environmental impact is significant, the elected member of the council may be fined according to the Local Government Act ("Kommunestyrelseslov") Section 61c, which has actually taken place in few recent cases. In re Priess & Co, not only was Priess & Co Limited fined DKr 350,000 for contravening the permit for discharging of waste water but also members of the Council Board responsible for environmental regulation were fined DKr 1,000 to 2,000, (Local Court of Skive, June 17, 1992, SS 101/1990 - a Western High Court, 8. division S 1740/1992). Failure to enforce the Planning Act was similarly penalised in a case from the Supreme Court, Westsealand County, (UfR. 1993.482H). NB "UfR" refers to a weekly legal magazine which publishes cases, amongst others, from the Supreme Court, the higher courts and the maritime and commercial court.

Lenders and parent companies

Although parent corporations and lenders might in theory be liable for damages caused by their negligence, the theory is not supported by any caselaw.

FINLAND

Directors and managers

The Environmental Damage Compensation Act, 737/1994 names the operator of the polluting activity as the liable person, but there is no explicit provision on channelling the liability. Where a company is the operator, directors are unlikely to be liable although if an individual is deemed to be the operator he may be liable. The term operator has not yet been interpreted by the courts. The oil pollution legislation channels the liability to the shipowner and the nuclear liability legislation channels the liability to the operator.

In criminal law directors can be prosecuted. Since revision of the Penal Code companies can be liable.

Lenders and parent companies

Further, persons comparable with an operator are also subject to strict liability, for example, a parent company could be held liable for activities of its subsidiary.
The Government Bill prior to the Environmental Damage Compensation Act, 737/1994 expressly stressed that a lender is not subject to liability for environmental damage only on the basis of its financing role and the customary supervision which follows that role.

Although the Environmental Damage Compensation Act, 737/1994 is not intended to impose liability on lenders, nevertheless there might be situations where the involvement of a bank, or other financial institution, in an operator's affairs could be sufficient to attract liability; for example, where the lender, can be regarded as an operator. This might be the case if the lender is engaged in the day to day running of the business. In all other cases the lender or investor can only lose the assets it has loaned/invested.

**FRANCE**

**Directors and managers**

Under civil liability imposed by Articles 1382 to 1386 of the Civil Code the legal entity (company, partnership, ...) as such and, in theory, its legal representative, may be held liable (no practical example of the latter case, to our knowledge). Board Members and shareholders of companies cannot be held liable under civil law.

In criminal cases, prior to the entry into force of the new Penal Code (1994), the liable person is usually the company's chief executive or principal. So far, no director has ever been convicted personally.

See also 13.

**Lenders and parent companies**

As far as other potentially liable persons such as a lender or an insurer are concerned, there is no possibility in France for them to incur liability.

**GERMANY**

No general legal provisions exist regarding channelled liability for individuals, lenders, parent companies or insurers.

**Directors and managers**

If a company has caused damage to the environment, not only is the company itself liable but, subject to certain conditions, the employees responsible for that area are liable as well. This liability is actually not a "channelled liability" but rather a direct liability.

**Lenders and parent companies**
In the environmental area, the possibility of piercing the corporate veil has not been of any practical importance up to now. However, this might change in future.

In general, the principle according to which the company only has to fulfil its own obligations is applicable. In order to safeguard the principle of the separate legal identity of a legal person, a parent company will only be liable for its subsidiary in very exceptional circumstances. However, under German law there are some rules on group liability. In relation to public limited companies (Aktiengesellschaften) these can be found in company law (Aktiengesetz (AktG)). In relation to private limited companies (GmbHs) these can be found in the principles of case law. However, the statutory provisions of company law do not apply directly to environmental damage. Furthermore, case law has not yet dealt with group liability for environmental damage.

In very exceptional cases, the parent company in a group might be deemed to be the proprietor (Inhaber) of a plant which belongs to a subsidiary or it might be liable for the actual proprietor according to the principles of piercing of the corporate veil. However, the fact that a group is set up either by agreement or as a so-called de facto group (faktischer Konzern) is not sufficient to make a parent company a "proprietor" and thus to make it liable. Although such relations between companies may create an obligation on the part of the parent company to compensate losses of a subsidiary and may in exceptional cases create a liability on the part of the parent company against creditors of the subsidiary, this combination is not sufficient to create a liability for environmental damage. Even if the parent company is managing its subsidiary as it was another of its branches, this would not be sufficient to deem the parent company to be the actual proprietor of the plant. This situation will only change, once the plant itself, which caused environmental damage, is under the direct management of employees of the parent company. Therefore, the removal of a dangerous plant from the parent company into a subsidiary is a means of separating the risk areas and avoiding liability on the part of the parent company. However, the liability of the parent company could come into consideration if the subsidiary has some equity which is totally out of proportion to the risk of liability, and the compensation for damage cannot be protected by insurance.

Thus, a parent company will only be liable for a subsidiary, if:

- the subsidiary is integrated in the parent company in a legal and organisational way;
- the parent company directs the management of the subsidiary to such a great extent that the effects of single instructions are not distinguishable; and
- the parent company does not respect the interests of the subsidiary properly when giving instructions.

These conditions will only be fulfilled in very exceptional cases. Therefore, creating liability for the parent company will remain an exception. According to the principles set out above, it becomes clear that banks and insurance companies will usually not become liable, because generally they will not direct the
management of a subsidiary to the necessary extent, and certainly not the very plants which are causing the damage to the environment.

ITALY

Directors and managers

For directors of a company to be held personally liable (both under civil and administrative law) there has to be direct involvement by the directors in an act or omission relating to the polluting event. It is possible that, for example, the chairman of a company could be held to be the legal representative of the polluting company and therefore liable. This is less likely in a very large company. It is common now for duties relating to protection of the environment (and to health and safety) to be delegated to technical or operations managers. For delegation to be effective they must have full and unrestricted powers (including financial) to perform any and all activities needed to ensure compliance with the applicable regulations.

As regards directors' liability, it is to be noted that under general principles of civil law, directors and general managers of companies may be held liable to the company (Article 2392 and 2396 Civil Code) if they violate their duty of diligence and of control over the company's activity, and to shareholders or third parties (Article 2395, Civil Code) for damages caused to them directly by their wilful misconduct or gross negligence.

If the company is liable for its acts or omissions, individual directors or managers of companies may be subjected to payment of fines and penalties (the nature for which are administrative or even criminal) under special environmental or health and safety laws. For example, Article 9 of Law 397 of 9 September 1988 (Urgent Provisions for Disposal of Industrial Waste), provides for the personal liability of the company's legal representatives in the case of the omission or delay in communicating data relating to the quantity or quality of waste produced or discharged and DPR (Presidential Decrees) No. 547 of 27 April 1955 (governing prevention of accidents at work) and 303 DPR of 19 March 1956 (governing health protection at work), establish the direct liability for fines for employers, managers or officers in case of non-compliance with their provisions. The directors' liability is limited by the fact that special powers as to the control of the potential polluting activities (disposal of waste, discharges into waters, etc.), health and safety at work, are now frequently specifically delegated to managers and officers who carry out these duties.

Case law shows that individual company directors, officers or managers have been indicted and condemned on several occasions, mostly, however, for breach of specific laws and regulations which provide for specified punishment and/or fines.

A recent case, re Riva (case no. 2250 December 1994, Third Chamber of the Supreme Court), involved a steel plant, which was prosecuted for polluting waters. The directors and managers of the polluting company were prosecuted, together with the representatives of the major shareholding company (that is, the Chairman
of the Board and other directors) on the grounds that the shareholding company had effective power to determine the policy of the company and could have prevented the pollution.

**Lenders and parent companies**

Parent companies, lenders and insurers should not be potentially liable except to the extent of their possible direct involvement in the polluting event. In the recently published case of the Supreme Court (No. 2250 of December 1, 1994), which was a criminal case, it was confirmed that "lender's shareholders" and the majority shareholders are jointly liable with the managing director and plant manager of a company in the event of environmental damage arising from the absence of safety systems to avoid discharge of residuals into sea waters.

**THE NETHERLANDS**

**Directors and managers**

There have been various cases in which directors have been held personally liable for pollution caused by their companies. These cases tend to involve smaller companies as it is much easier to prove direct involvement of a director or manager in a polluting activity or incident where the chain of command is short. It must be shown that the director personally committed a tort. It is therefore the relationship of the directors to the action in question which is important. Some examples of cases where directors of companies have been found liable are set out below.

**HR 24 April 1992 (State v Van Wijngaarden)**

In this case the Hoge Raad held Van Wijngaarden, the director of the company Transelectron B.V., personally liable for the pollution caused by the company. This was the case because Van Wijngaarden himself chose a system by which water used in the production process was emitted into the soil. By choosing to use this system, Van Wijngaarden had assumed the substantial risk that would take place.

**Rb Alkmaar 25 February 1993 (State v Neelen)**

In this case Neelan was held personally liable for the pollution caused by the company of which he was the only director, as he was the only person in a managerial position. Therefore, he was under a duty to prevent tortuous activity taking place in the company.

**Rb Zwolle 28 January 1994 (State v Heijboer)**

In this case Heijboer was held personally liable for the pollution caused by the company as he had *de facto* management and control of the company, and did not stop the pollution activities although he was in a position to do so.
Rb Den Haag 22 March 1995 (State v Kemp)

In this case Kemp was held personally liable for the illegal dumping of waste by the company of which he was the only director, as the dumping had taken place under his responsibility.

Lenders and parent companies

Lender liability in the Netherlands is most likely to occur where a mortgagee forecloses and becomes owner of the property before selling it.

In environmental cases, various attempts have been made to pierce the corporate veil. For example, in the case of State -v- Roco; Rouwenhorst, (Gerechtshof Arnhem, 10 May 1994), the court decided a company incorporated in 1984, Roco B.V., was liable for pollution caused by Rouwenhorst in the period before 1984, as Roco B.V. was created at the time only to avoid claims by the State for the clean-up costs of soil pollution. The Hoge Raad has recently rejected Roco and Rouwenhorst's appeal against this decision (Hoge Raad 3 November 1995).

In the case of State -v- Holdoh Houtunie, (Rb Assen 27 July 1993) a company belonging to the same group as the company which had caused the pollution, was held liable for the clean-up costs as it was considered so closely related to this company that it could be regarded as one and the same. In the same type of case, however, the Hoge Raad has recently decided (HR 16 June 1995, State -v- Bato's Erf) that the fact that two companies are closely related is not in itself sufficient to hold one company liable for the pollution caused by another. According to the Hoge Raad, the Gerechtshof Arnhem, which had accepted liability, had not made sufficiently clear what grounds for this acceptance were.

SPAIN

Directors and managers

There is no legal provision on this subject. In principle, any person may be personally liable provided he has created the damage. In certain cases the corporate veil has been pierced, although not in situations directly related to environmental damage (for example, Supreme Court decisions of May 28, 1984 and April 29, 1988). Directors of limited liability companies are liable to the company, its shareholders and its creditors for damage caused by actions which are contrary to the general law or the rules of the company or arise because of lack of due diligence (Article 133 of Ley de Sociedades Anónimas);

Lenders and parent companies

Lender liability is, for the time being, unlikely under Spanish law. In principle, it could be based on the general principle that any person is liable when his own acts or omissions create damage to another person. In this respect, it could be said that if a lender has sufficient power or influence on the activity of its debtor as to be
held responsible for the acts thereof, lender liability could be acknowledged. Again, for the time being, this is more a question of theory than of practice.

A parent company may in theory incur civil liability if there was a fraudulent intention in setting up a subsidiary company or if the setting up of a subsidiary has a fraudulent effect, perhaps enabling the parent company to shelter from environmental liability. As yet however no practice in this context relates to the environment. In addition some laws containing environmental provisions such as Law 21/1992 on industry provide that the owner of the industry can be liable for pollution. As this law is fairly recent it is as yet unclear quite what the "owner" of industry includes.

SWEDEN

There is no provision for "channelled liability" under the Environment Protection Act 1969 which holds the "operator" liable. The corporate veil is lifted rarely, but there have been some cases.

Directors and managers

In a case from the Court of Appeal in 1989:

A managing director and a chairman of the board were fined because their company had breached licensing requirements. The defendants argued that the risk of damage was only a minor one. The district court, however, concluded that it is of great importance that the licensing requirements put down by the Licensing Board are followed and fined the defendants 100 dagsbot each. At that time the penalty was a fine of 1 to 120 dagsbot. This ruling was accepted by the Court of Appeal.

It is possible for a managing director to delegate responsibility provided that the person put in charge has the competence and means to fulfil this responsibility:

An owner of a road delivery business handed down the responsibility for the daily maintenance of a vehicle used for the transportation of polluting matter to the workshop manager. The police found that the vehicle had some defective equipment. The Court of Appeal (1989:64) found that the workshop manager had competence and acquitted the owner.

Lenders and parent companies

In Sweden, lenders are unlikely to be liable as they do not usually go into possession when selling a property. They merely apply to the Sheriff to auction the property. It is conceivable that a bank who places a director on a company's board may be liable if that director is particularly active in the management of the company

A parent company may incur liability where it owns land and its subsidiary is the tenant who is responsible for causing environmental damage. The parent company
will incur liability as landowner and because of its economic interest in the subsidiary.

**UK**

**Directors and managers**

The law is unclear as to the degree of involvement by a director in an act/omission giving rise to environmental pollution before he incurs personal liability under civil or administrative law. This is not the case with criminal liability where most of the statutes contain a standard clause stating that any director, manager, secretary or other similar officer of the company (this will include shadow and non-executive directors) may be held personally liable for an offence committed by the company if it was committed with that person's consent or connivance or was attributable to any neglect on his part. Consent normally means that the defendant had knowledge and was aware of what was going on when the offence was committed and agreed to it. Connivance is usually taken to mean that the defendant had some knowledge and was aware of what was going on but did not take any steps to stop the commission of the offence. Neglect refers to an act of a negligent nature. It implies a failure by the person to perform a duty which he knew ought to have known about. The duties applicable to each director, manager etc. will depend on their individual responsibility for the company's affairs. As yet, such provisions have not been widely used in the environmental area. However, if developments in the field of health and safety are paralleled, directors will be increasingly targeted by the regulatory authorities and may be fined heavily or even imprisoned.

**Lenders and parent companies**

There are circumstances in which a lender may incur direct liability for costs resulting from a pollution incident. Where a lender appoints a receiver the receiver will normally seek an indemnity from the lender in respect of all possible liabilities it may incur. Claims for damages or clean-up costs will, following the appointment of the receiver, be directed to the receiver. The receiver will in turn seek indemnity from the lender. If a lender directs the operations of the receiver too actively the receiver may also be deemed to be the agent of the lender again exposing the lender to potential liabilities. If a lender enforces its security by way of foreclosure or becoming a mortgagee in possession the lender will become the owner, occupier and/or person controlling the property. This will expose the lender to potential liability for contamination present on the land.

If a lender with a very substantial stake in the company seeks to exercise substantial control over the operations of the company it may be open to viability for civil damages and possible criminal sanctions due to its position of control over the company. If the control exercised by the lender is sufficient it may even be deemed to be a shadow director with potential liability as a result. Similarly it is possible for a lender to be appointed to the board of a company thus becoming open to the liability imposed upon directors and managers.
The above liabilities will depend to some extent on the definition given to the terms such as owner or occupier in environmental statutes. These terms are not widely defined in existing statutes thus leaving potential for the courts to include lenders and receivers within the definitions. If the courts do so decide there is potential for liability to arise under a range of environmental statutes.

However, insolvency practitioners are exempted from liability to clean-up contaminated land under provisions of the Environment Act 1995, yet to be implemented.

A parent company may be liable where it is obliged to provide a cross indemnity in respect of a subsidiary or if it effectively controls the activities of the subsidiary to such an extent that it may be deemed to be a "shadow director" or the subsidiary can be said to be the parent company's agent.

**STUDY 2**

**AUSTRIA**

There are no special provisions for "channelled liability" under environmental law. However, the general provisions for channelled liability in bankruptcy laws and company laws apply and there is the possibility, not restricted to environmental liability, that a shareholder can also be held liable in the same way as a managing director, if he holds the majority of shares and acts like a managing director.

**BELGIUM**

There is no channelled liability on lenders or insurers in Belgium. Due, however, to developments in Belgium's neighbouring countries, lenders, parent companies and insurers are adopting a cautious approach. Environmental audits are increasingly being used.

Under criminal law there is a strong likelihood that directors or managers will be liable as it is a general principle that criminal liability cannot attach to companies therefore the law seeks the responsible individual.

**GREECE**

Under civil law procedures the general principles establish that where a civil claim is brought in respect of damage caused by a company the action would be brought against the company and not against the directors or managers. It would then be for the company to bring a separate action against an individual director or manager to recoup damages. In the case of administrative law the situation would be similar but in a criminal prosecution the individual responsible and not the company would be made defendant. In practice the company would normally then pay the fine on behalf of the individual.

The Thessaloniki Administrative Court of Appeal, in its Decision no 323/92, ruled that in the case of marine pollution the director of the oil company could be fined
as being responsible for the pollution as a result of not having taken the necessary measures in order to prevent the pollution.

The basic law 1650/86 does not provide for liability or lenders, parent companies or insurers. If one such party were found liable and required to pay clean-up costs, it could subsequently turn against the polluter for restitution.

**ICELAND**

If it can be proven that the directors or managers were at fault in giving orders that lead to pollution, it is likely that they could be held liable, particularly in either administrative or criminal law.

Since there are no statutes or case law on liability of lenders or parent companies, it is difficult to demonstrate whether such a rule will apply in Icelandic law.

**IRELAND**

There is a provision for channelled criminal liability under a number of the principal pieces of environmental legislation already mentioned, for example, under the Environmental Protection Agency Act, where there is an offence under this Act committed by a body corporate or a person acting on behalf of this body corporate, and it is proved to have been so committed with the consent, connivance or approval of, or to have been facilitated by any neglect on the part of any officer of the Company, that person shall be also guilty of an offence.

Notwithstanding these very powerful provisions there is no evidence of their effective use and enforcement in Ireland.

In Irish law it is not yet possible to hold a lender to a company which causes pollution liable for that pollution in civil law. There appears to be no trend in this direction by the courts and there is indeed at present no legal basis for such a claim. Specific legislation on the matter would probably be necessary to introduce such a claim.

**LUXEMBOURG**

There are no particular provisions for channelled liability in Luxembourg law that would be applicable in the present case.

Liability of lenders and parent companies would have to be sought on the basis of tort law or on the basis of bankruptcy rules.

The general principle in criminal law is that the company cannot be prosecuted and so the prosecution is brought against the individual within the company who committed the offence. If such an individual cannot be identified then liability lies with the directors and ultimately with the chairman of the board. The first case occurred in the mid 1980s (the Giebel case) where a steel company caused
pollution of a river. The directors (who in fact had no knowledge or involvement with the incident) were fined heavily and given suspended prison sentences.

There is less likelihood of liability or directors or managers in the civil or administrative areas and in these areas direct involvement with the polluting event must be shown. Even where the company is bankrupt and has ceased to exist former directors can be liable.

NORWAY

In relation to criminal offences a company can be prosecuted and made subject to payment of fines. A director, acting in his capacity as director can only be fined and/or imprisoned if it can be shown that he has acted with negligence. Also in the civil and administrative areas of law the negligence of the director or manager must be shown for him to be personally liable.

PORTUGAL

There are no provisions in Portuguese law for "channelled" liability. Lenders and parent companies cannot be held liable for environmental damage.

For cases considered as crimes, when perpetrated by companies, their directors will be personally liable, provided they were directly and personally involved, and companies responsible for fines and indemnities.

SWITZERLAND

The liability is "channelled" in the respective federal administrative laws and there is, also a "deep pocket effect".

Under Swiss law at present a commercial lender could not normally be held to be an active or passive polluter even where holding a security interest. Liability could possibly be imposed if a lender forecloses on the property and becomes the owner.

Directors and managers may be held liable where a criminal breach of law has occurred. The general principle is that a corporate entity cannot be held criminally responsible. Liability for directors and managers in civil law is unlikely but would require some direct negligent act or order of that party causing a breach of law.
USA

Liability to the government for clean-up costs and natural resource damages under CERCLA is generally joint and several, unless the defendant can show that the harm is divisible or another reasonable basis for apportionment (see United States -v- Chem-Dyne, 572 F. Supp 802 (S.D. Ohio 1983); United States -v- Alcan Aluminium Corp., 964 F. 2d 252 (3d Cir. 1992)). However, it is rare that one of the multiple defendants must actually be responsible for all the liability, and in practice liability is ultimately allocated among liable parties based on equitable factors.

In actions by parties liable under CERCLA seeking to recover "contributions" from other potentially liable parties (CERCLA paragraph 113, 42 USC paragraph 9613), the court is directed to allocate liability according to unspecified "equitable" factors. This generally results in a rough allocation based on relative degrees of culpability and responsibility for the problem.

Federal courts have varied in their choice of equitable factors to consider in CERCLA cost allocation cases. A number of courts have applied the "Gore factors," so named because they were part of a 1980 proposed amendment to CERCLA sponsored by then-Senator (now Vice President) Albert Gore (which was not ultimately enacted):

- the ability of the parties to show that their contribution to a discharge, release or disposal of a hazardous waste can be distinguished;
- the amount of hazardous waste involved;
- the degree of toxicity of the hazardous waste involved;
- the degree of involvement by the parties in the generation, transportation, treatment, storage, or disposal of the hazardous waste;
- the degree of care exercised by the parties with respect to the hazardous waste; and
- the degree of party cooperation with government officials.


Federal courts have also applied the following other equitable factors:

- the relative fault of the parties in causing the release of the hazardous materials;
- the knowledge and/or acquiescence of the parties in the contaminating activities;
- the benefits received by the parties from the contaminating activities;
the relative clean-up costs incurred as a result of the released hazardous wastes;
- the financial resources of the parties involved;
- contracts between the parties bearing on the subject;
- circumstances and conditions of property conveyance in cases involving successive owners; and
- any traditional equitable defences as mitigating factors.


While case law on allocation is still somewhat limited, owners and operators of the site typically receive the largest share, with generators and transporters generally receiving smaller shares proportional to their contributions. In practice, the vast majority of CERCLA cases are settled, and as among generators of hazardous substances, liability is typically allocated based on the volume of waste sent to the site, or the extent to which particular wastes contribute to the cost of the remedy (for example, PCBs in comparison to solvents); although "ability-to-pay" considerations are also a factor. In practice, the accessibility and wealth of individual defendants are important factors at least in the initial determination of which potentially responsible parties are used.

With respect to clean-up costs, if a private party cleans up a contaminated site, a variety of mechanisms exist for that party to recover some or all of its clean-up costs from other liable parties. For example, under CERCLA, if a private party conducts clean-up activities on a site in a manner which is not inconsistent with the federal rules for conducting such clean-ups (the "National Contingency Plan") ("NCP"), 490 C.F.R. Part 300, then that party may recover all or a large proportion (based on the equitable factors described in response to question 2.1.2 above) of its costs from other liable parties.

DENMARK

In practice there is joint and several liability for damage caused by negligence. In theory this also covers strict liability under statute, but in practice, the courts do not always apply this rule, for instance in the case of pollution of the sea, where liability in some cases have been proportionate, (see unpublished case, Western High Court, 11th August, 1989, BS 290/1988). In administrative law liability is never joint and several but proportionate.

FINLAND
The Environmental Damage Compensation Act, 737/1994 provides that in cases where the environmental damage is caused by two or more persons, they will be held jointly and severally liable. However, a person whose apparent contribution to the damage is minor cannot be held responsible for damage caused by others (Section 8). It is for the courts to determine what counts as "minor".

Liability is allocated between those who are jointly and severally liable on the basis of equity, in proportion to the damage caused by each liable person. As a rule, several liable persons are jointly and severally liable under both civil liability and administrative liability systems.

**FRANCE**

When there is more than one defendant, they are jointly and severally liable for the payment of damages to the victim under both the civil and administrative systems.

In the context of liability for negligence, joint and several liability is applied when several people have contributed by their negligence to the creation of the same damage.

In the context of strict liability, joint and several liability is possible in the case of joint custody of the object which caused the damage. (See 8).

**GERMANY**

As a rule, several liable persons are jointly and severally liable under both the civil liability and the administrative liability system. This means that the injured person can pursue his claim against every individually liable person, against all liable persons or against several liable persons.

It was originally intended in the UmweltHG that several proprietors of plants should only be liable proportionally to the extent that they caused the damage. This provision was deleted during the legislative process.

**ITALY**

Article 18.7 of law 349 of 1986 states that in the event several persons participated in the pollution, they are liable *pro-quota* to their direct participation in causing the pollution. Liability is therefore proportionate. In addition Article 6 of Tuscany Regional Law 27 of May 12 1993 imposes joint and several liability on the polluter, owner and the person who has a licence (see 8).

**THE NETHERLANDS**

The general rule is that each defendant is liable for the damage he has caused. Liability is proportionate. However, Article 102 of Book 6 of the Civil Code
states that if two or more defendants are liable for the same damage, they are jointly and severally liable.

Furthermore, Article 99 of Book 6 of the Civil Code states that if damage can be a consequence of two or more acts for which different persons are liable, and it has been established that at least one of these acts alone actually caused the damage, each of these persons is jointly and severally liable unless he proves the damage was not caused by his act. This rule has yet to be applied in cases of environmental damage. In a recent case involving the pollution of a landfill by various companies which had dumped chemical waste, the Arrondissementsrechtbank The Hague rejected joint and several liability on the basis of Article 99 of the Civil Code. The court considered that it was not proven that the defendant alone could have caused the entire damage by his dumping activities. The defendant was held proportionally liable to the amount of chemicals dumped by him (decision of 22 March 1995, State -v- Kemp).

**SPAIN**

If more than one person is civilly liable, the applicable rule would be, in principle, that each person would be responsible for the part of the damage he has caused (see Articles 1137 and 1138 of the Civil Code), although in practice, and under certain circumstances, joint and several liability is applied (for example, where it is not possible to allocate liability) (Supreme Court decisions of October 26, 1971, April 28, 1992 and March 15, 1993).

In the Supreme Court decision of October 26, 1971 the question concerned the liability for damage caused to houses by mining activities conducted by two different companies in two different successive periods of time. The Supreme Court deemed that since the damage had been caused before and after the subrogation of one of the companies in the activities of the other, both should be considered as jointly and severally liable for the damage claimed.

The Court decision of April 28, 1992, concerning damages for loss of water, expressly stated that joint and several liability exists for those liable persons that have a common causal link, where it is not possible to determine the respective behaviours nor establish the respective liabilities. The same principle is contained in the decision of March 15, 1993, concerning damage for gas and clay dust.

**SWEDEN**

Under the Environment Protection Act 1969, regulatory authorities can bring an action against each defendant or may pursue the most accessible defendant. The liable persons will then have to decide between themselves how to split the costs. This type of situation may arise where more than one party is liable but the National Licensing Board claims against the most accessible party or the party with the most available resources. If the liable parties cannot come to a settlement on liability for costs the party ordered to pay by the court may seek contribution from other liable parties in separate proceedings.
Under the Environmental Civil Liability Act 1986, owners, occupiers and operators can all be held responsible. Joint and several liability can arise out of different situations: for example, the landowner and a tenant may both be liable for the same damage. However, this will not be likely if the landowner is not commercially involved with the tenant's business. More usual examples are where a landowner and a contractor or the main contractor and the subcontractor are liable for the same damage. Liability will be apportioned equitably according to how the disturbance was caused, the possibility for each party to prevent the damage etc. including also the possibility of insurance cover.

If there are two or more causes of damage each responsible party will have to pay for the damage he has caused. If it is not possible to separate the damage the parties who caused the damage will carry a joint and several liability (Prop. 1985/86:83 47, Prop. 1969:28 378, AE 59). If the defendant maintains that another event also caused the damage, the defendant will have to prove his case. For example, if a plaintiff argues that his health has been worsened by pollution caused by the defendant and the defendant maintains that the plaintiff's illness was a contributory factor, it will be for the defendant to prove it. Even if the defendant is successful in this, he will not be able to escape responsibility if the connection between emissions, illness and bodily harm is so common that the defendant should have taken it into account, (for example, allergic reactions). The defendant has the right to call upon the special burden of proof rule in paragraph 3 of the Environmental Civil Liability Act (Prop. 1985/86:83 p 47, AE p 59), (see 19).

UK

Under classical "civil liability", liability is joint and several. This means that, where there is more than one party responsible, the plaintiff need only establish liability against one of them and that party will then be liable for the full amount of damages awarded. In the environmental context, two main concerns can be identified:

- plaintiffs tend to sue the party who has the "deepest pocket" that is, the most financial assets first, rather than the party who bears most responsibility for the problem; and

- where defendants are from different countries, joint and several liability may encourage "forum shopping" whereby the defendant is selected by reference to which potential defendant has the most favourable liability regime.

However, one defendant may serve a contribution notice against another defendant, in order to establish/apportion liability between them. Contribution proceedings can continue after the main action has been settled.

Also, a defendant may join another responsible party to an action by way of third party proceedings. Again, those proceedings can continue independently of the main action.
Under administrative law, liability is imposed on a specific category of persons, for example, under the statutory nuisance provisions liability falls on persons responsible, that is, the persons to whose act default or sufferance the nuisance is attributable. Under Section 81 of the Environmental Protection Act 1990 where more than one person is responsible for a statutory nuisance and abatement works are undertaken by a local authority, the court may apportion expenses between the persons by whose acts or defaults the nuisance is caused in such a manner as the court considers fair and reasonable.

Under the contaminated land part of the Environmental Protection Act 1990 to be introduced by the Environment Act 1995 provision is made for imposing liability on more than one appropriate person. Under Section 78F(7) where two or more persons are appropriate persons in relation to any particular thing which is to be done by way of remediation they are liable to bear the cost of remediation in proportions determined by the enforcing authority in accordance with guidance issued for that purpose by the Secretary of State.

STUDY 2

AUSTRIA

In Austrian civil law all possible methods are to be found. Under general civil law, persons who do not act intentionally together but cause damage are liable for the proportion of the damage which they caused. If the proportion cannot be identified, all possible polluters are jointly and severally liable. Some of the new liability laws which provide for strict liability in certain areas provide for joint and several liability, others for proportionate liability.

If the proportion cannot be identified, all possible polluters are liable for the whole damage. The liability between the guilty parties under Section 1302 of the ABGB, due to the fact that the proportion of liability cannot be identified, follows the rule of Section 896 of the General Civil Code. This means that the damage is ultimately distributed in equal parts and that the party who paid for the whole damage can claim equal parts from the other parties who would have been liable against the plaintiff.

BELGIUM

Where cumulative damage results from acts or omissions of various defendants, each of them shall be liable for the full amount due to the victim. On the other hand, where the damage can be divided amongst its various causes, the defendants shall only be liable for the part of the damage they have caused, that is, the liability is proportionate.

GREECE

The civil liability of several defendants is joint and several.

ICELAND
The general rule is that defendants are jointly and severally liable. There are a few exceptions to this rule given by provisions in statutes. One defendant can be found liable for all costs but can claim back a proportion of the costs from the other defendants, depending on the level of fault attributable to each liable party.

Between the liable persons, the division of the compensation is generally gauged on the extent of fault by each party. If the liability of the parties is based on strict liability rules, then the tendency is to divide it equally.

IRELAND

Section 12(1) of the Civil Liability Act 1961 declares that concurrent wrongdoers, as defined in the Act, are each liable for the whole of the damage in respect of which they are concurrent wrongdoers. Section 12(2) of the Act states:

"Where the acts of two or more persons who are not concurrent wrongdoers cause independent items of damage of the same kind ... the Court may apportion liability between such persons and in such manner as may be justified by the probabilities of the case ... and if the proper proportions cannot be determined, the damages may be appointed or divided equally".

Therefore, whether the liability is joint and several or proportionate depends on the relationship between the defendants and the circumstances of the case as determined by the trial judge.

The apportionment of liability is a matter entirely for the judge hearing an action having heard oral evidence from all parties to the action as to the circumstances of that case.

LUXEMBOURG

Liability is joint and several, (that is, each defendant is liable for the full amount of damages granted to the victim). This effectively can lead to a "deep pocket" effect, where the most financially secure party could be compelled to cover all the damage and recover the other responsible party's part separately (except in cases where the plaintiff is himself held responsible for part of the damage).

Under the law of 17 June 1994 concerning the disposal processing and storage of waste, Article 31 also stipulates that the liability is joint and several.

NORWAY

Allocation of liability is as follows:

- The Pollution Control Act: joint and several liability.
- The Petroleum Act: the claim is primarily presented to the operator. If the operator refuses to compensate the loss, the holders of the petroleum production rights must compensate the loss in proportion to their interest in the permit.

- The Maritime Act: the shipowner, a legal entity or an individual, will be the primarily liable party.

PORTUGAL

Civil liability involving two or more parties is joint and several.

SWITZERLAND

Legislation and practice on the allocation of liability between several defendants is extremely complex and each individual case must be examined against the background of the applicable specific legislation, the nature of the "contribution" of each defendant to the environmental impact, the degree of fault etc. Liability can therefore be allocated proportionately or jointly and severally.
11. THE DEFINITION OF RELEVANT TERMS, FOR EXAMPLE "ENVIRONMENT" "DAMAGE" "ENVIRONMENTAL DAMAGE"

STUDY 1

USA

The majority of USA environmental statutes contain definitions of many of the key terms. However, the meaning and scope of these terms are typically the subject of considerable judicial interpretation.

Definitions:

- damage: no definition.
- environment: no definition.
- environmental damage: no definition.
- pollution: no definition.

DENMARK

Danish legislation does not traditionally define terms. However, definitions are included when interpreting international law or EU law:

Definitions:

- damage: Section 2 of Environmental Protection Act 358/1991 contains a definition of damage which complies with the normal definition in the general law.
- environment: no definition.
- environmental damage: Section 1 of the Environmental Protection Act 358/1991 does not define environmental damage but states that the Act only covers "damage caused by pollution", "including noise pollution and vibration".
- pollution: the Environmental Protection Act, 358/1991 contains no definition. The preparatory work to the Act defines pollution as a "substantial change in the ecological balance". This definition also appears in the preparatory work to the Act on Compensation for Environmental Damage, 225/1994. In Danish Law these comments in the preparatory work to the Act are a legal source on the interpretation of the Act for the Courts.

FINLAND

Definitions:

- damage: is defined in Section 5 of the Environmental Damage Compensation Act 737/1994 as including bodily injury and material loss in accordance with Chapter 5 of the Tort Act 412/74. Consequential economic loss, which is not minor, is also covered. Reasonable compensation for other environmental damage is also included, taking into account the duration of the nuisance and loss and the possibility of avoiding loss.

- environment: during the preparation of the Environmental Damage Compensation Act, 737/1994 it was considered impossible to define the term "environment". Neither is the term exhaustively defined in any other act.

- environmental damage: is defined in Section 1 of the Environmental Damage Compensation Act, 737/1994 as damage resulting from an activity in a specific area, which has caused damage through:
  - contamination of water, air or land;
  - noise, vibration, radiation, light, heat or smell; or
  - other comparable nuisance.

- pollution: no definition.

**FRANCE**

Subject to a few exceptions, mentioned below, definitions of environmental terms appear in or may be construed mainly from case law rather than from statute.

Definitions:

- damage: no specific definition but the notion of damage has been progressively developed by case law which has proved to be quite liberal in accepting very different categories of damage (see 6) without imposing any condition with respect to the seriousness of the damage (except in the case of liability for causing disturbance in the vicinity, where the disturbance must be "abnormal" (see 6).

- environment: not defined. However, interests which can be said to form part of the environment are given protection, namely:

  Law 76/663 of 19th July 1976 Article 1: "Subject to the provisions of this law are factories, workshops, warehouses, building sites and, more generally, plants which are operated or possessed by any natural or legal person, public or private, which may endanger or cause disturbance to either the vicinity, or public health, security or
salubrity, or agriculture, or the protection of nature and the environment, or the preservation of sites and monuments."

Law 75/633 of 15th July 1975 Article 2: "Anyone who produces or possesses wastes in conditions likely to have harmful effects on the soil, flora or fauna, to damage sites or landscapes, to pollute the air or waters, to cause noises and smells and, more generally, to be a threat to mankind's health or the environment, is obliged to eliminate them or to cause someone to eliminate them in accordance with the provisions of this law, in conditions likely to avoid such effects."

Law 95/101 of 2nd February 1995 Article 1 (modifying Article L 200-1 of the Rural Code): "Article L 200-1 - Natural spaces, resources and surroundings, sites and landscapes, animal and plant species, biological variety and equilibria to which they belong are parts of the common heritage of the nation."

"Their protection, enhancement, restoration, rehabilitation and operation are of general interest and work towards the objective of a sustainable development which aims at answering the needs of the present generation without jeopardising the ability of future generations to fulfil their needs. ..." [Translation of 76/663, 75/633 and 95/101].

- environmental damage: no definition. The concept of ecological damage is not yet recognised under French law. Thus, in the case of environmental pollution of the unowned environment the state cannot be considered a plaintiff unless it suffers direct damage to its private domain or the public domain is damaged. In other words, the state can always bring an action according to common law rules when it has taken preventive or cleaning up measures following a pollution incident.

- pollution: no definition.

**GERMANY**

Definitions of environmental terms appear in both statute and case law.

**Definitions:**

- damage: no definition.

- environment: no definition.

- environmental damage: no definition.

- pollution: no definition.
The following term is especially important in the context of the restoration of environmental damage and is defined as follows:

- environmental effect (Umwelteinwirkung): the requirement for a claim in damages pursuant to the UmweltHG is that an environmental effect has caused damage. Following the definition in paragraph 3(1) UmweltHG an environmental effect causes damage, "when the damage comes about as a result of materials, shock, noise, pressure, radiation, gas, steam, heat or other phenomenon which has dispersed on the ground, in the air or in water." The decisive factor is, therefore, that the damage arises through the air, the ground or water.

ITALY

There are no general definitions of environmental terms.

Definitions

- damage: no definition.

- environment: no general definition. It is generally accepted that a concept of environment as consisting of "common (public) property" is now part of Italian legislation, particularly after the coming into force of Law 349/1986.

- environmental damage: no definition.

- pollution: no definition.

THE NETHERLANDS

Terms are defined in relation to general tort law in the Civil Code and are further specified in case law and in special legislation.

Definitions:

- damage: the term "damage" is statutorily defined in Articles 95 and 96, Book 6 of the Civil Code and is further specified in case law. The two articles of the Civil Code define "damage" as financial damage and other disadvantages compensable by law and "financial damage" as losses suffered and profits foregone including reasonable costs of prevention and limitation, the costs of establishing liability (that is, investigations) and the reasonable costs of restoration.

- environment: no definition.
- environmental damage: no definition.
- pollution: no definition.
- soil: defined in the Soil Protection Act 1994 as "the solid part of the earth [together] with liquid and gas and organisms found therein."
- soil pollution: in the Soil Protection Act 1994 a "serious case of soil pollution" is defined as "a case of pollution in which the soil is or is threatened to be polluted in such a way that the functional properties the soil has for man, plants or animals are or are threatened to be seriously diminished".
- polluting substances: defined in the Air Pollution Act 1970 as "solid or liquid substances or gasses, not being fissionable materials, ores or radioactive materials as defined in the Nuclear Energy Act 1963, which in the air, by themselves or in conjunction with other substances, either diminish the health of man of cause nuisance to man, or can cause damage to animals, plants or goods".

**SPAIN**

In general, terms relating to civil environmental liability are not clearly defined under statute and case law provides very broad concepts which are applicable on a case-by-case basis.

**Definitions:**

- damage: no definition.
- environment: there are different definitions of the term "environment" under administrative and criminal law respectively:
  - air, soil, inland and maritime waters, health, conditions of wildlife, forests, natural spaces and useful plantations ("plantaciones útiles") (Article 347 of the Criminal Code);
  - human population, fauna, flora, vegetation, soil, water, air, climate, landscape, structure and function of ecosystems, social relationship, noise, vibrations, smells and light emissions (Article 6 of Royal Decree 1131/1988, on Environmental Impact Assessment).
- environmental damage: no definition.
- pollution: no definition.

**SWEDEN**
Definitions of environmental terms are derived from the Environment Protection Act 1969, SFS 1969/225.

Definitions:

- damage: includes bodily harm and/or damage to property and/or "pure" economic loss.

- environment: although the term "environment" is not defined in the Environment Protection Act 1969 itself it is considered to be the area outside the relevant factory, installation etc..

- environmental damage: no definition.

- pollution: no definition.

- polluting activities: the Environment Protection Act 1969, SFS 1969/225 applies to "polluting activities". "Polluting activity" is discussed in great length in the Bill prior to the Environment Protection Act 1969, SFS 1969/225. Basically, where the use of land or water leads to a risk that the environment will be polluted the use is an "activity" for the purpose of the Environment Protection Act 1969, SFS 1969/225. It is not necessary that any human activity is taking place. Even if a landfill has not been used for a long time it is deemed a polluting activity as soon as there is a risk that it might leak and thus pollute the environment. Polluting activities are, in connection with real or immoveable property (Paragraph 1 of the Environment Protection Act 1969, SFS 1969/225):

UK

In UK law definitions of environmental terms appear both in statute and case law. The Courts will both interpret existing statutory definitions and define terms where no statutory definition applies or exists.

Definitions:

- damage (harm): Environmental Protection Act 1990 introduces the term "harm". Under Section 1(4) of the Environmental Protection Act 1990 and Section 78A of the Environmental Protection Act 1990 (to be introduced by the Environment Act 1995) "harm" means "harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes offence caused to any of his senses or harm to his property; and "harmless" has a corresponding meaning."
- environment: Section 1(2) of the Environmental Protection Act 1990 provides that the "environment consists of all, or any of the following media, namely, the air, water and land; and the medium of air includes the air within buildings and the air within other natural or man made structures above or below ground." This definition is mirrored in the Environment Act 1995. Further definitions are used by lawyers at will in the context of contractual negotiations. Inevitably definitions will vary but a definition of "environment" is likely to include the ecosystem and areas of the unowned environment.

- environmental damage: Section 107(3) of the Environmental Protection Act 1990 provides that for the purposes of Part VI of the Act which relates to genetically modified organisms "damage to the environment is caused by the presence in the environment of genetically modified organisms which have (or of a single such organism which has) escaped or been released from a person's controls and are (or is) capable of causing harm to the living organisms supported by the environment."

- pollution: Section 1(3) of the Environmental Protection Act 1990 provides that "pollution of the environment means pollution of the environment due to the release (into any environmental medium) from any process or substances which are capable of causing harm to man or any other living organisms supported by the environment."

In R -v- Dovermoss Ltd (Times 8 February 1995) Stuart-Smith L.J held that "pollution", as used in Section 85 of the Water Resources Act 1991, has its ordinary English meaning as defined in the Oxford Dictionary - to "pollute" is "to make physically impure, foul or filthy : to dirty, stain, taint, befoul". The case concerned the contamination of a watercourse as a result of slurry being spread on an adjacent field. This contamination affected the taste of water being treated by a nearby treatment works due to high levels of ammonia being present. The court held that the dictionary definition should be adopted and that it would be a question of fact and degree whether the matter did pollute the water. Further, he considered that it was not necessary to establish actual harm; the likelihood or capability of causing harm to animal or plant life or those who used the water was sufficient. He made no finding on the facts in this case as the appeal against conviction was allowed on other, technical grounds.

- contaminated land: under Section 78A of the Environmental Protection Act 1990 (to be introduced by the Environment Act 1995), defined as:

- "any land which appears to the local authority in whose area it is situated to be in such a condition, by reasons of substances in, on or under the land, that significant harm is
being caused or there is a significant possibility of such harm being caused; or pollution of controlled waters is being, or is likely to be caused”.

The questions, what harm is to be regarded as significant; whether the possibility of significant harm being caused is "significant"; and whether pollution of controlled waters is being or is likely to be caused, are to be determined in accordance with guidance issued by the Secretary of State.

**STUDY 2**

**AUSTRIA**

In civil law, the relevant terms are not clearly defined. The term "damage" is defined in the ABGB but with no specific connection to the environment. The definition has been clarified by judgments of the Austrian Supreme Court. Although the judgments are not binding by law they have an influence on future decisions of the courts.

In the laws which have introduced strict liability (for example, the Forestry Act, the Mining Act, the Water Rights Act, the Waste Substances Restoration Act) the relevant terms are more or less defined. However, these definitions are only applicable to the specific area covered by the law.

In the new administrative legislation an increasing number of terms are defined. However, sometimes different laws use different definitions for more or less the same term.

In the penal law the most relevant terms are defined. However, questions still remain open which have not yet been clarified by the courts.

**Definitions:**

- **environment:** no definition, however, the draft Environmental Liability Bill contains a proposed definition.

- **environmental damage:** no definition, however, the draft Environmental Liability Bill contains a proposed definition.

- **damage:** defined in the ABGB with relevance not only to environmental law.

- **pollution:** Section 47 of the Forestry Act defines air pollution in terms of causing measurable damage to the forest soil or to vegetation; Section 30 subparagraph 2 of the Water Rights Act defines pollution of water as an impairment of the natural condition of the water with respect to its physical, chemical and biological properties and any reduction of the ability of the water to cleanse itself.
The Environmental Liability Bill states that the Bill applies to environmentally threatening activities. Environmentally threatening activities are defined as:

- the production, handling, storage, use, or release of or other activities involving dangerous substances;

- the production, cultivation, handling, storage utilisation, destruction, removal or release of, or all other activities involving a genetically modified organism or micro-organism, as long as, for genetically modified organisms and by reason of genetic modifications, that organism by reason of its characteristics and the conditions under which the activity is carried out gives rise to considerable danger for humans, property or the environment;

- the operation of a plant or site for incineration, processing, handling or recycling of waste, insofar as by reason of the quantity of waste, a considerable danger for humans, property or the environment arises;

- the operation of a site for long term deposit of waste.

Dangerous substances are defined as those substances or preparations which are explosive, flammable, highly infectious, mildly infectious, infectious, very poisonous, poisonous, slightly poisonous, corrosive, irritating, sensitising, carcinogenic, mutagenic, danger for reproduction or environmentally damaging .... or from which a considerable danger for humans, property or the environment arises by reason of other characteristics.

BELGIUM

Some terms have been defined by statute.

Definitions:

- protection of the environment: includes at least the protection of the soil, the subsoil, water and air, as well as noise prevention under the Special Law of Institutional Reforms of 1980 Article 6, as amended in 1988 and 1993.

- contaminated land: defined as the presence of substances or organisms that have been generated by human activities, on or in the ground, or of constructions being prejudicial or which could be prejudicial, directly or indirectly, to the quality of the ground under the Flemish decree of February 22, 1995.

- hazardous ground pollution: pollution of the ground introducing a risk of or possibly leading to contact between polluting substances or organisms and humans, plants or animals, where this contact
shall certainly or probably be prejudicial to the health of humans, plants or animals, or pollution of the ground having a possible negative impact on water abstraction, under the Flemish decree of February 22, 1995.

- environmental damage: no definition.

GREECE

Definitions are given in both the Civil Code and the basic environmental law, Law 1650/1986.

Definitions:

- damage: defined in the general provisions of the Civil Code. It includes damages for pecuniary loss and moral or non-pecuniary harm.

Law 1650/1986 gives the following definitions at Article 2:

- environment: the grouping of natural and anthropogenic factors and components (elements) interrelated and effecting the ecological balance, the quality of life, the health of inhabitants, the historical and cultural tradition as well as the aesthetic values.

- environmental damage: any human activity provoking pollution or any other change to the environment which is likely able to have a negative impact on the ecological balance, the quality of life, the health of inhabitants, the historical and cultural inheritance and the aesthetic values.

- environmental protection: all activities, measures and actions targeting the avoidance of environmental damage, its restoration, conservation or amelioration.

- ecosystem: all biological and nonbiological factors and elements, components or substances which function in a specific place and are interrelated.

- ecological balance: the relatively stable relation in time between the factors and substances of an ecosystem.

- pollution: the appearance in the environment of pollution, as well as every component, element or substance, noise, radiation or other form of energy, in quantity, integrity or duration capable of provoking a negative impact in health, living organisms and ecosystems or damage and generally making the environment unfit for its desired uses.
natural resources: any element, component or substance of the environment which is or can be used by the person for its needs and is considered as of value by society.

substances: any chemical component or element and their unions as they are presented in their primitive condition or as they are produced by derivation.

area landscape: any dynamic group of biological or nonbiological factors and components of the environment which on their own or interrelated in a specific place compose a visual experience.

health: the state of full physical, natural, mental, and social condition of the person or the population.

ICELAND

There are no general definitions of environmental terms in Icelandic statutes. In the Acts on environmental matters, terms such as "pollution damage" are defined for the purpose of each Act. Case law in this area is rather sparse.

Definitions:

From the Bill introduced in 1994:

- environmental issues: issues that concern the external environment of humans, either naturally formed or man-made.

- protection of the environment: any effort or operation carried out in order to prevent or decrease undesirable effects on the natural environment; to improve environmental quality; to prevent, decrease or delay any kind of undesirable changes in the environment; or when the over-exploitation of natural resources is being stopped or reduced.

From the Act on Protection Against Pollution of the Ocean No. 32/1986:

- pollution: when micro-organisms, chemicals and chemical compounds cause undesirable and harmful effects on the state of health of the general public, disturbance to environmental life, and the contamination of air, land and sea or any discomfort due to odour, bad taste, any form of noise or vibration, radiation and temperature variation.

- pollution damage: damage or loss caused by pollution of the sea, wherever such pollution may occur and whatever the cause of it may be or the cost of measures regarding the prevention of damage, further damage, or any loss caused by such measures.
IRELAND

Most of the relevant terms are defined by statute, although in many cases the definitions are sufficiently imprecise to allow for judicial interpretation. Others take their definition by direct or indirect reference to the core EU legislation upon which many are based.

Definitions:

- environment: as including "the atmosphere, land, soil and waters".

- environmental damage: is classed as environmental pollution (see below).

- environmental pollution: means "Air pollution for the purpose of the Air Pollution Act 1987"; or "the condition of water after the entry of polluting matter within the meaning of the Local Government (Water Pollution) Act 1977"; or the disposal of waste in a manner which would endanger human health or harm the environment; and "noise which is a nuisance or would endanger human health or damage property or harm the environment". (Environmental Protection Agency Act 1992)

LUXEMBOURG

Environmental legislation is comprised of a multitude of laws, acts and decrees, informally codified into the Environmental Code. Rather than defining a general term "environment" or "environmental damage", Luxembourg has adopted specific legislation for specific issues. However, a number of more general texts do, however, exist. The Law of 27 November 1980 which created an administration responsible for environmental issues and the law of 11 August 1982, on the protection of nature and natural resources, both contain lists of the areas to which they apply.

Definitions

- environment: Article 1 of the Law of 10 August 1992 on Access to Information Relating to the Environment and Rights of Action for Associations involved in the Protection of Nature (Mém.1992, 2204) states that the term "information relating to the environment" refers to "any piece of information in whatever form relating to the state of waters, atmosphere, soil, fauna, flora or open spaces, as well as any harmful activities affecting such elements including noise or acts affecting them or which could possibly affect them, as well as acts and activities whose object is to protect the environment". Other pieces of legislation simply refer to the term "environment" (for example, the law of 16 May 1990 concerning unhealthy and hazardous establishments).
NORWAY

Many of the relevant terms are defined in the different environmental acts. The definitions are then expanded by case law.

Definitions:

- pollution: "the introduction to air, water or ground of solid matter, fluid or gas, noise and vibrations; light and other radiation to the extent determined by the pollution control authority; effects on temperature; and which cause or may cause damage to the environment or loss of amenity". "Pollution" also means anything that may cause existing pollution to lead to greater damage or loss of amenity (Section 6 of the Pollution Control Act).

- pollution damage: damage or loss caused by pollution (Section 53(2) of the Pollution Control Act).

Likewise, relevant terms are defined in the Petroleum Act and the Maritime Act.

PORTUGAL

The following terms are defined in Article 5 of the Basic Law on the Environment (Law No. 11/87, of 7 April 1987).

Definitions:

- environment: the whole physical, chemical and biological system and its relationship, together with economic, social and cultural factors, with an effect on human beings and their quality of life;

- territory regulation: the integrated process of the organisation of biophysical space, and its purpose is the use and transformation of the territory maintaining the biological balance and geological stability;

- landscape: the geographical, ecological and aesthetic unity resulting from human activity and natural events;

- continuum naturale: the continuous system of natural events that sustain wild-life and must be preserved as far as possible;

- quality of the environment: the suitability of all the components of the environment to the needs of human beings; and

- conservation of nature: the human use of nature in order to coordinate its maximum profitability with the protection and regeneration capacity of living resources.
SWITZERLAND

The terms are defined in the federal Law on Environmental Protection of 7 October 1983 and the ordinances thereto. The most important terms are defined by federal statute.

Definitions:

- environment: no definition.

- damage: no definition, but some clarification under the Code of Obligations.

In the Environmental Protection Act and its ordinances a long list of terms are defined as follows (the definitions help to identify which regulations are violated):

- impact: means pollution of the air, noise, shocks in the ground radiation and pollution of the soil.

- pollution of the air: a change in the natural condition of the air through smoke, soot, dust, gas, aerosol, steam, smell or heat.

Under the new section of the Environmental Protection Act, which is still subject to referendum, some amended and new definitions exist such as:

- soil pollution: physical, chemical and biological changes in the natural composition of the soil.

- soil: soil includes only the top, unsealed layer of earth, in which plants can grow.

- organisms: cellular and non-cellular biological units, which are capable of reproduction or passing on of genetic material. Mixtures and objects which contain such units are also included.

- effects: air pollution, noise, vibrations, radiation, water pollution or other intrusions in bodies of water, soil pollution, changes in the genetic material of organisms or changes in the natural composition of symbiosis which are given rise to through the building or running of plants, through the use of substance, organisms or waste or through the cultivation of the ground.
12. WHERE THE DEFENDANT IS INSOLVENT OR HAS DISAPPEARED

STUDY 1

USA

Under CERCLA, there are two major responses to situations where one of the defendants is insolvent or has disappeared.

First, CERCLA's liability net is so wide that it is rare that the government will not be able to pursue one or more parties with some connection to the site. If a responsible company is insolvent, the government's clean-up cost claims generally have priority among creditors in bankruptcy proceedings. If the company has been dissolved, the government may pursue the assets under certain circumstances. Where a potentially responsible company has ceased to exist, the government can also pursue successor companies. Also, the government may seek to impose liability on an insolvent corporation's individual officers, directors, or management employees who controlled the polluting activities. Where a responsible individual has died, governments may pursue his estate or heirs. Where a failed company received chemicals which contributed to the contamination, government authorities may pursue suppliers of those chemicals under certain circumstances.

Second, should there truly be no party available, or should it be deemed inequitable to hold those parties responsible for the entire clean-up costs, EPA has the authority under CERCLA paragraph 104 to pay all or a portion of those costs from the Superfund. Where there are some solvent parties but a substantial "orphan share" attributable to missing or insolvent parties, EPA can provide partial or "mixed funding" from the Superfund.

DENMARK

When the liable parties have disappeared or cannot pay the damages, the responsibility becomes that of the regulatory authority to ensure that reasonable efforts are made to prevent damage to health and the environment, (Environmental Protection Act 1969 Sections 69 and 70).

In a recent case before the higher court, Danjord A/S v. Århus (UfR.1995.255) unknown persons had damaged a mobile mineral oil tank placed by the entrepreneur on the land owned by the municipality (Århus). After cleaning up the contamination, the municipality claimed for compensation from the entrepreneur. The entrepreneur was found not liable under administrative law because the placing of the tank was legal.

As yet there has been no published discussion of an environmental damages fund, however, the Committee on Soil Contamination is examining the issue and is due to report in 1996.
FINLAND

If the operator cannot be found, the state and/or municipalities will clean-up and bear the expenses. During the years 1989-1994, 34 "orphan" accidents were discovered for which the costs (4.5 million marks) were left to be paid by the state (Environmental Accidents and Costs in Finland 1989-1994, Ministry of the Environment, Report 1/1995).

A proposal for legislation involving a scheme for compensating environmental damage is currently underway, which will include compensation where the liable party is unknown or insolvent. The proposal introduces three possible alternatives: a fund outside the national budget, a scheme based on the national budget and a compulsory environmental damage insurance and a related secondary insurance scheme, (Complementary Scheme for Compensating Environmental Damage; Working Group Report 3/1993; Ministry of the Environment).

A further proposal was presented in late 1995 by another Committee. The proposal combines compulsory elements of individual insurance and a fund. The compulsory insurance would be to provide compensation where a defendant is insolvent or cannot be found. Installations listed in a decree would be required to have the insurance. All insurance companies could provide the insurance but those participating would have to collectively take care of reinsurance and damages caused by unknown or, in some cases, insolvent polluters. Accordingly the insurance company would still have liability to pay despite the fact that the insured company has ceased to exist or defaulted on payments. Insurers would only have the liability for a fixed number of years at the end of which transitional provisions would be needed for the move to the next period.

Compensation for environmental damage is not a preferential claim in a bankruptcy estate.

FRANCE

When the defendant has disappeared or is unknown, no action for civil liability can be brought by the victim within the civil jurisdiction. The victim may initiate criminal proceedings by lodging a complaint against unknown person(s) ("plainte contre X"). The public prosecutor then decides, on the basis of the information available to him, whether or not prosecution should be initiated. If he decides not to prosecute because, for example, if there is not enough evidence or in case of a minor offence, he informs the victim of such a decision and the matter filed ("affaire classée sans suite"). In other cases, the public prosecutor may decide to prosecute even though no defendant is known at that stage; he then initiates an investigation (the police being in charge of such an investigation) in order to find out who is the guilty party. If the investigation produces no result and if no one is identified as the guilty person, then the matter is dismissed and filed.

When the defendant is insolvent, there is no way to force him to pay the damages which have been decided by the courts. The victim, even though he has won the
case, does not receive any money. No fund has been introduced. Public authorities may intervene in the event of "orphan sites".

Although this is not expressly provided by law, public authorities are in charge of the clean-up of unowned environment (referred to as orphan sites" ("sites orphelins")), at least when there is a potential danger. Should public authorities fail to remedy a pollution and such pollution spreads out causing damage to third parties, then action against the public authorities could be brought by the victim(s) before the administrative courts and the State could be found liable.

A compensation fund for residents in the vicinity of French airports was established under the law of 31 December 1992, 92/1444. The airlines must contribute to the fund on the basis of how often they take off from a French airport depending on:

- the weight of the aircraft;
- the noise level of the aircraft
- the size and location of the airport; and
- the time of take off.

A noise protection plan has been established for each airport following a study of noise levels. This plan is used to determine who may be a claimant in the area of that particular airport. In establishing the plan all interested parties including residence associations, airport operators, government representatives and the airlines are consulted. It appears that the structure of the fund and noise protection plans has contributed to the success of the fund in providing rapid compensation for victims with standard payments while avoiding the general legal system.

GERMANY

Where an injured party cannot realise his claim, the State is under no duty to pay him damages. Administrative authorities are obliged to clean-up soil and water if there is no owner or the owner is insolvent and to bear the cost of doing so.

A number of funds for the remediation of contaminated land exist in the different states of Germany. One example of such a fund is in the state of Hessen. Here clean-up of historically contaminated sites was initially based on voluntary cooperation between industry and government however since regulations have been tightened. Under the Act of Hessen on Waste Management and Remediation of Historically Contaminated Sites there are detailed provisions on the examination registration and remediation of such sites. A special clean-up body is in charge of the remediation where a responsible party cannot be found or held responsible or the responsible party reasonably believed at the time of contamination that damage was unlikely to occur.

Originally remediation was based on an agreement of cooperation between industry and the state of Hessen, however, the Act of Hessen on Charges for Hazardous Waste passed in 1991 introduced a charge to be levied on waste produced by commercial and industrial enterprises which requires control. The
level of charges depend on the level of hazard which the waste creates. The fund created from these charges must be used for the exploration, supervision and remediation of ecological dangers and damages and their consequences which result from handling of the hazardous substances subject to the charge.

The corporate body in charge of the remediation is Hessische Industriemüll GmbH. This body finances the clean-up if the land has been registered as potentially contaminated, the existence of historical contamination has been confirmed by the district authorities and no responsible party can be found or held liable. Where Hessische Industriemüll GmbH has been requested by the district authorities to undertake remediation the project will be placed on a list and prioritised for clean-up by the clean-up council which is made up of representatives from local government, commerce and industry. Priority depends on the level of hazard and available financial resources.

ITALY

If the defendant is insolvent or has disappeared, enforcement of orders for remediation of a civil breach (the concept would extend to environmental damage) may take place against any successor (in universum jus or in the specific activity involved) of the polluter, in accordance with the ordinary civil rules. Italian law does not provide for a compensation fund to finance the clean-up of environmental damage where the polluter has become insolvent. In two major cases namely, the "Seveso" disaster and cases where ships carrying toxic waste travelled from country to country without being able to unload, the regional and state authorities are now seeking compensation from firstly the company which loaded the vessel (now insolvent) and now from organisations, which sent the waste, on a joint and several basis, on the principle that the producer should be liable.

THE NETHERLANDS

If the defendant is insolvent, the claim must be filed with the receiver. The receiver will either acknowledge or deny the claim. If he acknowledges the claim, the amount claimed will be paid pro rata to the claims of other creditors, if any funds remain after the creditors possessing priority rights (such as the tax authorities, mortgage holders, etc) have been fully compensated. If the receiver denies the claim, a procedure against him can be started through the civil courts.

Insolvency usually means that no compensation for environmental damage is received, as no priority rights exist for such a claim. The plaintiff often tries to find other persons to hold liable. In environmental cases involving insolvent companies, this sometimes results in actions against the directors personally or against other related companies under the doctrine of "piercing the corporate veil".

If the defendant has disappeared, it is possible to obtain a judgment against him in his absence. This will only be useful if assets remain upon which the judgment can be executed. If this is not the case, as with insolvency, the plaintiff must try to find other liable persons.
In cases of damage caused by air pollution, damages can be claimed from the Air Pollution Fund if the defendant is bankrupt or cannot pay sufficient compensation. Also, a voluntary fund created by oil companies exists for the cleaning up of former petrol stations, the so-called Petrol Station Fund.

**SPAIN**

The defendant is liable to pay damages from the total amount of his wealth, whether present or future (Article 1911 of the Civil Code). Therefore, if the defendant is insolvent, restoration could take place in case the defendant becomes wealthier in the future, although in practical terms the victim, as a creditor of the defendant, will be involved in insolvency proceedings (either suspension of payments and bankruptcy) which usually ends in (at least) a sensible reduction of the debt.

If the defendant has disappeared, his assets may be used for the purpose of bearing the cost of the restoration.

If the defendant has died, the debt arising out of civil liability would pass onto his successors, unless they have expressly inherited "a beneficio de inventario" (Articles 1010 to 1034 of the Civil Code), in which event the successors will not be liable with their own assets, but only with the assets received from the defendant.

At no point will the State ever fund any clean-up where the liable party cannot pay or cannot be found. However, the authorities may repair the environmental damage by themselves, at the cost of the polluter. It is possible, therefore, that the authorities may never recover such a cost, if the polluter is insolvent or not identified.

From a more practical (and administrative law) point of view, according to the recently published National Plan on Recovery of Contaminated Sites (State Official Journal of May 13, 1995) funding for cleaning up of contaminated sites will come, in principle, from the authorities, without prejudice to the implementation of the necessary tools to recover such funding, as far as possible, from the responsible party. In the National Plan on Waste Water (State Official Gazette of May 12, 1995), the authorities predict that an investment of almost 1.9 billion pesetas will be required up to 2005, although, there may also be the implementation of a special tax instrument ("canon de saneamiento") to be paid by the polluters.

**SWEDEN**

A claim for clean-up under the Environment Protection Act 1969 has often been deemed by the Licensing Board to be a priority claim in a bankruptcy estate. The estate is deemed to operate the ongoing activity or to be the owner of the property and is thus made liable for it.
A claim under the Environmental Civil Liability Act 1986 is not a priority claim in a bankruptcy estate, however if the plaintiff is a private person (and not a commercial enterprise) he might be covered through the Environmental Civil Liability Fund, (see 29).

There are many cases concerning the responsibility for cleaning up after a company insolvency. There is an ongoing discussion on whether it is fair to let the creditors of the insolvent company carry the economic burden of a clean-up instead of the public. The Government has started an investigation into the matter of liability for clean-up but their findings are not yet available. A claim under the Environmental Civil Liability Act 1986 is an ordinary unprioritised claim against the insolvent company.

UK

At present, a party who suffers damage where a defendant is insolvent or has disappeared may have no right to recover any losses suffered. There is no fund available by which a plaintiff may recover the cost of clean-up where none of the responsible parties can be found, as in the US. The Government's Framework for Contaminated Land, does not address this issue. There is, however, a proposal to impose a tax on landfill operations, according to the weight of waste disposed of, combined with the setting up a trust fund to remedy environmental damage, to be offset by the tax.

The current situation with respect of environmental trusts for landfill operators is that in March 1995 the Government produced a consultation paper on a proposed landfill tax for landfill operators. However, there is a proposal that such operators would receive a tax rebate for making payments into trusts for specified environmental purposes. Details have been revealed in the budget by the Chancellor of the Exchequer on the 28 November 1995 although further details will be set out in Spring 1996. The information at present available is that for approved environmental purposes environmental trusts may be established. Site operators who make payments into these trusts will be able to claim a rebate of 90 per cent of their contribution up to 20 per cent of their landfill tax bill.

STUDY 2

AUSTRIA

If a polluter cannot be traced, or he is unable to finance the clean-up operation, public funds must be used instead.

If the cost of clean-up is too high for the polluter to be able to finance the clean-up operations and public funds have to be used, the proceedings tend to be longer and more complicated. In the first years after the introduction of these laws it was possible to access public funds for the restoration work. However, due to budget problems and to the fact that the public is more environmentally conscious, public funds are now far from sufficient to finance the necessary clean-up operations.
BELGIUM

Although there are no funds in place to provide compensation for pollution damage where the polluter cannot be reached or is insolvent, there are in both the Wallonia and Flanders regions proposals to establish compensation funds which are to be paid into by landfill owners, to supplement the proposed landfill tax. This is not the case in the Brussels region. At present and in future where the funds do not apply the plaintiff will have no remedy.

GREECE

Where a polluter has disappeared or cannot be reached a plaintiff will have no source of compensation. If the defendant is bankrupt or insolvent the plaintiff may be able to enforce a judgment by claiming assets as a creditor. As yet there are no funds available to provide compensation or clean-up costs in the event of environmental damage.

ICELAND

Iceland has no compensation fund to provide damages to a plaintiff where the potential defendant is insolvent or not available but see 3.

IRELAND

In Ireland there are no compensation funds for environmental damage, so if the plaintiff cannot find the polluter or the defendant is insolvent there is no remedy.

LUXEMBOURG

If the defendant has disappeared or is insolvent, the plaintiff will have no remedy and there are also no compensation funds from which the plaintiff might claim.

NORWAY

In the case of insolvency or disappearance of the defendant, there would be no remedy available and there are no compensation funds.

PORTUGAL

Where a civil plaintiff wishes to make a claim against a defendant who has disappeared or is insolvent, the plaintiff is left without a source of compensation. There are no funds available for providing compensation and use of such funds is not common in Portuguese law.

SWITZERLAND

In Switzerland there are no compensation funds for general civil claims for environmental damage where a polluter has disappeared or is insolvent therefore the plaintiff will have no remedy. There is a form of super insurance pool
covering serious damage from nuclear installations over and above the insurance held by nuclear power plants. Funding for the insurance pool comes mainly from the utility companies and to some extent from the federal government.

**SPECIFIC COMMENT: MARINE POLLUTION**

If a claimant cannot fully recover loss under national marine pollution legislation either because a shipowner cannot pay or recovery from an insurer is not possible or the damage exceeds the liability limit then, the claimant may claim under the Fund Convention against the International Oil Pollution Compensation Fund (IOPC Fund).

The IOPC Fund is financed by a levy on oil importers. Compensation is capped at US $186 per ton a figure which includes a sum paid by the shipowner.

In addition to the IOPC Fund two voluntary schemes are in existence. The Tanker Owners Voluntary Agreement concerning Liability for Oil Pollution ("TOVALOP"). This system applies where liability under CLC is not imposed. Claims are directed against owners or bareboat charterers who carry insurance. The liability is capped at $160 per ton up to $16.8m. Where TOVALOP applies but the cargo-owner is a member of CRISTAL then the owner's liability is up to a maximum of £3.5m and £493 for every gross ton over 5000 gross tons of up to $70m known as the TOVALOP Supplement.

CRISTAL is The Contract Regarding a Supplement to Tanker Liability for Oil Pollution. This is a fund established by oil cargo-owners and compensation will only be paid once the shipowner has paid compensation up to the TOVALOP Supplement level regardless of whether the shipowner is a member of the TOVALOP scheme. The maximum which may be paid (including sums paid up to the TOVALOP Supplement limit) is £46 plus $733 per gross ton above 5000 gross tons, up to maximum $135m.

An important point is that these schemes cover liability for damage caused by measures taken in order to prevent a spill, even if there is no subsequent spill.
USA

While there have been literally hundreds of cases decided under CERCLA, it seems fair to group them into two major categories. See generally S. Cooke, The Law of Hazardous Waste paragraph 14.01 (Matthew Bender & Co., 1994).

CERCLA

The first category consists of those cases decided fairly early on (for example, 1980-86) in which the core of Superfund's liability scheme was established. Issues here included:

- the scope of the liability system (strict, joint and several);
- its retrospective effect and constitutionality;
- the standard of causation to be applied; and
- the limited defences to liability.

Since then, there has been a continuing series of cases testing the outer limits of CERCLA's liability regime. These include cases seeking to clarify:

- the extent of liability for owners, operators, generators, transporters, lenders, individual corporate officers, parent companies and corporate successors;
- the limits of joint and several liability;
- the scope of the petroleum exclusion;
- the types of "response" costs which may be recovered;
- the allocation of liability among multiple responsible parties;
- statute of limitations issues; and
- collateral issues such as the effect of contractual indemnity provisions and the availability of insurance coverage for clean-up costs.

With respect to natural resource damage cases, there have been significantly fewer judicial decisions in this area, and most such cases have settled. The cases which have been brought to trial have tended to concern:

- the rules to be applied when calculating natural resource damages;
- the acceptability of the settlement agreements which have been reached between the parties; and
- whether the cases must be dismissed on statute of limitations grounds.

In this case summary judgment was granted on behalf of the defendants on statute of limitation grounds.

United States -v- Montrose Chemical Corp., . 93055824, 93-55876 (9th Cir., Mar. 21, 1995)

The Court of Appeal overturned the trial court's approval of a proposed consent decree settling the government's natural resource damage claim against the municipal sewage system for $45.7 million on the basis that the court lacked evidence of the total damages at issue and thus could not evaluate the fairness of the settlement.

State Tort Cases

The issues relating to state tort actions for personal injury or property damage caused by pollution have primarily been ones of causation and the scope of the injuries for which damages can be recovered. Other major current issues in "toxic tort" litigation include:

- recoverability of damages for future or non-physical (for example, medical monitoring and "stigma") damages;
- standards of proof for causation;
- liability of former landowners for contamination; and
- statute of limitation issues.

Daubert -v- Merrell Dow Pharmaceuticals, Inc. 113 S.Ct. 2786 (1993)

The major issue was the standard for admissibility of expert testimony particularly on the issues of contaminant source and transport, exposure and causation of injury.

The US Supreme Court recently held that the test was no longer whether the expert's methodology was "generally accepted" in that field, but rather whether the basis for the opinion was scientifically valid.

This standard has required federal judges to carefully scrutinise expert testimony, and has led to its exclusion (and dismissal of the claims as unsupported) in a number of "toxic tort" cases. The Daubert rule does not necessarily apply to tort cases brought in the state courts, where the evidentiary standards are generally determined by state Supreme Court decisions, but several states have adopted the Daubert approach.

Exxon Valdez

In March 1989 the tanker Exxon Valdez ran aground in Prince William Sound, Alaska. By the start of 1993 Exxon had spent US $2.5bn cleaning up from the
resulting oil spill. A further US $1bn had been paid in 1991 toward restoration in settlement of court cases brought against Exxon. There was also a fine of US $25m and the cap on funds available from the compensation fund was lifted due to the enormity of the problem.

In response to the disaster the US Oil Pollution Act 1990 was passed. This Act imposed stringent liability rules on tanker owners and tough double hull requirements. Importantly the Oil Pollution Act 1990 provides for compensation to the ecosystem and covers costs of removing the spilled oil and "the cost of restoring, rehabilitating, replacing, or acquiring the equivalent of, the damaged natural resources". Further, "the diminution in value of these natural resources pending restoration" and "the reasonable cost of assessing (natural resource) damages" are recoverable.

General Conclusion

Although there is a general view that Superfund is broken and that the enormous costs are not justified by the benefits achieved there has been some reluctance in practice to fundamentally change the system. In practice due to the high level liabilities possible the system has been effective in modifying behaviour within industry. Businesses have in many cases invested significant amounts of money to comply with regulation and have internalised environmental compliance employing technical staff such as environmental engineers. Therefore despite its many faults it has had a significant deterrent affect.

Toxic tort litigation is also highly expensive and a great deal of difficulties exist in proving liability. The level of damages available will differ considerably amongst the different states however it is normally difficult to obtain high level damages and defendants are often prepared to settle for lower sums in order to avoid the bad publicity and costs of litigation. The high costs of environmental actions in the US also has a strong deterrent effect on potential plaintiffs bringing claims for environmental damage.

DENMARK

Examples of cases are as follows:-

The First Cheminova case

The main issue in the first Cheminova case (not published, Western High Court, 1st division, 4th June 1987) was whether liability for environmental damage was strict, as claimed by the Danish State, or whether it should be fault-based as claimed by Cheminova.

This case concerned pollution caused by the chemical company Cheminova, which is owned by the University of Arhus. Cheminova had, in the middle of the 1960s, deposited hazardous waste on a North Sea beach without a permit. Despite knowledge of the deposit, the local council (the regulatory authority) did not try to stop it. After a period of
time, the local council approved not only future deposits of waste, but also the original deposit. When, in the 1980s, it became clear that the deposit was causing release of hazardous substances into the sea, an action for clean-up was started by the local council and the Environmental Protection Agency. The Environmental Protection Agency then claimed DKr 22 million compensation in clean-up costs based on strict liability.

This claim was dismissed by the higher court on the basis that strict liability must be established by statute and not by the courts. This position was upheld in a later case, the Gram-case, (UfR.1994.659) and indirectly by the Supreme Court in the second Cheminova case, (UfR.1992.575H) as well as in the second Phöenix case, (UfR.1989.692H).

**The Second Cheminova case (UfR.1992.575H)**

There was some dispute concerning the time of the discovery of the pollution and whether or not the limitation period of 5 years under the Statute of Limitation could be extended to twenty years in line with old law.

The case concerned a deposit of chemical waste in Ballerup, a suburb of Copenhagen. Cheminova chemical production took place at the site from 1945 to 1954, and from the evidence in the case a number of breaches of health regulation indicated negligence in the handling of hazardous substances. Cheminova moved to Jutland in 1954, and the contamination of the soil and the groundwater on the site was discovered in 1977.

Although the higher court found that the twenty years limitation could apply but would only begin to run when the contamination was discovered, the Supreme Court held that the twenty years limitation was not applicable to environmental damage, but only to personal injury (following the Aalborg Portland case, (UfR.1989.1108) concerning workers exposed to asbestos).

**The Rockwool case (UfR.1991.674H)**

The case concerned the question of whether an "innocent" landowner is liable under administrative law for clean-up costs in respect of his land.

Rockwool purchased the contaminated site in 1962 without any knowledge of contamination or risk of contamination. In 1987, when Rockwool started the construction of a new building and discovered the site was contaminated by mineral oil, the administrative authority was notified and it ordered Rockwool to clean-up the site.

The order was upheld by the Environmental Protection Agency, and later on by the higher court. The Supreme Court reversed the decision on the basis that such a strict liability regime could not be based on a speculative interpretation of the statute but required express provision.
The Dansk Kabel Skrot case (UfR.1994.267H)

The case involved administrative liability concerning Dansk Kabel Skrot A/S (Danish Cable Scrap Limited), (KFE.1993.300) and the contamination of neighbouring land from the scrap plant.

The plant had breached the Environmental Protection Act, 358/1991 by illegally depositing and handling scrap waste and the plant was fined Dkr 300,000 (UfR.1994.267H) and ordered to take various preventive measures. It was one of a number of administrative orders against Dansk Kabel Skrot requiring clean-up of neighbouring properties.

The order was upheld by the Environmental Protection Agency, but overruled by the Environmental Appeal Board which based its judgment on administrative law and principles which only allow administrative orders against legal or physical persons concerning things in their possession and things in the possession of a third party. The decision in Dansk Kabel Skrot was, therefore, that the authorities did not have legal power to order the company, Dansk Kabel Skrot, to clean-up the neighbouring properties, because Dansk Kabel Skrot did not exercise the necessary power over the land to comply with such an administrative order. However, the Appeal Board underlined that this did not prevent the neighbours from claiming compensation or from taking their claim to the authorities.

Purhus -v- the Minister of Defence (UfR.1995.505H).

This case concerned a leak from a NATO fuel pipeline. The Supreme Court upheld the decision of the Environmental Appeal Board in the Dansk Kabel Skrot case and decided that neither the innocent landowner with no influence on the accident nor the Ministry of Defence as owner of installations on foreign land could be responsible for clean-up costs under the Environmental Protection Act, 358/1991. The Ministry of Defence was, however, found liable under civil law for negligence.

Danish Farmers Association -v- Danish Angling Association (UfR.1988.878)

The main issue was the question of whether a pressure group could have locus standi to prevent pollution of a stream under the Act on Compensation for Environmental Damage, 225/1994.

The case involved an application by the Danish Angling Association to prevent pollution of a stream and particularly the question of locus standi. Although the preparatory work for the new Act on Compensation for Environmental Damage (report No. 1237/1992) stated that environmental organisations are not entitled to recover compensation for environmental
damage the Danish Angling Association sought *locus standi* in respect of preventing pollution.

The Western High Court recognised the *locus standi* of the Danish Angling Association in preventing pollution of the stream but also allowed the Association to recover damages for the cost of restocking the stream with fish, which was carried out under the supervision of the Ministry of Fisheries.

**General Conclusion**

It is disputed how effectively environmental law is enforced in Denmark. The Danish Environmental Protection Agency, collecting reports from municipalities, seems to be of the opinion that in general things work very well although they have focused lately on the lack of enforcement concerning municipalities' cleaning of waste water. If one asks the many municipalities how the environmental legislation is enforced the picture is more complicated. In many of the municipalities public officers are confused at to when some provisions must or could be used. The fact that the Committee on contamination of soil set up by the Minister for the Environment has spent more than one year disputing what the law is partly explains this confusion. However, it would not be right to claim that companies in general breach environmental law. In general, companies will follow not only administrative orders from public officers, but also recommendations.

**FINLAND**

There have been cases where the plaintiff has been unable to obtain any compensation because he had failed to prove the existence of a causal link between the activity and the damage. This is especially so in complex cases where there might be various possible sources of pollution and, therefore, it might be impossible to prove causation. For these reasons, the new Act has adopted new rules with regard to causation.

Under the Environmental Damage Compensation Act, 737/1994 the claimant has to prove that there exists "a probability" of a causal link between the activity and the pollution, that is, a likelihood of clearly greater than 50%. It would appear that the same result would have been achieved under caselaw:

**Superior Water Court Decision T:89/1993**

The main issue concerned the requirement to prove a causal link between the contamination and the activity at the sawmill.

This was a criminal case also involving a civil claim for damage to groundwater contaminated by toxic chemicals from a sawmill. The Water Court did not award damages because the plaintiff had failed to prove the existence of a causal link between the contamination and the activity at the sawmill.
The Superior Water Court held that the causal link was proved. The defendant was obliged to prevent contamination of the groundwater due to the handling of the chemicals. However, when judging the liability question regard should be paid, amongst other things, to knowledge of the properties of the chemicals at the time when the harmful activity was carried out. At this time there was no information indicating that the chemicals may cause damage to groundwater if they came into contact with the soil. The contamination was thus not caused intentionally (the defendant was not sued for negligence because the limitation period had expired).

**Supreme Court decision 1990:47**

This case considered fault liability for environmental damage under the Tort Act, 412/74. A limited partnership company had used toxic chemicals in production, as a result of which wells in the vicinity became contaminated. The major partner of the company had the responsibility of ensuring that the working methods and the plants were such that possible discharges would not harm the surroundings. Since he had negligently failed to do so, he was obliged to compensate for the damage caused to the owners of the contaminated wells.

**Superior Water Court decision T:164/1989**

The case concerned a release of waste water due to a broken waste water pipe. The town authorities where the incident occurred were held responsible for negligent delay in undertaking measures in order to mitigate environmental damage.

**General Conclusion**

The Environmental Damage Compensation Act, 737/1994 entered into force only recently (1st June, 1995), and it is too early to give any estimates on its effectiveness. However, the purpose of this Act is to make environmental law enforcement more effective.

**FRANCE**

The major issues which have been raised are to be found in administrative procedures and relate to identifying the defendant and quantifying the cost of remediation. The current operator of the site is generally found liable. However, the current owner of land is more and more frequently being found liable (even when he is acting in good faith) but there is also the possibility of imposing clean-up measures on a previous operator in accordance with the principle of direct extension of activity ("prolongement direct de l'activité").

The role of pressure groups is not very important in France. They do have significant power to act but frequently they have insufficient financial resources to
enable them to act effectively. Nonetheless, the local pressure groups do play an important role in pollution clean-up and prevention. As far as the administrative case law is concerned, there is a tendency to apply the deep pocket theory. In some recent cases, the operator and the owner may be subject to clean-up procedures according to who effectively has the financial resources to do so. This development is only recent and it is not clear whether it will continue. Such an approach, similar to CERCLA, has been strongly criticised by industry.

"Protex" (TGI Tours, ch. correctionnelle, 13 janvier 1992, ministère public c/M et R, n°106)

In this case, a fire which broke out in a listed site resulted in a very severe pollution of the Loire river and other smaller rivers; thereafter, the authorities decided to cut off the water supply.

The Chairman of the Board and the head manager of the Protex group were found criminally responsible and convicted to a prison sentence and to a fine. Moreover, they were convicted to pay damages in an amount of about FF 500,000 to different third parties (parties cêlées) among whom were:

- local federations of fishing and fish breeding registered interest groups, and
- professional fisherman's interest groups;...

Other interest groups did not receive any damages because the tribunal ruled that they had suffered only an indirect damage. Among them were:

- an ornithological interest group (damage caused to birds, as opposed to fish, were not considered as the direct consequence of the water pollution);
- other interest groups or syndicates which had no link with any piscicultural matter; and
- a work's council operating a restaurant.

With respect to the town (Tours) itself, it could claim damages for the moral damage suffered and for the material damage which were directly caused by the accident but not, for example, for the reduction in the number of tourists and the loss of income resulting therefrom.

Société La Quinoleine 24 March 1978 Conseil d'Etat

This case concerned the difficulties of identifying the defendant and the way in which it is resolved by the administrative courts and was the case in which the Conseil d'Etat developed the concept of direct extension of the activity.
La Quinoléine had closed down its factory for the manufacture of high quality chemical products and entrusted two thousand drums of waste resulting from the manufacture of its products to a transporter. The latter took charge of the waste, without indicating their destination and dumped them in an abandoned pit thereby creating a serious risk of pollution both of the atmosphere as well as of groundwater. In order to hold La Quinoléine liable, the Conseil d'Etat held that "the deposit and the nuisances created by the wastes dumped in the pit must be considered as a direct extension of the activity of this company". This ruling had as a necessary corollary the application of the legislation on dangerous sites (at the time, the Law of 1917), to which the company which had produced the waste was subject. The Conseil d'Etat held that this decision did not necessarily represent a general interpretation of the law but was based on the facts of the case. The ruling has been followed in a large number of subsequent cases.

**Société des produits chimiques Ugine Kuhlmann 9 July 1991**

Administrative Court of Appeal of Nancy

In a more recent judgment, also delivered by the rather active Administrative Court of Appeal of Nancy on 9 July 1991, "Société des produits chimiques Ugine Kuhlmann" ('PCUK'), the Court held that PCUK was liable even though it had transferred to a third party the facility which had produced the waste which caused the contamination and had concluded a contract with another party for the disposal of a large number of wastes. The Court held as follows:

"Whereas the risk of nuisance created by the dumping of the residues of lindane on the site of the facility at Huninge by PCUK before the closure and sale of this site in 1974 and the dumping carried out by the company Genet [the party entrusted with the disposal of the wastes]... must be regarded, on the facts of the case, as being directly attached to the activity of PCUK which was subject to authorisation under the regime established by the Law of 1917...; that the provisions of the contract entered into between PCUK and Genet may not be relied upon before the administrative authorities; that PCUK can neither rely on the sale of the site on which its facility was located in order to be released from its obligations... Consequently, contrary to the submissions made by the appellant, the purchaser has not substituted itself to the appellant in its capacity as the authorised regular operator for the treatment of the wastes in question".

It is clear from this case law therefore that the past operator remains liable for the disposal of wastes produced by its activities and on this basis may be compelled to remediate the site in question.

**Rodanet 20 March 1991 Conseil d'Etat**
The only possible exception under which the vendor/past operator may be exonerated from liability for its waste-producing activities evolves around the concept of the regular substitution of the purchaser as operator. This concept of regular substitution, already considered by the court in the first instance in the PCUK case in 1986, was followed by the Administrative Court of Appeal of Nancy in its judgment of 9 July 1991 in the same matter.

However, if the substitution is considered to be irregular, the vendor will remain liable. Thus, in the Rodanet judgment of 20 March 1991, the Conseil d'Etat held that "the appellant cannot rely on the transfer of land, in order to release itself from its obligations under the law on Listed Sites, where none of the transferees regularly substitute the appellant in its capacity as operator".

A regular substitution takes place in the following circumstances.

(i) The substantive conditions of the substitution:

In Rodanet, the Conseil d'Etat held, in confirming the necessity for a regular substitution of the operator, that the appellant could not in any event meet this condition since the exploitation of the dump in question had been prohibited by an order of the préfet. This prohibition therefore rendered irregular any subsequent change in the person of the operator.

The transferred site must be operating regularly for there to be a substitution of the operator. If this argument is taken further, it is likely that there can be no regular substitution where the site sold was operating irregularly, for example, without any authorisation from the préfet or without any declaration being made. Authorisation can ensure substitution.

SPCM 4 October 1994 Administrative Court of Appeal, Nancy

In addition, the substitution must be effective, in other words, the activity must be continued. Thus in its SPCM judgment of 4 October 1994, the Administrative Court of Appeal of Nancy held that "the company cannot rely on the sale of the lands on which its facility was situated to release it from its obligations under the Law on Listed Sites where the purchaser, which envisaged setting up a supermarket, did not substitute it in its capacity as operator".

(ii) The conditions as to the form of the transfer.

When the substantive conditions are complied with, so that there is a regular exploitation and effective substitution, the conditions as to the form of the transfer seem to be of lesser importance.
CIMP 5 October 1994 Administrative Court of Amiens

With regard to the declaration which may have to be made, in a judgment of 5 October 1994, the Administrative Court of Amiens held:

"Whereas, the company CIMP argues that in its take-over bid it had expressly referred to the fact that it did not intend to continue the lease in force between the previous operator and Mrs Delaere concerning the site...; that, however, since CIMP had made a declaration to the préfet to the effect that it was substituting itself for the operator of the site in accordance with the conditions set out in an [authorisation] order made by the préfet... the latter was entitled, upon proof of the existence of nuisances established by the Inspector of Listed Sites, to serve notice on CIMP regarding disposal of the waste on the site, including those on the land belonging to Mrs Delaere.".

Wattelez 30 June 1994 Administrative Court of Appeal of Bordeaux

Other judgments, however, attach little importance to whether or not a declaration has been made. Thus in Wattelez, judgment delivered by the Administrative Court of Appeal of Bordeaux on 30 June 1994, the Court held:

"that the company, in spite of the fact that it had not made the necessary declaration to the administrative authorities in accordance with Article 34 of the Decree of 21 September 1977, substituted itself as from 30 March 1989 [date of the acquisition] to the company Wattelez in its capacity as operator of the facility 'Puy Mouliniez'".

Amoco Cadiz

In March 1978 Amoco Cadiz ran aground off Brittany and sank. More than 220,000 tons of crude oil were released into the sea and polluted about 180 miles of the Brittany coastline which is of importance for its tourist and fishing industries. The clean-up required use of resources from all over France and resulted in a large number of lawsuits due to the effect on the environment and economy of the region.

The French government responded by passing legislation to ban all tankers from coming within seven miles of the French coast unless heading for a French port.

At the time of the claims France had not ratified the fund convention but had ratified the convention on civil liability while the USA has still not ratified either. The claims were therefore brought against the owner of the cargo, Amoco, rather than the tanker owner as it was perceived that more
damages would be available this way. In July 1990 the US Federal Judge in Chicago Illinois ruled against Amoco and in favour of the French Government awarding £155 million. Of that sum £70 million accounted for interest on the sum of $85 million in a judgment form which Amoco appeared. Amoco awarded in 1988 elected to appeal the 1990 judgment also.

General Conclusion

As a general comment, enforcement of environmental liability in France to this date is not as effective as it could be. Despite a highly developed regulatory system, problems of pollution remain unresolved, often for financial reasons. For example, in 1994, an Inventory of Contaminated Sites was published by the Ministry of the Environment, listing 669 sites as of 30th September 1994: the necessary clean-up actions remain to be carried out in most cases.

GERMANY

The most significant problems in the application of the old environmental liability law finally led to the introduction of the UmweltHG. These problems were: causation; whether or not an act was illegal; and establishing fault intention or negligence, the latter being associated with foreseeability.

The injured person had to prove that the person from whom he was claiming damages did in fact cause that damage. Generally, it can be very difficult to prove such causation (especially in the area of emissions, which are often not traceable back to a single individual). The case law concerning the old environmental liability law assisted the injured party by easing the burden of proof to a certain extent. The burden of proof had, however, not been completely removed from the injured party, so that considerable practical problems still existed.

A duty to compensate existed only in the context of an illegal act (which was not possible if the proprietor of a plant had obtained a licence) and if the action was caused intentionally or negligently. If the damage was not foreseeable, despite all care having been taken (for example the relevant scientific knowledge was not available at that time), no culpable action, and therefore no duty to compensate, existed pursuant to paragraph 823 BGB. Strict liability only existed under paragraph 22 WHG but has now been introduced under the new UmweltHG.

General Conclusion

Civil liability for environmental damage has until now in Germany not been very important (regardless of whether it is the old or new environmental liability law in question). The effectiveness of administrative law prevention and control is generally estimated to be greater. The problem is much less that a particular plant creates environmental damage which can definitely be proved, and much more that through multiple emissions ground, air and water all become heavily polluted. Emissions from commercial plants have greatly reduced in recent years. The most important problems today are those of the massive increase in road traffic

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and in the high levels of land use for the construction of new estates, whereby the overall natural balance is disturbed.

ITALY

The major issue concerns the difficulty in quantifying damages. Civil judges may award damages at their own discretion on an equitable basis and not necessarily follow the criteria set down by law. Other issues concern the level of restoration ("restitutio in pristinum"), and the appearance (locus standi) of the environmental associations in criminal or administrative proceedings.

Court precedents concerning liability for damage due to pollution are quite limited in number. The solution to most pollution cases has been reached more often through out of court settlements between the parties (public and private). This might be partly attributable to the lack of legislative criteria to define the "threshold" levels of contamination and the minimum acceptable levels of clean-up to be imposed upon polluters.

The Farmoplant Case

The case concerned the locus standi of environmental associations to intervene in criminal proceedings for the recovery of damages. locus standi has been recognised not only for the state and the regions, provinces and municipalities, but also for environmental associations, authorised to file complaint reports and to intervene in lawsuits started.

This case involved damages arising from the discharge of waste. The Court confirmed the decision reached by several courts that environmental associations are entitled to intervene, through the "constituzione di parti civile", in criminal proceedings for the recovery of damages suffered as a consequence of environmental damage. It was held that the prejudice suffered by the individual members due to an environmental disaster should be taken into account.

Supreme Court - No. 440 of Jan. 25, 1989

This decision supported the view that direct orders for restoration of sites should be imposed on polluters as provided for under Article 18 of law 349/1986.

Although this view has subsequently been supported in several other cases, such orders do not appear to have been extensively granted so far.

Administrative Court of Sardinia (May 25, 1992)

The right to intervene (locus standi) was recognised as extending also to an association not belonging to the list of "agreed" entities made by Ministerial Decree of Feb. 20, 1987.
Supreme Court, Case No. 968 of Oct. 24, 1991

In cases concerning adulteration of drinking water (from either private or public wells), the existence of a mere danger was sufficient to trigger punishment, even in the absence of actual damage. There is an apparent tendency to apply Article 635 of the Penal Code, rather than the more serious provisions of Articles 439-440 in cases where there is no clear evidence of a "poisoning" intent whenever damage occurs to property.

Genoa Court of Appeals, July 12, 1989

As detailed evidence of damages is generally quite difficult to show, a certain discretion has been exercised by the judges. In this case it was held that behaviour violating environmental regulations may constitute per se a basis for punishment and/or damages, regardless of any immediate, specific, quantifiable prejudice.

Supreme Court Case 305 of April 22, 1992, Case 415 of November 5, 1991, Case 838 of March 29, 1984

The Courts have sought to define "landfill". "Landfill" may mean a contained waste treatment/disposal facility or a mere dump of waste materials. It has been held in this context that "a landfill exists whenever, as a result of repeated conduct, waste is disposed of in a given area thus transformed into a permanent deposit for such waste" (Case No. 305), "regardless of whether accumulation is made by the producer through partial burial in an area near the plant" (Case 415). A "repeated, although not customary dumping of waste in a public or private area without authorisation" is considered to be by itself illegal (Case 838).

Sicilian Region's Court of Administrative Justice, Case No. 105 of April 29, 1992

The general principle laid down in Article 3 of DPR 915/1982, under which "producers of waste are under a duty to arrange at their own expense for the disposal of special waste, including toxic and dangerous waste", was held to apply "also to the storage of toxic waste produced before the coming into force of DPR 915, considering that the new rules are aimed at the ceasing of all situations of actual danger, regardless of the causes (which may also be remote) that determined such situations".

Joint (Criminal) Chambers of the Supreme Court, Case 12753 of October 5 - December 28, 1994

The Court held that in the event of succession in ownership of a site, "he who finds the area littered with the waste piled there by the prior operator of the dump is not guilty, .. being under no obligation to counteract, that is, intervene to remove the waste from the land he acquired". Nor, according to the same judgment, is the concern founded that "the mere keeping of the
toxic and noxious waste would then amount to making them substantively liable, although detrimental or dangerous to health. Should this indeed be the case, then the Mayor may impose a removal order on the party involved, with the related criminal consequences in the event of non-compliance with the order”.

**Various Cases including the "Seveso Case" in 1976**

Although the principle that the "polluter pays" has been affirmed several times, damages have been mainly quantified in an equitable way. In these cases reference has been made to: the budgeted costs of public expenditure for remedial works; the profit asserted as having been made by the polluter; the seriousness of the negligence; and a general calculation à forfait of the "moral damages" suffered as a consequence of the pollution.

**General Conclusion**

At the beginning of the 1980's, the courts began to recognise a healthy environment as a right belonging not exclusively to the state but to the citizens as individuals and as a community. This illustrates a gradually improving attitude of the courts towards environmental matters.

Effective enforcement can still be lacking, depending on the local (regional and municipal) situation and on the flexibility of the enforcement authorities, but, overall, it is certain that enforcement bodies and companies are taking and will be taking environmental issues more and more seriously. Criminal courts tend to interpret existing laws and regulations rigorously and sometimes even extensively. An example is the water law, where courts have punished any dilution made in order to reach acceptable limits, or have suspended imprisonment (which is usually granted for sentences of up to two years) conditional upon the adoption of all necessary measures to comply with such acceptable limits.

Environmental organisations have attempted to bring twenty three cases, seventeen of which were admitted to trial. The damages claimed have, however, only been awarded in four cases.

**THE NETHERLANDS**

The major issue relating to civil environmental liability in The Netherlands has been that of responsibility for soil contamination. The first legislation on soil contamination was the Interim Soil Clean-Up Act ("Interimwet Bodemsanering") which came into force in 1983, soon after the first major case of contamination (on a housing estate) was discovered. This interim legislation provided for clean-up of soil contamination by the state, the cost of which could be reclaimed from the polluter. To date, more than 150 cases have been brought before the courts. The main question has been how far back the state can go in claiming these costs under the so-called "relativity" element of tort (Schutznorm-theory) as to when the standard imposing a duty of care on the polluter served to protect the State against
having to make clean-up costs. In other words, when should the polluter have foreseen that pollution would cause damage to the State in this form?

State -v- Van Wijngaarden and State -v- Akzo Resins of 24 April 1992

In both cases the Hoge Raad decided that generally it should have been clear from 1st January 1975 to any person commercially using potentially polluting substances, that pollution of the company's property would compel the state to take action and cause it to pay damages in the form of clean-up costs. An exception exists if the state can prove the polluter was made aware of this before 1st January 1975. The Hoge Raad expressly left open the question of whether a polluter should have realised before 1st January 1975 that pollution of a third party's property would lead to clean-up costs having to be incurred.

State -v- Shell, State -v- Duphar, State -v- Ten Brink, State -v- Fasson of 1 September 1994

The Hoge Raad stated that the date of 1 January 1975 must generally also be seen as the date from which this foreseeability exists in cases of pollution outside the company property. The Hoge Raad expressly stated that causing soil contamination before 1 January 1975 generally does not constitute a tort against the state.

The Interim Soil Clean-up Act 1983 has recently (15 May 1994) been incorporated into the existing Soil Protection Act 1994 ("Wet bodembescherming"). As a result of the decisions of 24 April 1992, a provision has been included in this Act stipulating that in serious cases, the costs of cleaning up contamination caused before 1 January 1975 can be claimed by the State. Relevant factors are: knowledge of the dangers of the substances used, the state-of-the-art, the state of the industry and the existence of possible alternatives to the polluting actions undertaken. One lower court decision accepting liability under this provision exists to date.

"Rb" Zwolle, State -v- Bol, 28 December 1994

This case involved recovery of the costs of soil pollution clean-up by the State following the introduction of the Soil Protection Act 1994.

Pollution found on the property of the defendant was caused when oil was delivered to the defendant by Shell, and also by the defendant cleaning used oil drums.

The Rechtbank Zwolle decided that the defendant could have prevented pollution occurring by adequately requesting Shell's truck drivers to take more care when delivering oil to him. Furthermore, he could easily have prevented pollution from the cleaning of oil drums by taking care not to cause any spillage. Not taking these simple preventative measures was considered a serious omission creating liability before 1 January 1975.

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There have also been important decisions in relation to the sale of contaminated property where the vendor had caused the contamination.

HR 13 November 1987, in re Gasfactory The Hague, HR 9 October 1992 in re Maassluis and HR 19 February 1993 in re Groningen -v- Zuidema

These cases concerned the sale of contaminated property, especially by local authorities for building purposes.

The Hoge Raad decided that a municipality selling land for building purposes is under a duty to guarantee that the property sold is fit for this purpose. In all these cases the (historic) contamination was caused by the municipality. The sale of contaminated property without notice being given of the contamination was considered to be a tort committed by the municipalities on the buyers.

General Conclusion

In the Soil Protection Act 1994 as recently introduced, the emphasis has shifted away from clean-up by the State followed by civil claims in tort, to administrative measures against polluters, such as clean-up orders. Clean-up by the State followed by a claim in tort now forms only a secondary line of action.

There appears to be no general perception that enforcement of environmental law is lacking.

SPAIN

The major issues concern the difficulty of proving the existence of an indemnifiable damage and the existence of a causal link, as well as whether or not negligence is necessary to determine the existence of civil liability.

Lopez Ostra v Spain 41/1993/436/515, Dec 9/1984

In a recent case the plaintiff, who lived in the province of Murcia, brought an action against a plant close to her house for invasion of privacy arising from fumes, noise and smells from the plant.

The Spanish courts considered that no liability existed but this was overturned by the European Court of Justice which required the plant to pay four million pesetas in damages.

The main problem that exists, from the procedural point of view, is the causal link.

Supreme Court Decisions of June 19, 1980 and October 27, 1990
The June decision related to damage caused to mussel beds by oil spills and the October decision related to damages for the death of trout in a fish hatchery.

Despite different facts that could have led to the defendant being held liable, the court decided that the causal link was not sufficiently proved.

In addition, there are several cases on fires where the Supreme Court has reached different decisions in (at least apparently) similar situations (decisions of March 14, 1978, June 4, 1980, May 18, 1984, July 9, 1985, January 23, 1986, April 8, 1992, November 9, 1993 and February 14, 1994).

General Conclusion

Apart from the above, several principles arise from case law: one of these is that compliance with specific administrative rules applicable to the defendant is irrelevant for the purpose of determining the existence of civil environmental liability.

Enforcement of environmental law is steadily improving in Spain. While four to five years ago the main pressure came through the European Community and its requirements for implementation of environmental Directives, public and political awareness of environmental issues is now increasing with a consequent effect on enforcement levels.

Criminal prosecutions are generally becoming more common in the environmental field (especially since about 1990) since it is felt that a successful criminal prosecution has a deterrent effect on others not to pollute the environment. A prosecution may be made by either the Public Prosecutor or an individual (in practice, environmental organisations). Prosecutions of individuals within companies (for example, directors) are also becoming more common (see 2.5).

Due to the constitutional structure of Spain there are, however, regional differences in law and the powers of the regulatory authorities. It would appear that those regions with more industry such as Madrid, Cataluna and the Basque region have a more developed and active regulatory system. The policy of the regulatory authorities in general tends to be co-operative, encouraging compliance with the law and allowing parties a chance to rectify breaches while bringing prosecutions in cases of continued, blatant or deliberate breaches.

SWEDEN

One of the fundamental principles under the Bill (prior to the Environment Protection Act 1969) is that the person who causes the pollution must remedy its consequences. The preparatory works forming part of the Bill are used in the interpretation of the Act. The main questions relating to this have concerned first who is liable and secondly which measures it is reasonable to force the liable person to take to avoid or remedy the consequences of his pollution. If an
operation is licensed the remedy should be stated in the licensing requirements. If the operation is not licensed, the administrative body decides which measures should be taken. The biggest problem for the authorities concerns operations which have become bankrupt.

**Licensing Board Decisions B91/94 and B124/94**

By virtue of these decisions the bankruptcy estate is deemed to continue the operator's polluting activity. For example, in the decision from the Licensing Board (B 91/94) the bankruptcy estate was deemed to have been carrying on a mining company's polluting activity, and was therefore subject to the licence and its conditions. In the decision (B 124/94) the Board ruled that the estate of a tenant company was liable for dangerous substances deposited on the former rented premises. In both cases, however, the estates were only required to remove the substances which were said to be "stored" or "taken care of" at the property. What had leaked into the soil has not yet been deemed to be an activity for which the estate should carry liability.

**Licensing Board Decision B249/94**

If a purchaser of land knows or has reason to believe that the property is contaminated, this case amongst others implies that he will be liable for clean-up. From various statements from the Board it seems clear that costs could very well exceed the operators' ability to pay.

**Supreme Court Nytt Juridiskt Arkiv (NJA) 1977 s 424**

A road was built through a garden suburb of Stockholm. Some small homeowners claimed compensation, arguing that their houses had lost value because of the road and, in particular, because of the noise from the road. The noise levels exceeded the recommended outdoor levels for an existing housing area where a new road was built (60 dB(A)) and were in fact between 62 dB(A) and 67 dB(A).

Those noise levels that exceeded the recommended level were not considered to be acceptable either as "common locally" or "occurring generally". The homeowners were granted compensation for the loss of value of their houses but the court decided that they should carry 5% of the loss themselves as this was considered to be the loss of value according to the general risk in Sweden for a homeowner to have noisy traffic outside his house.

It is not certain if this case would be decided in quite the same way today, as the law has been changed in this respect. The homeowner might, in this case, now be entitled to full compensation.

**Supreme Court NJA 1988 s 376**
The homeowner argued that a new power line on his land caused it to suffer 7.5% depreciation in value. Most of this loss was due to the possibility that the magnetic field from the power line might be harmful and that the line as such was ugly.

It was considered that in principle a loss in value exceeding what was considered to be common locally or occurring generally was to be compensated. However, it was decided that physical and aesthetic disturbances were personal and could not be measured so the houseowner must accept that he must endure a high level of this type of disturbance and it would still be considered as common locally or occurring generally. Thus a loss of 7.5% of the land's value was not more than the owner must accept. The homeowner was therefore not granted compensation.

**Supreme Court NJA 1992 s 896**

A company had, through blasting activity, caused cracks in the plaster facade of a house. The plaster was old and worn and this was considered to have contributed to the cracks.

The company was, therefore, held responsible to pay only half compensation. The Court stated that:-

"regarding the short interval of time between the blasting works and the cracks ... there is a prevailing probability that the cracks have been started by the vibrations from the blasting works. However, it was obvious from investigations that the vibrations were considerably less than would be required to cause the cracks if the plaster had been in good condition and not near breaking point already. However, it cannot be estimated how long it would have taken before the plaster would have cracked if the blasting works had not been taking place. Thus, it is reasonable that the company pays half the damage."

**General Conclusion**

The Environmental Civil Liability Act 1986 is, in comparison with the Environment Protection Act 1969, of minor importance. No data on the number and value of claims is produced. There appears to be no lack of awareness of the Environmental Civil Liability Act 1986, but the type of cases which arise tend to involve relatively minor incidents and disputes.

In the 1992 report from the National Environmental Protection Agency it was shown that for 14% of the supervised A-plants, and 56% of the B-plants supervised by the counties and municipalities (see 3), no control programmes have been established. Of about 21,500 plants (including agriculture) which do not require licences but are required to notify their respective municipality (C-plants), more than 50% of these plants have not made any such formal notification.
Further, more than 850 A and B plants have licences that are more than ten years old, which need to be reviewed.

Also, 459 criminal offences under the Environment Protection Act 1969 were reported during 1992. Legal proceedings were instituted in 54 cases.

UK

Three significant cases in recent years are explained below.


This major recent case relating to civil liability involved consideration of strict liability in the rule in Rylands -v- Fletcher (1868) LR 3 HL 330 and in nuisance by the House of Lords.

The case concerned the historic pollution of groundwater available for extraction at a borehole owned by Cambridge Water Company (CWC). Pollution of water at the borehole was caused by regular spillages of a solvent known as perchloroethene (PCE) over a mile away at a leather tanning works owned by Eastern Counties Leather (ECL). Although these spillages ended in 1976, the PCE which had already seeped into the ground beneath the tannery continued to be conveyed in percolating water towards the borehole. Under subsequent criteria laid down in Regulations (which were issued in response to the Drinking Water Directive (80/778/EEC)), the water could not lawfully be supplied in the United Kingdom as drinking water, forcing CWC to find a different source.

In the High Court, the judge dismissed CWC's claims in nuisance and negligence because he held that ECL could not reasonably have foreseen that such damage would occur. The judge also dismissed the claim based on the rule in Rylands -v- Fletcher because he held that the use of such chemicals in an industrial village constituted a "natural use" of land. The Court of Appeal, however, allowed CWC's appeal on the ground that ECL was strictly liable in nuisance for the contamination of the water percolating under CWC's land, on the basis of the judgment in Ballard -v- Tomlinson (1885) 29 CH.D 115.

The House of Lords reversed this decision, holding that ECL did not have to pay an estimated £2m in damages to CWC. Lord Goff (who delivered the only judgment) noted that the judgments in Ballard -v- Tomlinson did not give grounds for concluding that a defendant could be held liable for damage which he could not have reasonably foreseen, as the point had not arisen in that case. The central feature of the Lords' decision was that foreseeability by the defendant of the type of damage complained of was now also a prerequisite for strict liability under the rule in Rylands -v- Fletcher (as well as for nuisance). Lord Goff noted that it was more appropriate that strict liability for high risk operations be developed and...
imposed by Parliament, rather than the courts. Furthermore, since the present case concerned historic pollution (in the sense that the spillages of PCE took place before the relevant legislation came into force) it was not appropriate that "retrospective" liability for such pollution be imposed at common law, when it was not even being envisaged in proposals on statutory liability at either the national or international level.

On the facts of the case, the defendant could not, at the time the spillages were made, have reasonably foreseen the resultant damage which occurred at CWC's borehole and so could not be held liable. Lord Goff also rejected the argument that ECL could be held liable in respect of the continuing escape of PCE from its land occurring after such damage had become foreseeable, because by that time the solvent had "passed beyond the control of ECL".

It was not necessary for the purposes of deciding the appeal to attempt a redefinition of the concept of natural or ordinary use. However, Lord Goff noted that the storage of chemicals in substantial quantities on industrial premises "should be regarded as an almost classic case of non-natural use" and could not fall within the natural user exception to the rule.

**Graham -v- Rechem International (16 June 1995)**

In this case the Grahams sued Rechem International in negligence and nuisance. Up until 1984 Rechem International operated a toxic waste incinerator near to the Grahams' farm. Between 1982 and 1983 many cattle from the Grahams' herd died and the Grahams claimed that those deaths were brought about by emissions from the incinerator.

The case ultimately turned on whether it could be proved on a balance of probabilities that the cattle died as a result of emissions. Rechem International successfully argued that the deaths were a result of overfeeding and not emissions and the claim was dismissed.

The case serves to emphasise the importance of showing causation and the need for scientific evidence to substantiate any claim.

**Hancock -v- T and N plc, Margereson -v- T and N plc**

The High Court has recently held the parent company of an asbestos factory in Leeds liable for historic pollution.

The defendant admitted that the mesothelioma contracted by the deceased husband of one plaintiff and the deceased mother of the other was caused by the asbestos dust emitted from the factory in large quantities significantly affecting people in the vicinity. The defendant sought to defend the claim on the basis that the lack of medical knowledge about mesothelioma at the time meant it could not reasonably have foreseen the risk to local residents. On the basis that conditions outside the factory...
were as bad as inside and considering that the technology was available at
the time to drastically reduce the emissions the judge found the company
liable awarding damages of £65,000 and £50,000 to the two plaintiffs.

Conclusion

The remediing of environmental damage is more likely to be brought about by
regulatory control than by civil actions by private parties (the major deterrent for
the latter being the level of costs) and in any event there is no requirement for a
successful private litigant to put the damages paid to remediation/restoration of the
environment. With regard to regulatory controls the NRA is responsible for
protecting Britain's watercourses and therefore takes an active enforcement role.
The total number of pollution incidents reported and substantiated has risen since
1990 from just over 20,000 to just over 25,000 in 1994. The exact figures for
1994 were a total of 25,415 substantiated pollution of incidents with 9,876
unsubstantiated. Of the substantiated incidents 18,618 were category 3 (minor),
6,567 were category 2 (significant) and 229 were category 1 (major).

Of those 1994 incidents NRA has brought 237 prosecutions with 222 convictions.
The NRA was intending to bring 151 further prosecutions. Cautions were issued
in 193 cases with 46 still to be issued in respect of 1994 incidents. Cautions are
intended to deal rapidly with less serious incidents while deferring further
pollution. The NRA must be able to evidence the polluter's guilt and the polluter
must admit to the offence. Further, the polluter must understand the effect of the
cautions and consent to being cautioned. Cautions can be used as evidence in court
if the polluter later offends.

NRA prosecution policy is to prosecute category 1 incidents if sufficient evidence
is available. Formal warning letters or cautions may be used for category 2
incidents where this is an appropriate alternative to court action. The general
obstacle to more prosecutions being brought is the difficulty in obtaining evidence,
particularly in the minor cases. Where the NRA feels that greater progress is being
made through a cooperative approach it may hold back from prosecuting. In
relation to 1994 pollution incidents the highest fine awarded was £30,000. The
maximum fine which a magistrates court can award is £20,000 by virtue of section
85(6) Water Resources Act 1991. There is, however, no limit to the level of fine
which a Crown Court can award. Fines are based on the seriousness of the offence
and the defendant's ability to pay and range from discharge (no fine) up to around
£30,000. The NRA figures do seem to show some sign of increase with both
higher maximum and minimum fines being recorded in a number of regions in
1994.

The majority of the fines imposed appear to be at the lower end of the range. Also
the level of fines appears more linked to the type of incident than the resources of
the defendant. The effect of the fines as a deterrent to further pollution is therefore
questionable, especially where heavy investment is required to take effective
preventative measures.
NRA often recovers its clean-up costs through costs awarded in the criminal prosecutions. There is a civil claim available to NRA under Section 161 Water Resources Act and the NRA's stated policy is to recover the whole of its clean-up costs where possible. Use of Section 161 Water Resources Act varies throughout the regions with some authorities preferring to recover costs through the criminal prosecution route. The costs of a clean-up can in some cases be much higher than the level of fines typically imposed. In *NRA and the Anglers Cooperative Association v- Mr J E Clarke* (April 1994) a pig farmer was ordered to pay £107,000 in costs following the burst of a slurry lagoon into a river. The costs were recovered under Section 161 after the criminal prosecution was unsuccessful. This case involved unusually high clean-up costs. Usually the level of costs is the same or less than the level of fine.

Waste regulation authority enforcement statistics seem to show a similar situation to the NRA. The total number of charges brought was 688 with 442 leading to prosecutions. The level of fines imposed by the courts is similar to the NRA cases, being mainly around the lower level possible. The waste regulation authorities have repeatedly expressed concern at the inconsistency in the level of fines imposed.

There is a strong indication that the prosecution policy towards water polluters will become less rigorous when the NRA is transferred into the Environment Agency. It would appear from published data that the Environment Agency will move away from a strict prosecution policy towards a more co-operative approach with industry aimed at prevention rather than prosecution. The Chief Executive has suggested that this approach will be made possible by the provisions in the Environment Act 1995 which allow service of notices to correct actual or impending breaches of discharge consents in addition to notices requiring prevention of pollutants entering water.

### STUDY 2

**AUSTRIA**

The major issues in all proceedings with respect to environmental damage have been the problems of tracing the polluter and of proving the causation between the damage and a negligent act of the defendant. For the injured person to prove a causal link between the damage and a certain act or omission of the defendants is very difficult and is perhaps the most major difficulty under the liability rules of the ABGB.

**Borax-Case**

The *Borax* case was decided on the basis of the General Civil Code (ABGB) and other special provisions concerning the liability of the state ("Amtshaftungsgeetz"). The Supreme Court decided that the local authority of Vienna - which is responsible for the controlling of a special regulation against pollution of water (including groundwater) under the
Water Act - had to pay for damaged plants on the land of the neighbours caused by a closed down Borax factory.

The Borax-factory had stored the chemical substance "bor" in a manner that it reached the groundwater and the plants in the nearby gardens died. Many neighbours wanted the local authority to take action against the pollution of the groundwater. But - due to a fault in the authority - the groundwater tests were performed in a way that "bor" was not detected in the groundwater samples, although - as was proved later - the groundwater-samples were heavily contaminated with the substance. Due to the false results the local authority did not take action against the further contamination of groundwater with bor, which was responsible for the damage to the plants in the nearby gardens. On the basis of fault liability the Supreme Court stated that further damage was caused by the insufficient groundwater-testing of the local authority and that the state had to pay for the damage caused by the bor-contamination of the groundwater.

Supreme Court 3 Ob 508/93 11.10.1995

Insufficient permits of dangerous activities can lead to righteous claims based on strict liability, even if the permit has not been injured.

In a very recent case the Supreme Court stated that the responsible persons for dangerous activities have to pay damages - and even that the damaged persons can apply for the cessation of dangerous activities - which are caused by insufficient permits of the dangerous activity, if the regulations on which the permits are based do not give the injured persons the right to take other action than raise claims based on civil law. In such cases courts have to grant damage on the basis of strict liability.

General Conclusion

The developments in recent years have been towards a system based more on administrative measures and regulation than on civil and criminal liability. The majority of the environmental laws are used effectively by the authorities. The administrative authorities work efficiently as long as the damages are not excessive and/or the polluter is traced and able to finance a clean-up operation (for example car accidents where oil pollutes the soil). If the cost of clean-up is too high for the polluter to be able to finance, public funds have to be used and the proceedings tend to get longer and more complicated. Due to budget problems and an increasingly environmentally conscious public, public funds have become far from sufficient to finance the necessary clean-up operations. Recent case law shows a tendency to impose strict liability in relation to all dangerous activities.

BELGIUM

Examples of leading cases are as follows:

Walter Kay case, April 28, 1978
The theory of "the breach of the causal link" by a legal or contractual obligation has prevailed during the last decade, where public authorities are unable to claim the reimbursement of clean-up costs from the person liable for the damage because they are already obliged to organise such a clean-up by virtue of a law. The authorities of a harbour claimed reimbursement of clean-up costs from the owner of a vessel. The Court of Cassation decided that no such reimbursement could be claimed by the public authorities because they were already obliged to carry out such a clean-up of the harbour by virtue of the law. This approach has now been abandoned.

Court of Cessation, April 6, 1960 and Article 544 of the Civil Code

This case was decided according to the principle of "nuisance to the vicinity", under which the owner of land, having unreasonably disturbed the relationship between his property and the neighbouring properties, while acting lawfully, must compensate the victims of his acts.

Examples are nuisance from dust, mud and noise during the construction of an underground station (Cassation, May 28, 1983); pollution of ponds due to a malfunctioning of the sewage system (Brussels, January 18, 1979); continuous barking of dogs in urban areas (Tielt, June 16, 1982). In each of these cases, the defendant was acting within the law.

General Conclusion

In Belgium the regions are in principle competent to regulate on environmental matters, however, environmental legislation exists at the national, regional, provincial and also municipal levels. Legislation is sectoral therefore no single comprehensive act exists. A variety of different regulatory authorities are responsible for the different sectors and co-ordination is often lacking.

GREECE

Examples of leading cases are as follows:

Decision 1876/80

The Supreme Administrative Court allowed the judicial review of the constitutionality of certain environmental law provisions, and decided that the provisions in question were incompatible with the Constitution.

Case no 412/93

The Supreme Administrative Court held that the legislature is obliged to introduce adequate measures for the protection of the environment; if such legislative protection does not exist, the Administration is directly bound
by the Constitution either to provide for such protective measures or to abstain from any actions that may endanger the environment.

The Supreme Administrative Court has also ruled that the Administration must justify its consent to major developments which may have an adverse effect on the environment.

Case 1038/93

The case involved the construction of a highway through a mountain near Athens. The Supreme Administrative Court ruled that unless an environmental impact assessment was concluded and approved, not only could the construction not begin but also the authorities were to abstain from any administrative action in relation to such construction.


In cases of pollution of the sea, it has been ruled that a ship which has caused pollution may not be permitted to leave the port unless the fine imposed has been paid (EN1992.1300,11). It is not, however, expressly provided that the ship may not leave before paying clean-up costs (EN 1992.1300,12).

General Conclusion

Although the Civil Code and some specific environmental provisions do form a framework for environmental protection and restoration it must be observed that this environmental framework is not yet complete and is not always effective in achieving its aim. The relatively slow development of environmental law in Greece is largely a result of the structure of the Greek economy. As a result enforcement has often been problematic. Due to an improving level of public environmental awareness and the positive attitude of the Supreme Administrative Court the system and its effectiveness should improve.

ICELAND

There are few cases on environmental damage which have been decided by the Supreme Court. One example is as follows:-

Supreme Court of Iceland (Hrd. 1986:79)

A chicken farmer was unable to prove to the satisfaction of the Court that fluoride air pollution from an aluminium factory had caused damage to his poultry. Many extensive technical reports were submitted but the district court, with two specialists sitting as laymen judges, found that the plaintiff had not established the causation between the fluoride air pollution and the damage. The Supreme Court verified the district court's decision.

(51998936.01)
In another case, the manager of a beverage factory was found to have violated neighbours' rights where machines in his factory caused too much noise.

General Conclusion

Environmental law is a rather new area of law in Iceland and the country generally considers itself an environmentally friendly country if not a prototype for other countries. There has consequently been very little discussion on problems in this area until approximately ten years ago. In addition, the country has now been burdened with pollution that requires immediate attention. Accordingly, the practice in this area is sparse therefore it is difficult to say how effective enforcement of environmental law has been. the focus for environmental matters has been on the pollution of the ocean since the fish industry accounts for approximately 70% of the nation's income. The state is a party to many international conventions in relation to this area.

IRELAND

There have been a number of important civil cases in environmental law decided in Ireland in recent years.

Hanrahan -v- Merck Sharp and Dohme (Ireland) Limited [1989]

In this case the plaintiffs farmed land situated about one mile from the defendant's factory. The factory processed pharmaceutical products and was involved in the storage and use of toxic substances.

The plaintiffs instituted proceedings claiming that they personally, their animals and plant life on the farm had been severely damaged due to the manner in which the defendants conducted their operation. The claim was treated as one of nuisance. In Ireland the claim of nuisance lies if a person has adversely affected and caused damage in an unlawful manner. A party can be liable in nuisance whether that nuisance is caused negligently or non-negligently.

In this case it was held that the plaintiffs were not required to prove lack of due care by the defendants in the manner they conducted their operation. It was held to be sufficient for the plaintiffs to succeed by establishing that they had not enjoyed the comfortable and healthy use of their land to the degree expected by an ordinary person whose requirements are objectively reasonable.

Chambers -v- An Bord Pleanala and Sandoz [1992]

The second case of note was in relation to a preliminary issue in 1992. In this case, the plaintiffs lived within two miles of a proposed pharmaceutical plant. They objected to the application of Sandoz for planning permission. There was much technical evidence heard, including evidence in respect of the potential environmental impact of the
development. The core issue was whether or not the plaintiffs had *locus standi* to pursue their claims.

The reason this had become important is because the Planning Appeals Board (An Bord Pleanala) had denied that the plaintiffs had sufficient *locus standi* to take the proceedings, due to a lack of sufficient interest of the plaintiffs in the decisions and determination of the Bord, the plaintiffs being neither a party to any Appeals referred to in the Statement of Claim, nor observers.

It was held that where a person is an aggrieved person, he has, by definition, *locus standi*; matters such as a failure to make use of other procedures were not relevant to *locus standi*.

The case itself was settled before proceeding to a full hearing on the merits of the case.

**Raybestos Manhattan Ltd [1980]**

In this case the company was discovered disposing of asbestos waste from their factory in Cork in an open dump. Residents protested.

Conditions attached to the Company's planning permission had specified an acceptable method of waste disposal which Raybestos had not adopted. Cork County Council successfully sued the company in the High Court under the planning legislation and obtained a prohibitory and mandatory injunction against it which included terms as to the manner of packaging, transport and disposal of waste.

**Meath County Council -v- Thornton [1994]**

The High Court made an order under the water pollution legislation, requiring a waste disposal company and a director of that company to defray the costs of providing an alternative potable water supply to persons whose well water was contaminated by their waste disposal site.

**General Conclusion**

Until recently legislation tended to be media specific with enforcement being devolved to the local authorities to a large extent which were in some respects unable to deal effectively with enforcement. Consolidation of enforcement powers is being achieved through implementation of the Environmental Protection Agency Act 1992. Where breaches of legislation occur criminal liability is normally imposed. More recent legislation has increased the levels of fines which may be imposed. To date most effective and wide enforcement has been through the water pollution control provisions. A number of prosecutions are brought but the number that are successful is relatively low. Fines are in general low and can hardly provide a deterrent effect. Enforcement measures in other sectors are
widely used but are of somewhat limited effect in terms of environmental restoration.

**LUXEMBOURG**

No major cases dealing with environmental matters have been heard in the civil courts in Luxembourg. Decisions on environmental matters have been heard by the criminal courts, but none have resulted in the allocation of significant damages to civil parties.

Measures such as the demolition of a construction built in violation of environmental legislation have been requested and obtained by civil parties (Trib.Police 17.12.1984, No. 673/84, confirmed by Trib. Lux. 9.7.1985, No.1322/85).

Numerous administrative cases have been dealt with, especially in relation to administrative decisions granting or refusing authorisations to pursue activities or fulfil projects on the basis of environmental legislation.

Problems encountered by civil parties concern, primarily, the admissibility of their claims as well as proof of fault or negligence by the defendant.

**General Conclusion**

In practice civil claims in respect of environmental damage are rare due largely to the cost of litigation, difficulties in proving technical issues etc. Accordingly there have been no major civil claims for damages in civil courts and interest groups tend to operate through lobbying and the media. Criminal courts in practice to encounter environmental matters but have not so far awarded significant damages to civil parties. Most environmental actions are in the administrative courts and administrative authorities are reasonably active in enforcement of the law.

**NORWAY**

The administrative bodies implementing the law seek to settle pollution disputes outside the court by imposing fines and conditions for future polluting activities. The polluter is in most cases willing to negotiate; thus, very few cases have been brought to the courts.

The most well known cases deal with the Protection of Nature Act. The owners of land which has been set aside as National Reservations, have, on several occasions, challenged the authorities' competence to set up the areas in dispute, especially with regard to the extent of the Reservations.

**General Conclusion**

Environmental damage and protection in Norway is regulated by a comprehensive set of laws. Public and political awareness of environmental issues is at a high level. The efficient co-ordination of the work carried out by the various authorities
is regarded as the most effective part of the system. In the opinion of the Ministry of the Environment the legal regime in Norway successfully meets the goals of environmental protection and restoration.

PORTUGAL

The major issues in environmental legal cases are related to water pollution. For example, there is often difficulty in identifying the actual source of the pollution and, therefore the polluter, when there are numerous discharges from different sources into the same water system. This situation of multi-source accumulative damage may also cause difficulty in deciding the size of the penalty to be imposed on the polluter that has contributed to the damage.

Other issues that usually arise (such as the burden of proof for example) are common with other branches of law.

Water Pollution Cases

The factual situation is always similar: namely the discharge of polluted effluent into rivers. There are also some cases where the polluting substances have been discharged into the sewerage system or into the sea.

The main difference concerns the consequences of the polluting act. Sometimes discharges into rivers (as happened in August 1987 involving the company Prazol) result in the poisoning of a large number of fish; in other cases there is only the risk of causing severe consequences.

Generally, the courts consider these types of acts as crimes of "danger", which means that the crime is considered committed even if there are no damaging consequences, it being enough that the mere risk of such consequences occur. Criminal sanctions are therefore applied (imprisonment and/or fines).

An early case regarding stork's nests

One of the very first known cases on environmental regulations having an important impact in public opinion was decided in early 1990. The owner of a rural property was informed by a renowned association for the protection of the environment that there were twenty-seven white stork's nests in three pine trees existing in the property. The owner of the property, in spite of having received notice of this fact, sold the pine trees to a lumber dealer requesting him to fell the trees as soon as possible. The trees were then cut down and, consequently, the nests destroyed.

The owner of the property was sentenced to 87 days of imprisonment or a fine of 135 thousand Portuguese Escudos and also charged to build two supports for artificial nests that will replace those that were destroyed.

Supreme Court ruling on restrictions to property rights
The owner of a rural property intended to drain an area of 50 hectares of flooded land to cultivate rice. The state instituted a legal action against the owner of the land to prevent the draining of the land on the grounds that such area constituted an important natural habitat for birds and other animals. Draining this area would destroy the ecological balance and constitute an enormous loss for the community and scientists.

The first instance court accepted the claim and ordered the defendant to stop the draining of the land. The defendant lodged an appeal against this judgment, alleging basically that the injunction constituted an intolerable restriction to his property rights. Nevertheless, the second instance court confirmed the judgment of the first instance court. Once again, the owner appealed against the judgment, this time to the Supreme Court. In accordance with the decision of the Supreme Court, dated January 17, 1995, the restriction imposed on the owner of the property was held to be unacceptable and, consequently, the judgments of the courts of first and second instance are revoked, allowing the defendant to drain the land and cultivate rice.

**General Conclusion**

Environmental law has developed considerably in Portugal over the last ten years, mainly due to the enactment of statutes regarding the protection of the environment. Until 1986 there were approximately twelve relevant statutes on environmental matters. Since then, in the region of a hundred bills have been enacted.

One other issue that can only be resolved gradually over time, is the attitude of the authorities and the general public towards this relatively new branch of law and the environment itself. Legal actions on environmental law are still uncommon and, consequently, case law is still undeveloped. Nevertheless, environmental issues are growing in importance and it is expected that, within the next few years, the attitude of the Portuguese population towards the environment will be similar to that of the populations of more environmentally aware countries.

**SWITZERLAND**

Examples of leading cases are as follows:

**The Refonda case**

This was a case which attracted much attention. It involved the dumping of waste from aluminium recycling operations in Portugal by a Swiss company, in cooperation with the Portuguese government. The matter was ended after years of negotiation only by agreement between the governments and the private parties concerned.

*URP December 1994 p. 501 and June 1995 p. 177*
In 1990 a construction company demolished a building owned by the town of Zurich on the directions of an architect. As a result, the groundwater was heavily polluted and the clean-up required cost approximately CHF 200,000. The cantonal court imposed 40% of the costs on the architect, 35% on the construction company and 25% on the town of Zurich.

The federal Supreme Court considered that all parties were both active and passive offenders and that even the lessee had to contribute his part to the cleaning-up costs. The cantonal court had to reassess the quotas; it had to consider the responsibility of all the participators.

URP October 1995 p. 527

In a decision of 24 May 1995 the Government of the Canton of Zurich has ruled that the owner must pay for the removal of his construction waste even if the contamination can be traced back to a former lessee (a dry-cleaning company). The owner is appealing to the federal Supreme Court.

URP April 1993 p. 87

The federal Supreme Court clarified in its decision of 18 November 1992, that the polluter pays principle does not always determine the person responsible for anti-pollution measures. The owner or operator of the real estate is responsible for clean-up and primarily carries the costs if the law imposes this obligation on him.

URP June 1994 p.129

An owner wanted to build on his estate, although the critical limit of noise emission was exceeded because of a nearby motorway. He argued that, according to the polluter pays principle, the state (as the motorway owner) had the obligation to reduce the noise emissions from the motorway and had to carry the costs alone.

The courts ruled that this was an exception of the general polluter pays principle: a building permission could only be granted when the noise emission on the real estate was legal. The owner had to pay for the noise protection measures (special windows) on his own unless he wanted to wait until the State has reduced the emissions from the motorway.

General Conclusion

The different legislation and the fact that enforcement is to a large extent directed through the Cantonal authorities uniform enforcement and a general view of effectiveness are hard to achieve. The Cantonal authorities not only lack coordination in some respects but also overlap in their competencies. Both these
problems can cause inefficiency and delay. In general, however, the level of environmental awareness amongst the public and within the authorities is high.

**TRANSBOUNDARY POLLUTION**

The primary international convention dealing with reciprocal recognition and enforcement of judgments is the Lugano Convention 1988, based on the Brussels Convention 1968. The purpose of the Convention is to determine international jurisdiction, to facilitate and expedite recognition and/or enforcement of judgments and to authenticate instruments and court settlements. It applies to civil (and commercial) matters, but not administrative matters. In particular, a plaintiff is able to have an action against a defendant from a foreign jurisdiction heard in a court in the plaintiff's jurisdiction. Further, judgments from one Convention country may be recognised and enforced in another Convention country.

**The Brussels Convention on Jurisdiction and Enforcement of Judgments in Civil and Commercial Matters 1968**

**Parties (ratified)**

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<tr>
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**The Lugano Convention on Jurisdiction and Enforcement of Judgments in Civil and Commercial Matters 1988**

**Parties (ratified)**

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A second important Convention is the Nordic Convention on Environmental Protection 1974 between Denmark, Finland, Norway and Sweden under which individuals are able to use the court system in other Convention countries in cases of transboundary pollution and are also able to bring administrative claims in those countries. This had led to "forum shopping", for example, in the case of Norway and Sweden, environmental groups brought an action concerning pollution by a Swedish company of a boundary river between Norway and Sweden to the courts in Norway where rights of interest groups are stronger.

Recognition and enforcement of foreign judgments may also be based on the Paris and Brussels Conventions on Nuclear Accidents or the Brussels Conventions on Oil Pollution Damage.

Crossborder environmental impact usually requires bilateral or trilateral agreements between the nations concerned, for example following the Sandoz fire, when France, Germany and Switzerland worked together with respect to pollution of the Rhine (see below).

It should also be noted that problems of jurisdictions have, however, arisen intra-nationally between, for example, different municipalities in Denmark. The Environmental Protection Agency has stressed that municipalities are not entitled to order clean-up outside their jurisdictions but it remains unclear how this will affect issues such as crossboundary waste disposal.

In Switzerland, judgments and government orders/decisions of other cantons are routinely enforced, and no special recognition is necessary in other cantons based on an intercantal treaty and/or based on federal legislation.

With regard to the UK its position as an island the scope for cross-border pollution cases is limited. Water pollution could occur across the Scotland/England border or the Northern Ireland/Ireland border, however, no cases arising from such pollution have apparently occurred. A number of concerns have arisen in relation to air pollution. The Swedish government has in the past expressed concern about the effects of a pollution cloud from a fire in Grimsby and similarly a cloud from a fertiliser plant in Northern France threatened to reach South West England. In both cases the pollution dispersed without reaching the land threatened. There is potential for civil claims to arise from this type of situation however due to the geography of the UK causation may be difficult to prove in all but the most major incidents.
Transboundary Pollution Cases

Foundation Reinwater v Sopar NV Court of Appeal of The Hague 19 November 1992

This case concerned an application for the reduction and cessation of discharge of certain chemicals.

Four environmental protection groups (Reinwater) brought an action against a gas tar plant, Sopar. Sopar operates a plant in Zelzate in Belgium which lies close to the Dutch border. The process at the plant involves extraction of pharmaceuticals and dyes from coal. These substances, called polycyclical aromatic hydrocarbons (PAK's) are carcinogenic, slow to degrade, and adhere to sediment. Reinwater claimed for cessation of the discharge or at least the setting up of discharge controls which conform to the best available technology and compliance with the discharge permit levels. Difficulty arose from the fact that there are no existing legally enforceable standards applicable to PAK's even at the European level. The Court therefore declined to apply the EC Framework Directive 76/464/EC which had not yet been implemented.

Although the Netherlands and Belgium have both established environmental plans (the Dutch Indicative Multi-year Water Programme 1985-1989 and the Belgian Environmental Plan and Nature Development Plan for Flanders) the Court held that these documents were not yet legally binding on private citizens or companies and therefore dismissed the Reinwater argument that the Court should determine standards incorporated in these plans.

As there were no legal limits for emission standards which were directly applicable the Court held that Sopar had rights under its permit which had been issued by the Belgian authorities. If Sopar therefore complied with the conditions it would not be negligent. The Court held that this would apply under both Belgian and Dutch law.

This case is important in that it gives parties an effective remedy by which to challenge persons discharging substances under permits and to demand compliance with the conditions of the permit.

Cockerill Case 31 May 1994 Court of Appeal of Den Bosch Case no: KG299/MA

This case concerned discharges of waste water high in pollutants from a plant of Cockerill Sambre SA on the River Meuse. The pollution included high concentrations of polycyclical aromatic hydrocarbons (PAK's). The case brought by Reinwater was that Cockerill had discharged unacceptably high levels of these PAK's into the water which had travelled downstream and caused irreparable damage to the environment. The interest group Reinwater sought a declaration that Cockerill must limit discharges by applying the best available technology that it must take daily measurements and report these to Reinwater and sought that a penalty be imposed on Cockerill.
The Court held that there were no existing standards applicable to individuals or companies concerning maximum levels of PAK's which could be discharged into water. It was held that the EC Directive 76/464/EC on which Reinwater relied was not binding on individuals and the Belgian legislation pleaded only contained target values. It was not disputed that the pollution originated from the Cockerill plant and that it travelled downstream from Belgium into the Netherlands but it was disputed as to what extent this occurred. Conflicting technical data had been submitted by both parties however the Court considered that it had insufficient data to establish whether the interests of Reinwater had been damaged and acquitted the company. The Court of Appeal accepted that Cockerill had complied with all applicable permits and therefore did not assess the PAK discharges. The Court opted to do this, it would seem, due to the lack of any applicable emission standards.

Bier C.S. -v- Mines de Potasse d'Alsace

The case involved liability for polluting the Rhine. The main question was whether the plaintiffs could claim damages in The Netherlands, given the terms of the Brussels convention, or could only do so in France where the pollution was caused.

The Gerechtshof at the Hague referred the question to the European Court of Justice which held that the plaintiff claiming damages in tort could do so in the place where the damage was suffered or in the place where it was caused (ECJ 30 November 1976, case 21/76, ECLR 1976, p. 1735).

Seveso and Sandoz

Two well-known cases are: Seveso (the impact was in Italy, but a Swiss multinational industrial company was involved) and the Sandoz fire (both cases apparently well-known in the EU and handled between the Swiss industrial companies and the Government "by agreement"). The clean-up of the Sandoz Schweizerhalle site was carried out by MBT Umwelttechnik AG, which is a subsidiary company of Sandoz specialising in environmental services. The Environmental Engineering division of this company was established when Sandoz found nobody with the resources and facilities to carry out the clean-up. When it was finally completed in October 1992 it had cost some Sfr 60 million. Following the Sandoz incident the chemicals industry safety standards were revised considerably and awareness increased greatly. Where insurance companies are involved in Switzerland they usually are anxious to settle out of court therefore few details of environmental claims become public. This seems to have been the case with Sandoz. If there were any civil claims arising from the fire they would have been settled out of court.

Following the Seveso disaster in Italy there was a much complicated discussion on how clean-up could be achieved. It appears that the main solution was the construction of a incinerator which operated at over 1000°C and was used to burn the soil and dioxins. This was funded by a consortium of chemical companies with contribution from the state.
14. THE RELATIONSHIP BETWEEN DAMAGES, REMEDIATION/RESTORATION COSTS, REMEDIATION/RESTORATION STANDARDS AND ECOLOGICAL QUALITY STANDARDS

STUDY 1

USA

Damages

Under state tort law, damages are recoverable for injuries to persons or private property caused by various pollution events. Such damages may include: property damage (including diminution in market value, clean-up costs, lost use or enjoyment, and ancillary costs of real estate damage); bodily injury (including present physical injury, increased risk of future illness, costs of medical surveillance, and pain and suffering); emotional distress (including intentional and negligent infliction of emotional distress); medical costs; loss of quality of life; loss of consortium; and economic loss. Punitive damages and injunctive relief are also available in most (but not all) states. At common law, there is effectively a de minimis threshold for nuisance liability in that the law of nuisance requires a substantial and unreasonable interference to give rise to liability.

Under CERCLA, "natural resource damages", (broadly defined to include damage to surface and groundwater resources, air resources, geological resources and biological resources), are recoverable by the government trustees of those resources. The procedures for calculating natural resource damages are still developing and are generating considerable controversy.

Pursuant to CERCLA paragraph 301(c), 42 USC paragraph 9651(c), in 1994 the US Department of the Interior ("DOI") produced regulations on the assessment of natural resource damages that result from oil or hazardous substance releases at 43 C.F.R. Part 11. While difficult to calculate in any particular case, certain types of damages are assessed using relatively well understood techniques. These include the cost of restoring, replacing or acquiring natural resources to replace those which are damaged, as well as compensation for the lost use of the damaged resources (essentially through market value determinations). The US Court of Appeals for the District of Columbia Circuit has rejected the limitation contained in a prior version of the DOI regulations that the "lesser" of these costs be chosen as the basis for the assessment, instead expressing a strong preference for restoration costs, (see Ohio -v- DOI, 880 F. 2d 432, 444 (D.C. Cir. 1989). The same court also found that use value, should be based on nonconsumptive ("passive") uses in addition to market value. (see below). There is no requirement that clean-up costs be incurred in order for natural resource damages to be collected, see New York -v- General Elec. Co., 592 F. Supp. 291, 298 (N.D.N.Y. 1984).

The 1994 regulations provide simplified and complex damage assessment procedures, termed Type A and B Assessments, respectively. In addition to the
damages estimated in accordance with these procedures, claimants may also recover the costs of emergency restorative efforts, reasonable costs of natural resource damage assessments, and interest from responsible parties, (see 43 C.F.R. paragraph 11.15(a)).

CERCLA paragraph 107(c), 42 USC paragraph 9607(c), specifies a limit of liability for natural resource damages associated with "each release of hazardous substance" of $50 million for most types of "facilities", but a separate limit applies to each identifiable release or discharge, and the limit is inapplicable if the release was caused by "wilful negligence", a violation of applicable regulations, or if the liable party fails to fully cooperate with or assist responsible federal officials as requested.

As described in S. Cooke, The Law of Hazardous Waste (paragraph 14.01[10][b]), CERCLA imposes two theoretical limitations on natural resource damage. First, under CERCLA paragraph 107(f)(l), recovery of natural resource damages is barred "where such damages and the release of a hazardous substance from which such damages resulted have occurred wholly before December 11 1980". Courts have limited this provision considerably, by allowing recovery where the potentially responsible party cannot demonstrate that the harm may be divided into amounts occurring before and after the 1980 enactment of CERCLA (In re Acushnet River & New Bedford Harbor, 716 F. Supp. 676, 685-86, 689 (D. Mass. 1989), and where releases to the environment continued after CERCLA's enactment, even though the entire disposal occurred prior to this date (United States -v- Wade, 14 Envtl. L. Rep. (Envt). L. Inst.) 20,435 (E.D. Pa. 1984). Second, associated recoveries for the cost of assessing natural resource damages are limited to "reasonable" costs, and cannot exceed the anticipated damage amount. See Ohio -v- United States Dept. of Interior, 880 F.2d 468, 432 (D.C. Cir. 1989).

The major area of debate has been over a third type of natural resource damage involving injuries to non-market, "passive" uses (such as the knowledge that a pristine forest is there, even if no one ever visits it). Here, issues have arisen over the use of "contingent valuation methodology" or "CVM" to calculate and provide the basis for recovery of such passive use damages. In essence, CVM involves the use of surveys (sometimes involving several thousand responses) to determine how much individual members of the public say they would pay in order to preserve or restore endangered natural resources. Efforts are then made to base liability awards on the results of the survey, which can result in huge levels of damages.

Many criticisms have been levelled against the use of CVM in this manner. They include: that CVM, by definition, calculates only hypothetical damages since the surveyed parties will never be called upon to pay the amounts that they say they would be willing to pay; that it is an unreliable calculation method, leading to different results depending upon the survey conducted; that the result is frequently dependent on the notoriety of the resources at issue; that the surveys consistently overestimate the damages because the interviewees know that they will never have
to pay the amounts they say they would pay; and it can be a very expensive procedure depending upon the scope of the survey conducted.

Some of these difficulties have been recognised by the Clinton Administration. For example, in the 1994 regulations referred to above, CVM was retained as an available method, but only for use where "no use values can be determined", (43 C.F.R. paragraph 11.83(c)(2)(vii)(B)).

Duty of plaintiff to apply damages to remediation

It is generally not necessary for a tort plaintiff to perform clean-up to recover these types of damages. For a comprehensive discussion of these damages, see S. Cooke, The Law of Hazardous Waste paragraph 17.04 (Matthew Bender & Co. 1994).

Remediation/Restoration Costs

CERCLA does not allow the recovery of property damages, personal injury damages, or economic damages such as lost profits, but only clean-up costs and natural resource damages.

The different costs which EPA or private parties may recover as part of their "clean-up costs" has been the subject of considerable litigation. CERCLA authorises the recovery by governmental or private plaintiffs of "response" costs, which are made up of "removal" and "remedial" costs, see CERCLA paragraphs 107(a) and 101(23)(24). In general, removal costs include short-term clean-up actions and investigatory costs, while remedial costs include long-term clean-up activities, operation and maintenance costs of remedial technologies, etc..

Recoverable response costs of EPA have been held by the courts to include the pro-rated salaries and overhead expenses of EPA employees working on the clean-up, EPA's out-of-pocket expenses for clean-up equipment and materials, the costs of EPA's outside consultants and contractors (which perform most of the actual studies, remedial designs and clean-up actions under contract to EPA), governmental attorneys' fees and litigation costs. EPA also generally seeks to recover its "oversight" costs of supervising and reviewing the work of private parties' consultants in cases where the private parties have agreed to undertake the clean-up action. While some courts have allowed EPA to recover its "oversight" costs, others have not, see for example, US -v- Rohm & Haas, 2 F.3d 1265, 1278 (3rd Cir. 1993).

Maxima

The principal limitation on recovery of these costs is consistency with CERCLA's primary implementing regulations, the National Contingency Plan (the "NCP") (40 C.F.R. Part 300). CERCLA paragraph 107 permits government recovery of "all" removal and remedial action costs that are "not inconsistent with" the NCP, along with any "necessary" response costs incurred by other persons that are "consistent"
with the NCP. 42 USC paragraphs 9607(a)(4)(A), (B). Hence if response costs can be shown to be inconsistent with the NCP, then the costs will not be recoverable.

The costs that may be recovered by private plaintiffs under CERCLA are somewhat more limited than EPA's costs. Private parties must show that their clean-up costs are both "necessary" and consistent with the NCP. The US Supreme Court recently held that private parties cannot recover their attorneys' fees and litigation costs in private CERCLA cost recovery actions, see for example, Key Tronic Corp. -v- United States, 114 S.Ct. 1960, 1962, 1964-68 (1994).

In theory, the cost of remediation is limited by the requirement in CERCLA paragraph 121 and the NCP that remedial actions be "cost-effective". In practice, individual companies' ultimate liability may be limited by liability shifting mechanisms such as claims for contribution, indemnification, insurance coverage and in some instances bankruptcy and ability to pay constraints.

Minima

CERCLA encourages the EPA to enter into rapid settlements with liable parties who contributed only small amounts of hazardous substances to any particular site (so-called "de minimis" parties, see CERCLA paragraph 122(g) 42 USC paragraph 9622(g)). de minimis settling parties (of which there are often several hundred at a landfill or chemical disposal site) typically are required to pay a "premium" over and above their pro rata share of liability on account of avoided risks, in order to receive a release from further liability at a site.

Remediation/Restoration Standards

There are no generally applicable national numerical clean-up standards currently available under CERCLA, although some states have recently developed such standards. Rather, under CERCLA paragraph 121, clean-ups are required to be protective of health and environment; utilise permanent treatment technologies to the extent feasible; meet applicable or relevant environmental standards from other programs; and be cost effective.

In general, under CERCLA, a level of remediation is required which will reduce the risk of harm posed by hazardous substances at the site to acceptable levels (that is, no significant risk to health or the environment) for any activity to be conducted thereon (roughly similar to the "multifunctionality" approach in the Netherlands). For example, under current EPA policy, excess lifetime cancer risks ("ELCRs") in the range of $10^{-4}$ to $10^{-7}$ may be deemed acceptable, with an ELCR of $1 \times 10^{-6}$ (that is, one in a million) the usual "point of departure". In addition to this general standard of "protectiveness", clean-ups are required to meet "applicable or relevant and appropriate standards ("ARARs") established under other environmental laws and to be "cost-effective". There is currently no cost-benefit test used to determine clean-up levels, but rather a complex array of 9 decision criteria under the NCP, of which cost is just one (secondary) factor. (NCP, 40 C.F.R. paragraph 300.430(f)). Again, the level of required clean-up and resulting cost is one of the major
legislative issues in the current Superfund reauthorisation debate. The "average" Superfund site currently costs approximately $35 million to study and remedy, with some costing well over $100 million. CERCLA does have a provision for waiver of ARARs in cases where such clean-up is found to be technologically impracticable. See CERCLA paragraph 121(d)(4)(c), 42. USC paragraph 9621(d)(4)(c). However, such waivers have been granted very rarely and EPA policy generally requires an unsuccessful attempt at groundwater clean-up before considering such a waiver.

Recently, EPA has become more sensitive to the increasing criticism of its clean-up approach as requiring excessively costly remedies with little incremental environmental or risk reduction benefit. Thus it has become more receptive to "containment" remedies that isolate, rather than treat or remove, the contamination and to utilising "institutional controls" to prevent exposure as an alternative to extensive clean-ups. In addition, EPA is slowly beginning to accept the conclusion that at many Superfund sites it is simply not feasible to clean-up the groundwater to anything approaching drinking water standards.

This scientific realisation is pushing EPA to be more receptive to technical impracticability arguments. Nevertheless, there is a high degree of resistance within EPA and state environmental agencies to the concept of "writing off" aquifers as not capable of restoration. Rather, EPA continues to prefer to apply the "pump and treat" technology to remove contaminants from the groundwater to the extent feasible, on the premise that some environmental clean-up is better than no environmental clean-up. This approach is strongly supported by the major environmental groups, which vehemently oppose "writing off" aquifers and are not particularly concerned with the cost of trying to meet the current standards.

In fairness to EPA, its current, conservative approach to clean-up standards is largely by the statutory "clean-up standards" provisions of CERCLA paragraph 121, which were added by Congress in the 1986 Superfund Amendments. There is a growing consensus that these clean-up standards are unworkable and it is highly likely that if and when CERCLA is amended and reauthorised the clean-up standards provision will be significantly rewritten and scaled back.

**Ecological quality objectives**

While CERCLA does not itself lead to the setting of ecological quality objectives, it does incorporate those set under other environmental laws into its decisions on clean-up standards. For example, the United States has established standards for air quality, water quality and drinking water quality under the Clean Air Act, Clean Water Act and Safe Drinking Water Act. In determining the appropriate level of clean-up at any particular Superfund site, EPA is required to make reference to these and other ARAR's. Also, CERCLA paragraph 121 requires protection of both human health and the environment, so that ecological receptors and impacts must be considered in selecting remedies at Superfund sites. EPA is currently developing procedures and criteria for ecological risk assessment as part of the "remedial investigation" and remedy selection process.
DENMARK

Damages

Damages awarded under "classical" civil actions cover economic loss associated with damage to property (including in some cases loss of profits and diminution in the value of property). Punitive damages cannot be awarded. Damages may include remediation costs, at the discretion of the court. Non-economic loss is only compensated when expressly provided by statute. There is no *de minimis* threshold for liability.

There is a trend for higher courts to accept that damages should be awarded for diminution in the value of property. In *re ELSAM* (UfR. 1995.131) compensation was awarded against the electricity company, ELSAM, for the reduction in property value caused by the proximity to residential accommodation of high tension cables and pylons on the property.

Further, the re-establishment of a new drinking water supply is not necessarily compensated by damages if the establishment is considered by the court to be an ordinary part of the responsibility of the water supply company. For example, in the second *Phœnix*-case, (UfR. 1989.692H) concerning pollution of groundwater from an asphalt plant, the plant was found liable for clean-up measures to the value of DKr 2.8 million, but not liable for the cost of renewal of water supply, valued at DKr 700,000.

Where environmental damage has been caused to public property under the jurisdiction of the administrative authorities the regulatory authority is only entitled to be compensated for costs involved in remedying the damage and not for the environmental damage itself.

It is not clear whether persons dependant on a clean environment, for example, commercial fishermen or the tourist business are entitled to compensation when damage to the environment (which they do not own or have property in) reduces their income. Until now there has been no case. On the other hand, in a number of cases the higher courts (but not the Supreme Court) have upheld that where streams or lakes have been polluted, local angling and fishing associations are entitled to compensation for restocking with fish (see Danish Farmers Association -v- Danish Angling Association, (UfR. 1988.878)).

The calculation of environmental damage in economic terms (other than clean-up costs) has been the subject of a number of studies in Denmark including a report published under the Environment Protection Act 358/1991 (report number 13, 1994). However, there is no indication of economic evaluation of environmental damage in legislation or in case law. The evaluation of environmental consequences has been until now not in economic terms but in terms of natural resources in the broadest sense.

**Duty of plaintiff to apply damage to remediation**
When the plaintiff is a private person, damages which may be awarded by the court to include clean-up costs can be used for whatever purposes the private person wants. Public authorities are required to remediate the damage for which the compensation is awarded.

**Remediation/Restoration Costs**

Restoration costs can include consultants' fees and the cost of transport, and in the case of administrative authorities, expenses incurred by public officers (see Purhus -v- Minister of Defence (UfR.1995.505H) which has been accepted by the higher court and not disputed at the Supreme Court level. Furthermore, in the second Cheminova-case (UfR.1992.575H) a higher court awarded compensation to the administrative authorities for depletion of groundwater by the defendant which was calculated on the basis of the cost involved in providing a new drinking water supply.

The relative weight and importance of any particular factor will vary according to the facts of the case and decisions are made on a case by case basis. The issue of clean-up costs is being considered by the Committee on Soil Contamination which has not reported yet.

**Maxima**

The question of applying maximum limits to compensation was considered during the preparation of the Act on Compensation for Environmental Damage, 225/1994, but was rejected. In general "necessary and reasonable" costs for monitoring, prevention, clean-up and restoration of environmental damage are taken into account.

In Danish law there is only a maximum limit for liability regarding environmental damage at sea or caused by nuclear accidents.

**Minima**

There is in theory no *de minimis* threshold for liability in Denmark.

**Remediation/Restoration Standards**

The Environmental Protection Act 358/1991 Section 4(4), states that the polluter must "seek to restore the original state of the environment". In almost the same terms the Act on Compensation for Environmental Damage 225/1994 Section 2(4), states that the operator must "re-establish the environment". However, the two Acts and the respective preparatory works to the Acts are silent on the actual level of restoration. In practice, there has not, until now, been a single case concerning restoration of the environment although there have been a number of cases concerning cleaning up the environment.

There are no mandatory clean-up standards. The Environmental Protection Agency has published a number of Guidelines for closed landfills. Guideline 1

(51998936.01)
gives general guidance on the registration and clean-up of contaminated sites. Subsequent Guidelines cover certain industrial sectors such as sites used for wood preservation, tarworks and tanneries. In addition, acceptance criteria have been set under the Environmental Protection Agency for microbiologically cleaned soil.

Despite the lack of binding standards for clean-up on land, the Environmental Appeal Board in one case has interpreted the standards for clean-up as those necessary to make it suitable for the most sensitive use of the land, arguing that any lower standard will limit future use of the area and prevent consequent application of the polluter pays principle, (KTH-case), KFE.1993.293. Despite this ruling, standards for clean-up depend on decisions of the local authorities with wide variations between authorities and consequently, as reported in the press that contaminated soil has been transported from one county to another for disposal.

A register of sites that were contaminated prior to 1976 had been compiled under the Waste Deposit Act, 420/1990. The possibility of producing a comprehensive and up-to-date register of currently contaminated sites is being considered by the Committee on the Contamination of Soil. Denmark also operates a public sector clean-up system under the Contaminated Sites Act 1990. The State bears the cost of clean-up unless fault can be demonstrated. Clean-up levels are related to risk and cost issues in relation to current use.

**Ecological quality objectives**

Ecological objectives are set under the Nature Protection Act of January 3, 1992 in respect of the protection of species, ecosystems and landscape. Permits covering the emission of waste-water from plants or sewage-plants are required to take into account quality standards for pollution of the sea and freshwater, however, this has not yet been demonstrated in practice in the case of freshwater. Air pollution is covered by EU Directives on the quality of air, which, except for Directive 82/884 on lead, are implemented into Danish law. Whether these quality objectives can be enforced in liability cases are disputed and to date, has not been carried out in practice.

**FINLAND**

**Damages**

Damages payable under the Environmental Damage Compensation Act, 737/1994 cover personal and property damage (including consequential losses), pure economic loss (provided that the damage is not minor) and costs of clean-up and restoration. Punitive damages cannot be awarded.

However, as the Environmental Damage Compensation Act 737/1994 only entered into force on 1st June 1995 it is difficult to anticipate what will happen in practice.

**Duty of plaintiff to apply damages to remediation**
According to the general principles of civil law, a person suffering damage or loss has a general obligation to mitigate his loss. In civil claims for damages compensation is not awarded subject to the condition that the plaintiff uses it to clean-up damage, although an administrative body could order the plaintiff to clean-up irrespective of the plaintiff's civil claim (see 3). Under general tort law damages may be reduced if they are unreasonable for the defendant.

Remediation/Restoration Costs

Under Section 6 of the Environmental Damage Compensation Act, 737/1994 costs of clean-up and restoration must be "necessary and reasonable": necessary means measures taken by an individual whose rights have been infringed in order to prevent the threat of environmental damage or in order to restore the contaminated environment to its status quo, together with reasonable expenses incurred by the authorities in preventing damage or in reinstating the environment. These costs also include the expenses of any research and surveys required to assess environmental impact and to plan necessary measures.

The wording of Section 6, the Environmental Damage Compensation Act, 737/1994 seems to cover only costs of restoration measures actually undertaken, and not costs of future measures.

The 737/1994 Act is also silent on what should be done in situations where restoration of the environment is impossible. Section 10 however provides that, if environmental damage renders property unusable by the owner in whole or in part, or if it becomes essentially more difficult to use the property for its intended purpose, the person liable for the damage is under an obligation to purchase the property (or a part of the property) if the owner wishes.

Where administrative clean-up orders are made (see 3) the polluter must reinstate the environment and bear the cost.

Maxima

There is no explicit maximum and the requirement that costs of clean-up must be necessary and reasonable in order to be compensated is not explained in the legislative history of the 737/1994 Act. However, there must be a reasonable balance between the disturbance or the risk for disturbance and the benefit from the measures undertaken (Section 6(2)). In practice therefore the Courts must give some value to the damage and the amount required to clean-up. If the costs of clean-up appear unreasonably high in comparison with the damage then on a case-by-case basis clean-up costs may be limited.

One established legal practice is that the restoration principle would apply; that is, the compensation would be determined according to how much it would cost to restore the environment to how it was before the incident. However, there are no specific guidelines for restoration. This rule is not applicable in situations where the restoration of the environment is impossible. No indication is given of how to
evaluate damage to the environment \textit{per se} economically either in legislation or in case law.

\textbf{Minima}

The 737/1994 Act does incorporate a \textit{de minimis} threshold. Section 4 provides that damage to the environment is recoverable only if it is unreasonable to tolerate the disturbance. When assessing the threshold, among other things, local circumstances, the situation as a whole that led to the disturbance and how common this kind of disturbance is in comparable circumstances must be taken into account.

The obligation to tolerate disturbances is not applicable to personal injury or significant property damage. Neither does it affect damage caused by criminal or intentional behaviour.

\textbf{Remediation/Restoration Standards}

Under the Environmental Damage Compensation Act 1994/737 the principle is that the environment should be restored to its \textit{status quo} prior to the damage. Due to the added fact that restoration cost must be necessary and reasonable it would seem likely that in practice some degree of clean-up deemed desirable in the circumstances of the case will be undertaken. There are at present no specific guidelines on what should constitute restoration.

\textbf{Ecological quality objectives}

No ecological quality objectives are set.

\textbf{FRANCE}

\textbf{Damages}

Damages allocated by the judges may cover damage to persons and damage to property. Damage to persons will include material damage (all costs incurred with respect to death or permanent or temporary disablement, illness etc.); moral damage (for example, granted to the family of the victim in case of death, or granted to the victim who had been injured); loss of opportunity such as, for example, a disablement which prevents the victim from carrying on certain types of activity; and loss of future profits.

Damage to property will include material damage which already occurred (for example, loss of animals and plants); loss of opportunity and/or loss for future earning capacity: for example, in the case of contaminated land, if the land was the object of a "promise to buy" (sale agreement) which is finally not entered into because of the contamination; and loss of future value (opportunity or future profits) from a contaminated landscape.
Case law allows for the recovery of economic loss which does not immediately follow from the damage to the plaintiff's right. In this situation the chain of causation is viewed by the judge on a case by case basis.

Usually civil courts and administrative courts will grant damages to the victim, rather than requiring the defendant to carry out remediation of the damage, although they do so, or at least impose works which improve the situation on occasion. However, when the damage is caused by a listed installation, which is very frequent, the civil judges take the view that they cannot impose measures which could conflict with those taken by the public authorities (for example, closing a listed installation which has been authorised by the administration). This approach derives from the principle that judicial and public authorities are separate and distinct. A majority of French legal scholars criticise this attitude of the civil judges and considers that restoration measures imposed on the defendant would not contradict or impair decisions taken by public authorities nor infringe the principle of separation of powers.

A principle stated in French case law is that the intention behind civil liability is to restore, as much as possible, the balance which has been destroyed by the occurrence of the damage and to place the victim in the situation in which he would be if the damage had not occurred. As a result of such a principle, damages granted by judges must compensate as exactly as possible the prejudice suffered, but without exceeding what is necessary for compensation. There is accordingly no possibility of imposing punitive damages.

As a consequence of this rule, when the deterioration of initial damage continues after the payment of damages, a new action may be brought. Similarly, the judge can reserve the future rights of a third party if it appears from the time of the payment of damages that the damage is likely to continue.

With regard to damage to the "unowned" environment for example, rivers, landscapes, animals or plants, in addition to any damage to their own property (compensated like normal damages to property), interest groups and NGO's may claim damages if the collective interests which they aim at protecting are threatened. The recognition, as well as the scope, of such a right will vary depending on the jurisdiction before which the action is brought. Under such circumstances, the disappearance of certain species (animal or plant) through pollution of particular landscapes may be compensated. The damages awarded to the interest group are to enable them to carry out some form of restoration such as restocking rivers with fish. Normally a judge will allocate a lump sum to the interest group and will appoint an expert to assess the costs and level of restoration required.

**Duty of plaintiff to apply damages to remediation**

There is no obligation for the plaintiff to use the damages that he receives from the defendant to clean-up the contamination.
When determining whether an expense connected with a clean-up operation should be compensated, the judge does not consider the nature of expense but its usefulness in the context of the cleaning up of the site. This admissibility criteria allows all expenses to be taken into account including the cost of technical studies necessary for the conduct of the operation. The victim's loss of profit and that of professionals utilising the environment's natural resources, like all economic loss connected with the pollution is compensated in the same way as the cost of cleaning up. The State will bear the cost of remediation and the level of restoration (and costs incurred therefrom) where the defendant is insolvent or cannot be found. Such cost may then be limited to the minimum level acceptable (at least to contain the pollution and to prevent it from spreading out).

No general scheme exists on how to evaluate clean-up costs but a few attempts have been made in specific fields. French law provides several ways for dealing with environmental damage for which penal fines are not the appropriate remedy given a comprehensive assessment of the damage. In this way the Forestry Code relates the cost of cleaning up forests to the number of hectares cleared (Article 131.1); other penalties are calculated by reference to the cubic metres of soil illegally removed (Article R331.1).

This method is sometimes applied in case law in civil matters; courts ruling on river pollution have awarded the plaintiff compensation calculated by reference to the length and area of the polluted stretch of water, (see for example, TG1 Tars 13 January 1992 in the "Pretext Affair").

Maxima

Liability is only subject to maximum limits in certain fields: these are in relation to oil pollution at sea (Brussels Convention of 20-11-1969 relating to civil liability for damages due to oil pollution (and further amendments) and nuclear liability (Convention of 1960 and French Law 68-943 of 31-10-1968 modified by Law 90/488 of 16-06-1990 relating to civil liability in the field of nuclear power).

Minima

There is no de minimis threshold for liability.

Remediation/Restoration Standards

No pre-defined levels of restoration have as yet been imposed in France. For the time being, each contaminated site is dealt with on a case by case basis. France has a register with about 500 contaminated sites which have been identified as particularly serious and which it is intended will be cleaned up. The register is, however, not a comprehensive list of all contaminated sites.

In a circular of 3rd December 1993, the Minister of the Environment informed the heads of each of the French "départements" (the "Préfets") that the Ministry for the Environment was preparing various mechanisms, such as, in particular, scales for
establishing the urgency of a situation (in respect of contaminated sites), historical inventories of industrial sites and methodological guidelines enabling the establishment of different levels of restoration dependent on the future use of the site (such as, industrial, agricultural etc.).

"The clean-up of each site must depend on the real impact on the environment and on the future use of the site..."

Thorough impact assessments will have to be carried out on the sites which have been identified as contaminated, in order to decide the type of works which should be carried out and the levels of residual pollution, according to the future use of the site. In certain cases, such rehabilitation works may result in the complete clean-up of the site, which will afterwards be suitable for any use. In other cases, the works will only be such that the environmental impact of the site will be reduced to the minimal level which is technically and economically feasible. In such cases, the future use of the site will have to be controlled on a long term basis.

A procedural guideline will define the general framework of the impact assessments using a few standard scenarios as examples.

"... I will propose to my colleagues in charge of Health, Amenities and Agriculture to study the setting of levels of use which would establish, on a case by case basis and for standard scenarios, the levels of clean-up required, depending on the proposed future use."

The 1993 circular also stated that a national geochemical inventory of subsoil components would be discussed. In this respect, it should be noted that, for the time being, the levels of contamination which are used in France, in order to establish whether a soil or subsoil is contaminated or not, are the Dutch levels. However, as a result of the differences between Dutch and French soils and subsoils, it may happen (and actually does sometimes) that the levels of certain mineral substances (for example, arsenic) which exist in French subsoil are higher than normal Dutch levels: however, in such cases, it cannot be said that the soil is contaminated because the mineral substance in question is a natural component of the subsoil and is not due to an industrial activity. Clean-up standards will therefore relate to suitability for end-use, probably based on Canadian rather than Dutch standards.

According to the Ministry of the Environment, the different Guidelines mentioned in the 1993 Circular are nearly ready and currently being tested. They were due to be published by the end of 1995 but are still under discussion.

An example of clean-up concerned a chemical manufacturing site which had been owned by industry for over 100 years. A variety of pollutants were present on the site including cyanide, lead, PAH, heavy metals, styrene and cadmium. The occupiers of the site initiated a remedial investigation feasibility study which studied the contamination and suggested clean-up methods. The local environmental authority appeared unable to deal with the study and no action was
taken. The occupier became concerned about off-site contamination and the potential liability and therefore approached the Government with another form of risk assessment. The Government responded this time with an order for clean-up. The actual measures employed were risk and use related. Methods necessary to contain the contaminants and prevent public access were employed. Actual clean-up was not undertaken partly due to the lack of technology available to deal with certain of the contaminants, containment was undertaken with a view to clean-up in future when the necessary methods are available. Use of the Dutch ABC values for example, would have entailed highly expensive clean-up operations.

**Ecological quality objectives**

Minimum ecological quality objectives are expected to be set which, even in the case of a future industrial use, should restrict contamination from spreading in particular to groundwater and endangering health, in particular of people working on a site. Once again, more details in this respect will be given by future Guidelines.

In the case of a definite action of a listed installation, the standard of ecological quality is set by Article 341 of the Decree 77/1133 of 21 September 1977, which provides that the exploiter has to restore his site to a state such that it presents no danger or inconvenience to the comfort of the neighbourhood or, health, security, public enjoyment, agriculture, environmental protection and conservation of sites and monuments.

**GERMANY**

**Damages**

With respect to a claim for damages under paragraph 1 UmweltHG, paragraph 22 WHG or paragraph 823 BGB, any financial damage is reimbursable, such as, the cost of replacing damaged property. Consequential damage includes tax disadvantages, costs of litigation (costs of legal advice and court fees), expert's costs and lost profits (paragraph 252 BGB): for example, a brewery could not produce beer as a result of impure water and lost profits incurred as a result of a reduced output. Account will also be taken of the fact that "old assets" are being replaced by "new assets" (so-called deduction "new for old") but the time spent by the plaintiff will not be included. Costs of remediation will also be included.

**Duty of the plaintiff to apply damages to remediation**

The injured party does not have to use the money obtained for remediation purposes. He can either remove the damage himself (at lower costs) or he does not have to deal with it at all. He can use the amount obtained for his own purposes.

**Remediation/Restoration Costs**
In certain circumstances, the costs of remediation can be higher than the value of the object impaired or destroyed. Only if the costs of remediation are unreasonable in relation to the value of the object impaired, will compensation which equals the value of the object impaired be paid (paragraph 251(2) BGB). An unreasonable relation exists if the restoration costs are approximately 30% higher than the value of the object. In general, therefore, the person causing the damage is responsible for complete restoration (or he has to pay the costs necessary for such complete restoration). However, there are no absolute clean-up standards, nor will it be related to the suitability for end-use of the property or the object.

In relation to the UmweltHG, the provisions mentioned above will only be applicable in the context of damage to property; in the context of death or personal injury the UmweltHG contains special provisions (paragraph 12-14 UmweltHG) which are similar to the general provisions contained in paragraphs 249 onwards of the BGB.

Compensation by way of damages may only be claimed for definitely proven damage. In those cases in which it is certain that damage has arisen, but in which the level of the damage cannot be determined, the court may estimate the level of the damage. Punitive damages or flat rate damages are, however, not permissible.

Maxima

Liability pursuant to the UmweltHG is (theoretically) limited (paragraph 15 UmweltHG). The person responsible for compensation is liable for personal damage and damage to property to the amount of DM 160 million under both heads. Altogether, therefore, there is a limit of DM 320 million. In practice, however, this is not a real limit as damages very rarely reach this maximum. Otherwise no cap on clean-up costs exists.

Minima

There is, however, no de minimis level for liability.

Remediation/Restoration Standards

In the context of administrative law liability, there are no strict legal absolute clean-up standards, but in the case of ground and groundwater pollution certain standards exist which are used in practice. These standards are contained in administrative directives and serve mainly as a source of information for the competent authorities. These standards generally reflect what experts consider to be necessary in order to avoid danger being caused to ground or groundwater as a result of the pollution. In practice, only in very exceptional cases are these standards not applicable.

Clean-up standards vary from region (Bundesländer) to region. It is necessary for each region to impose standards individually to comply with EU legislation. Until now there appears to have been no co-operation amongst the Bundesländer to develop clean-up standards. They are now however in the process of jointly
developing clean-up standards which will be binding throughout the whole of Germany. These efforts have already taken a while and so far no concrete results have been produced and it is almost inevitable that further revisions will be necessary. It is, however, intended that uniform draft for clean-up standards will be presented this year, as the Bundesländer consider themselves to be under pressure from the forthcoming enactment of the Federal Ground Protection Act (Bundesbodenschutzgesetz).

Up until now, the authorities in the different Bundesländer have been using over eighty different lists. The two lists which have proved to be most useful have been the so called "Dutch list" and the "Sludge regulation" (Klärschlammverordnung). These two lists have been significant in the efforts by the Bundesländer to create uniform clean-up standards. It is, however, likely that the common standards will not lay down any absolute values, but will instead take into account on the one hand the regional background values and on the other hand the future use of the contaminated property and will thereby attempt to achieve greater justice in individual cases.

Ecological quality objectives

The basic ecological quality objective is codified in Article 20 a Grundgesetz (Constitution of the Federal Republic of Germany). According to this constitutional rule, all official authorities in Germany must strive for the protection of the "natural foundations of life". The main reason for this objective is the preservation of natural foundations of life for future generations.

In the context of civil law liability, ecological quality objectives have no significance. It is only relevant in this context whether life, limb, health or property have been damaged as a result of environmental pollution.

Otherwise, ecological quality objectives only exist in the sense that they set the standard for maximum limits which are relevant to administrative control. Thus, the maximum allowable limits for air and groundwater pollution are set according to their respective ecological quality objectives.

According to the Bundes-Immissionsschutzgesetz (Law on the Protection against Emissions), the main ecological quality objectives for air are to protect human beings as well as animals, plants and other inanimate objects against the noxious environmental influences of air pollution and to preserve or restore as far as possible the natural state of the air. The relevant directive for the implementation of the Bundes-Immissionsschutzgesetz, the TA Luft (Directive of Air), lists 130 substances which are potentially harmful to air quality; emissions of these substances must be avoided as far as "state-of-the-art" technology permits.

With regard to the ground, there is no single legal codification which prescribes ecological quality objectives. Many statutes do include such objectives, for example, the Bundesnaturschutzgesetz (Law on the Protection of the Environment), the Chemikaliengesetz (Law on Chemicals), the Abfallgesetz (Law on Waste Disposal) and the Baugesetzbuch (Building Law). The pre-eminent
ecological quality objective with regard to land is to protect it from contamination and excessive use.

The main ecological objectives of the various federal and state laws on water protection in force in Germany are as follows: to secure the use of all water (surface water as well as groundwater) for the welfare of the public and the individual, to avoid all unnecessary influences on it especially contamination by noxious substances such as oil, chemicals etc., and preserve or restore the ecological balance of all water deposits.

The implementation of all these objectives must be proportional to the degree of danger or nuisance originating from the respective environmental influences.

ITALY

Damages

Civil liability covers all damage suffered by the victim including remediation costs. Normally this will include damage effectively suffered and gain not realised as a consequence of the damage. The Supreme Court of Cassation (sent 19.3.92, Set III, imp. Barigazzi) held that damages can only cover identifiable damage affecting the quality of life as a result of change, deterioration or destruction of the environment.

Whenever precise quantification of the environmental damage is not possible, the judge applies equitable criteria to determine the amount of compensation due (Article 18.6 of Law 349 of 1986). He will take into account the seriousness of the fault, the costs for restoration of the status quo ante, the profit obtained by the person liable and, whenever possible, shall order the restoration of the status quo ante at the expense of the liable person. The State is entitled to recover from the latter the costs suffered for the clean-up activities it has performed.

There are no punitive damages awarded under Italian law; compensation covers only damages (out-of-pocket loss, lost profits and lost earnings) which are an "immediate and direct" consequence of any wrongdoing and on costs in connection with the death or illness of persons arising out of polluting events. In practice, damages have been generally assessed at quite low amounts, based upon à forfait calculations. When restoration is not possible, theoretically only monetary damages are payable.

When assessing fault for an environmental accident, courts can (and whenever possible should) order clean-up against the polluter, in accordance with the general privilege embodied in Article 18 of Law 349 of 1986. This could cover the unowned as well as the owned environment, payment of damages being limited to monetary compensation of affected persons for lost profit or the like.

Duty of plaintiff to apply damages to remediation
There is no general obligation for the plaintiff to use the money received as compensation for clean-up.

Remediation/Restoration costs

Costs may include legal and expert expenses provided that they are directly related to the specific pollution event. Costs are calculated by judges during proceedings based on experts' evaluations.

Maxima

The cost of remediation is not capped.

Minima

Liability is not subject to *de minimis* thresholds.

Remediation/Restoration Standards

Italian legislation does not provide for absolute standards. Most frequently, obligations to clean-up contaminated sites derive from plans approved at the competent level (normally the regional level, under Decree-law 361 of 31 Aug 1987, converted into law 441 of 29 Oct 1987) and refer to general duties of conservation and remediation rather than to fixed standards. Some indications may be found in special laws, particularly at regional and local levels:

- Article 2, para 14, of Law 349 of 1986 provides that the Ministry of Environment proposes to "set a ceiling for tolerance and exposure of the environment to indoor or outdoor chemical, physical, biological pollution and noise emissions";

- Lombardy Regional Law 94/1980 provides for the obligation to clean-up the contaminated sites in the event of danger or damage to public health, according to the technical indications stated by the regional governmental bodies;

- Lombardy Regional Law 62/1985 on civil and assimilated discharges provides that the clean-up of the land and drainage surfaces of the facilities utilised for the dispersion must take place at least once a year, starting six months after the coming into force of the law, and include the aspiration of non-percolated liquids, taking of sludges and renewal of drainage materials.

Whether clean-up standards should be absolute or related to suitability for current or subsequent use has been much debated. After a period in which the tendency was more clearly oriented to absolute standards, new trends and discussions appear to be leading to more attention being paid to the actual conditions of use (present and future) of a site.
Italy has at present no registers of contaminated land.

Ecological quality objectives

Ecological quality objectives are not set.

THE NETHERLANDS

Damages

In principle, the injured party can claim damages which will restore it to the state in which it would have been if the pollution had not occurred. This can include clean-up costs, losses suffered and profits foregone.

Further, reasonable costs of preventing or limiting damage and reasonable costs of determining the damage and liability can be claimed. Theoretically, immaterial damage (such as diminished enjoyment of a home as a consequence of noise pollution) can also be claimed. Furthermore, reasonable costs of obtaining a settlement out of court can be claimed if the rules on legal costs are not applicable.

As a rule, damages are normally awarded financially. There is no de minimis threshold for liability. Punitive damages cannot be awarded under Dutch law. In the cases involving claims by public authorities, the hours spent on the case by civil servants can be claimed by the authority according to case-law.

Liability in tort is not subject to maximum limits. The courts however can moderate the damages awarded if award of the total damages would be unreasonable under the circumstances given the type of liability, the relationship existing between parties and their respective financial capacities. The possibility of moderation is expressly repeated in the section of the Soil Protection Act 1994 creating liability for soil contamination. The courts, however, are not ready to apply any moderation if liability is accepted.

The type of liability may be relevant to the extent of damages awarded. In a case involving strict liability for collapse of an oil tank, the Hoge Raad decided that liability was limited to the typical consequences of the collapse of the structure (HR 14 June 1975 in re Amercentrale).

Generally, damage can only be claimed when it is proven it has been suffered or will be suffered. However, it is possible to claim damages before this extent can be established. The court will then first decide whether liability exists. If this is the case, but it is not possible to estimate the amount of damage suffered immediately, the court will award damages to be established in a special procedure. After cleaning up has taken place, the plaintiff must specify the costs he has made to the court. Once it is properly verified these costs have been actually made, the court will order the defendant to pay the sum involved. In this way, all clean-up costs made are awarded in practice.
Duty of plaintiff to apply damages to remediation

The plaintiff is not under an obligation to clean-up if he claims costs. It is, however, highly likely that he will clean-up, as the relevant public authorities will probably have administrative powers to force him to do so. Public authorities claiming costs are usually under a statutory duty to clean-up.

Remediation/Restoration Costs

Clean-up costs include all costs directly involved with cleaning up, such as costs of technical investigation and work undertaken, consultant's fees, costs of temporary measures, personnel costs (including those of civil servants if a governmental authority is claiming), publicity costs, etc. A list of costs which may be seen as clean-up costs in case of clean-up by governmental authorities, is included in the "Circulaire Inwerkingtreding saneringsregeling Wbb Tweede Fase", p. 14-17. Not included in clean-up costs are: accountant's costs, lawyer's fees, costs of work undertaken at the same time as cleaning up but for a different end, loss due to diminished end-use possibilities and damage caused by cleaning up. Some damage which does not come under the costs of cleaning up, can nevertheless be claimed in court proceedings, such as loss of profits.

If costs other than clean-up costs are claimed, the plaintiff will have to prove he has suffered this damage. If sufficient proof is provided, the claim can be awarded. Abstract calculations of ecological damage will not be followed.

However, where there is an obligation to replant trees illegally cut down, the administrative courts use a method in which the financial value of the trees cut down can be established.

Maxima

Special legislation does create limits of liability in certain cases.

In relation to liability for ships a number of different maximum levels exist. In cases of personal injury liability is limited to 33,000 SDR's for ships to 500 tons plus 500 SDR's per ton between 501 and 3000, 333 SDR's per ton between 3001 and 30,000 plus 250 SDR's per ton between 30.001 and 70.000 plus 167 SDR's per ton above 70.000.

In cases of material damage, liability is limited to 167,000 SDR's for ships to 500 tons plus 167 SDR's per ton between 501 and 30,000, plus 125 SDR's per ton between 30.0001 and 70.000 plus 83 SDR's per ton above 70.000.

If liability arises for the costs of removal of a shipwreck, other limits exist.

Where transport of hazardous substances is undertaken liability can be limited to an amount of 18 million SDR's in case of death or personal injury and 12 million SDR's otherwise. A fund must be formed in the same manner, as required for limitation of liability involving ships.
Where ships are carrying oil in bulk liability is limited to 133 SDR per ton with a maximum of 14 million SDR's. A fund can be formed with the "Arrondissementsrechtbank" in Rotterdam. A protocol to the Civil Liability Convention of 1969 exists, raising the limit of liability to 3 million SDR's for a ship of up to 5000 tons and 420 SDR's extra per ton with a total amount of 59.7 million SDR's. This protocol will come into force in The Netherlands on 30 May 1996; if the damage exceeds the amount of 14 million SDR's, the plaintiff can file a claim with the "Arrondissementsrechtbank" in Rotterdam against the international fund created by the Treaty of 1971.

Liability for the operator of nuclear installations is subject to a maximum of 625 million guilders at the present time. The maximum amount can be changed by Decree if higher insurance makes this possible. If the damage is higher than 625 million guilders, all states party to the Treaty of Brussels of 1963 will complete the amount according to a certain formula up to a maximum of 300 million SDR's per accident. If an accident occurs on Dutch territory, the State of The Netherlands will guarantee a maximum amount of 5 billion guilders.

The operator of a nuclear ship is liable up to a maximum of 10 million SDR's.

A maximum liability for the operator of the Pernis-Antwerp pipeline can be stipulated by Decree.

There is no general statutory or judicial maximum for clean-up costs. Legal costs are statutorily capped as they are calculated by the courts through a formula dependent on the amount of work involved in a case.

Minima

There is no de minimis threshold for liability.

Remediation/Restoration Standards

Clean-up standards for soil pollution are given in the Soil Protection Act 1994. Article 38 Section 1 of the Act stipulates that the functional properties of the soil for man, plant or animal life are maintained or restored (so-called "multifunctionality").

Article 38 Section 1 gives the possibility of exceptions to full restoration of the functional properties of the soil. Circumstances under which clean-up may take place to standards other than full restoration, can be given in a Decree. This Decree has not yet come into force. Until it does, clean-up standards are given in two governmental policy documents, the "Circulaire Interventiewaarden bodemzorg" of 9 May 1994 and the "Circulaire Inwerkingtreding saneringsregeling Wet bodembescherming Tweede Fase" of 22 December 1994.

These governmental policy documents give so-called "intervention values" and "target values" for a great number of polluting substances. If an intervention value is exceeded, clean-up will usually be necessary. In some cases in which particular
risks of exposure to the polluting substances exist, clean-up may be necessary even
if the intervention values are not exceeded. The target values form the maximum
acceptable concentrations of these substances after cleaning up.
The values in the document are scientifically determined on the basis of the
substance's human and eco-toxicological properties. They must be calculated in a
specific case taking into account the type of soil involved.

Under certain circumstances the competent authorities may decide
multifunctionality need not be achieved by cleaning up. This is the case if special
environmental, technical or financial circumstances exist making cleaning up to
the target values impossible or unacceptable. Such environmental circumstances
exist if cleaning up would mean a great risk of hazardous substances escaping,
causing extreme danger to the surroundings. Also, existing legal landfills will not
be cleaned up to target values. Technical circumstances exist if the costs of
cleaning up to target values would prove excessive compared to the cost of
isolating, controlling and regularly checking up on the pollution. Tables are given
to calculate whether the cost of total clean-up compared to isolating the pollution
can be said to be excessive. For example, for costs of total clean-up up to 10,000
Dutch Guilders, the case is excessive if isolating would be nine times cheaper
(costing 1,100 Dutch Guilders). For costs up to 100 million Dutch Guilders this is
the case if isolating the pollution would be one and a half times cheaper (costing
66 million Dutch Guilders).

If special environmental, technical or financial circumstances exist as indicated
above, the person cleaning up does not need to remove all pollution to target value
levels. Measures to isolate, control and regularly check up on the pollution then
suffice. Suitability for all end-uses is then not achieved, the objective is to
continue current use without unacceptable risk.

In summary, the starting point is that cases of serious pollution must be cleaned up
to make all end-uses possible. Current use only plays a role in deciding in advance
when clean-up must take place. Under certain special circumstances, isolating,
controlling and regularly checking up on the pollution suffices. If measures to
achieve this are taken, the objective is to continue current use without
unacceptable risks.

The new standards for clean-up under the Soil Protection Act 1994 in the
Netherlands are an up-dated version of the well known ABC values. The new
intervention values are the equivalent of the old C values and set levels of
substances which are considered dangerous and require clean-up. The new target
values equate to the A values which set the target levels for substances at naturally
occurring levels. The old B values were levels for which further investigation was
required before decisions on clean-up could be made. These have been replaced
by a formula based on substance quantities. The formula takes half the
intervention value and adds the target value to reach a quantity figure from which
it can be decided if further action is needed. The system under the Soil Protection
Act 1994 has merely adapted the ABC system that operated under the Interim Soil
Clean-Up Act 1983 and has brought the values up to date, most being brought
down and so becoming more strict.
In the Netherlands there is no actual register of contaminated sites however since the entry into force of the Soil Protection Act 1994 there has been a shift from the responsibility for investigating and identifying contaminated sites from the authorities to private parties. The results of investigations must be supplied to the authorities who take a view on whether or not action is required. The fact that the matter has been considered and there is information on the site is recorded at the land registry. This only applies from 1994 onwards and therefore cases prior to 1994 have not been so recorded.

As well as standards for soil clean-up, there are also standards for water quality.

Water quality standards are related to the functions of the body of water involved, for example, drinking water, recreational use, etc. Contrary to the standards for soil pollution therefore, multifunctionality is not always the basic norm. Maximum emission values are given in Decree based on the Surface Water Pollution Act ("Wet verontreiniging oppervlaktewateren"). The competent authorities may not permit emissions above these values. Where higher emissions were permitted under old permits, the Decree lowers these amounts automatically. Violations of the permit conditions are dealt with through administrative law.

Clean-up in practice tends to involve engineering solutions such as excavation of soil followed by heat or chemical treatment which is then either returned or disposed of elsewhere. In situ methods such as biotechnology treatments are rarely used. Generally remediation will be actioned around 3 years from the discovery of contaminated land and future use has a bearing upon the remedy chosen.

An example of a site on which remediation was carried out was an old industrial site in the port of Rotterdam. The soil contamination included hydrocarbons, chlorine, and clinker residues. The lessee of the site, whose operations had caused only part of the damage, left the site and the Port Authority used the terms of the lease to require clean-up which it then undertook itself. The three options were removal, containment or in situ treatment. After little sampling, removal was chosen. More soil than expected was excavated washed and replaced.

For the second stage of clean-up the Port Authority handed control to the state authorities who under the legislation can reclaim all costs incurred. At this second stage the options were excavation, containment or biotechnology treatment. Although the lessee pushed for containment, excavation was chosen by the State. The excavation was taken quite deep although there was less pollution at the lower levels. The multifunctional approach chosen was not normal and there was no consultation with the lessee. It would appear therefore that this approach was taken because there was a private business available from which clean-up costs could be claimed. The problem here was that the issue of whether the action taken was excessive only arose after clean-up when the money was paid and the evidence of the condition of the land was gone. The amount spent on clean-up was not only arguably excessive in terms of future use but surrounding sites were
also all contaminated so the cleaned up soil is likely to be recontaminated to some extent.

Ecological quality objectives

No general ecological objectives are set.

SPAIN

Damages

Civil liability covers all damage suffered by the victim. This may include two different general concepts: the damage effectively suffered (*damnum emergens*, among which clean-up costs may be included) and the gain that the victim has not realised as a consequence of the damage suffered (*lucrum cessans*). Punitive damages do not exist under the civil liability regime, since the aim of this type of liability is the repairing of damage effectively caused and not the sanctioning of unlawful actions.

There is no civil rule as to how environmental damage should be evaluated. However, Article 100 of Law 22/1988 on Costs, establishes that if the damage to be repaired is difficult to evaluate, the following criteria should be taken into account: theoretical cost of the restoration; value of the damaged goods; cost of the project or activity that has caused the damage; profits obtained from the infringing activity. Where the profits exceed the compensation, the latter shall be, at least, equal to the former.

Under the administrative system, damages will be expressly provided for by law and regulation.

Duty of plaintiff to apply damages to remediation

Case-law has created the obligation on the victim to mitigate damage within reasonable limits. Theoretically, this might imply, to environmental damage, an obligation on the plaintiff to clean-up if, by doing so, the damage is materially reduced. Currently there is no obligation on the successful plaintiff to clean-up, however, as yet there is no case law on the issue.

Remediation/Restoration Costs

Most administrative laws contain a provision giving authorities the power to order restoration. The Law on Toxic and Hazardous Waste which provides for the clean-up of a site and stipulates that factors such as the value of the site and the benefit the defendant derived in polluting the site, will be taken into account. The level of cost to be incurred in cleaning up is in theory not limited. In practice the administrative authorities seem to simply order restoration without giving any guidance as to how and to what level. The authorities have the power to carry out clean-up and reclaim the cost but in practice they order the polluter to do so.
To date, the courts have not addressed the situation where restoration of the environment to its former state before the damage occurred is not possible.

Maxima

The only maximum limit on liability relates to liability derived from nuclear damage (Article 45 onwards of Law 25/1964).

Minima

Apart from a law in the Catalonian territory (Law 13/1990, of the 9th July) which provides that, amongst other things, any owner must tolerate emissions coming from a neighbouring site, if the emissions are not damaging or cause interference which is not substantial, there is no legal de minimis threshold in Spain, further, there appears to be no such de minimis threshold provided for by case law.

Remediation/Restoration Standards

In practice, clean-up standards are related to the use of the site in question, as determined by its specific circumstances. There are no set standards or guidelines given to which clean-up standards should be applied for given end uses. It would appear that in practice, in view of the normally excessive costs of an absolute clean-up, an agreement is usually reached to allow a "reasonable" clean-up. It has never been expressly acknowledged that restoration is not at all possible; restoration always takes place in consideration to the available technique, financial resources and final use of the site. The actual method of clean-up used depends on the seriousness of the damage and the type of pollutants involved. If the damage cannot be cleaned up by in situ treatment, then the soil must be removed and treated. If the soil still cannot be cleaned or if the substances involved are too dangerous and the technology is not available to remove them, the soil will have to be dumped.

Administrative laws contain criteria for establishing liability, but in practice no civil courts use them. Indeed, as explained above, the goal of civil liability is the total repairing of the damage caused, so that in theory (and in practice, at least for the time being), civil courts have not used any standards to decide how "clean" is clean.

Ecological quality objectives

No ecological quality objectives are set.

SWEDEN

Damages

Damages payable under the Environmental Civil Liability Act 1986 may include depreciation in the value of property, loss of profits and clean-up costs. It is also possible for an action which has commenced under the 1986 Act to be transferred
to the administrative court and authorities to determine the necessary level of clean-up. Punitive damages cannot be awarded.

**Duty of plaintiff to apply damages to remediation**

Under the Environmental Civil Liability Act 1986 and the civil liability system there is no obligation to clean-up with the money received as damages. However, in practice it is likely that the administrative authorities will exercise their powers to require clean-up.

**Remediation/Restoration Costs**

Under the Environment Protection Act 1969, clean-up costs must be reasonable according to the principle of BATNEEC. There is no maximum limit. Costs of remediation may exceed the price of value of the land.

The Environment Protection Act 1969 is based on the principle that precautionary measures must be taken continuously throughout the operation of an activity. When the operation comes to an end, clean-up is the last step to be taken. The deemed costs of precautionary measures, including the final clean-up, can be limited to that which a "normal" company in the same industrial sector could financially bear (SW paragraph 213). Such costs must also be reasonable according to a "cost benefit" analysis. There is no specific rule on how to estimate these costs. Sometimes it involves negotiation between the operator and the authority with the Licensing Board acting as an arbitrator, for example, whether the level of restoration should depend on the intended use of the land.

On the question of what is "reasonable" under the Environment Protection Act 1969, if the costs of clean-up are not reasonable according to the benefit that will be derived from the measures taken, only those measures that are needed from an environmental point of view should be required. It is not necessary to address damage which is not harmful to the environment. Where the operator argues that it is not necessary to use the best available technique in performing the clean-up, he must prove that this is not necessary. An example is as follows:

Having required an operator of a plant to determine the environmental effects of waste water discharges containing chlorinated substances, the Licensing Board ruled (147/89) "that it is difficult, if not to say impossible, to fully clarify the risks when such a complex discharge, is emitted into a complex receiving body. The investigation can thus, in principle, normally only state that the effects of the discharge on the receiving body are unacceptably large. It cannot, when the situation is complicated, have enough information on the question of whether the discharge is acceptably small. This means that the investigation can only 'convict' and not 'acquit'. Thus, even if no dramatically adverse effects have been recorded, the best available technique must be used."

On occasion, the advantages of allowing a polluting operation to continue may be deemed to outweigh its disadvantages with respect to damage to the environment.
The Licensing Board regarded the discharge of zinc from the factory into Lake Vänern (Sweden's largest lake and the third largest in Europe) as seriously damaging to the environment. However the Board decided that, as the factory was important to the national economy and provided employment in a depressed area, the operation was allowed to continue, with the proviso that the factory reduced the discharge of zinc.

All costs are potentially included in clean-up costs as long as they relate to economic loss, are reasonable and include the actual costs of clean-up, legal costs, technical reports, temporary removal to another dwelling if necessary etc..

Maxima

There are no maximum limits although clean-up costs must be reasonable according to BATNEEC.

Minima

Under the Environmental Protection Act 1969 there is no de minimis threshold for liability. Under Environmental Civil Liability Act 1986 pure economic loss must be of "some importance" to be recoverable.

Remediation/Restoration Standards

There are no standards of clean-up in the Environmental Civil Liability Act 1986, the principle being that the remedy should be enough to restore the value of the property to what it was before the damage. If the damaged property cannot be properly cleaned up to the standard it was in before the damage occurred the plaintiff can demand that the defendant purchases the property.

According to Section 5 in the Environment Protection Act (1969:387) anyone performing or intending to perform environmentally hazardous activity has a duty to remedy detrimental effects after the activity has ceased. The remedial measures to be taken shall be such as may reasonably be demanded. The measures are decided for each individual case according to the prerequisites in the specific case. The requirements for environmental protection shall be continuously adjusted to what at each time can be considered as reasonable. There are no general guidelines or regulations regarding what state the site should be put into but the National Environment Agency (Statens Naturvårdsverk) has drawn up certain recommended values (riktvärden). These recommended values are not binding. A specific judgment is normally made in each specific case. The intention is not necessarily that the damaged site is put into the condition it had under earlier uninfluenced conditions. In many cases the site is changed considerably. The site can be given a shape and a vegetation covering which is in harmony with the landscape or be put to another use, for example, as a ski slope. The measures which are required are to a great extent connected to the nature of the site and to its intended use in the future. Often the word after-treatment ("efterbehandling") is used instead of remedial measures.
Sweden has no register of contaminated sites but in November 1995 the National Environment Agency published a report listing about 200 "orphan" sites which will be cleaned up by the government.

**Ecological quality objectives**

Swedish legislation has set no general quality objectives. However, Sweden is now a member of the EU and EU standards are being brought into the Environment Protection Act 1969. Sweden is in the process of incorporating EC Directives into its law and implementing all EU legislation including the environmental legislation.

**UK**

**Damages**

Clean-up costs are taken into account in awarding damages but are not awarded in addition to damages. The plaintiff will be entitled to recover those losses resulting directly from the breach of duty of care and/or the nuisance and/or the escape of polluting substance. Damages in negligence and nuisance are designed to put the plaintiff in the position he would have been in had the breach of duty not taken place. He will be entitled to recover those losses which were a reasonably foreseeable consequence of the breach and which flowed naturally from the breach. There is a body of case law on this point. Under common law, punitive damages are not normally imposed.

**Duty of plaintiff to apply damages to remediation**

There is no duty on a plaintiff to put any damages received towards remediation of environmental damage.

**Remediation/Restoration Costs**

Where a claim is brought under civil law for the cost of clean-up resulting from the commission of a tort, common law rules apply for assessing to what extent this cost is recoverable. In general where damage is shown to have been caused which is foreseeable the aim of damages will be to put the plaintiff back in the position he would have been in had the tort not been committed; this will generally be either the cost of remedial action or the diminution in the value of the land.

Costs incurred by a regulatory authority in clean-up operations are generally recoverable under statutory provisions for example Section 161 Water Resources Act 1991. Under Section 161 of the Water Resources Act 1991, costs which are recoverable are those which are reasonably incurred.

Similarly, under the contaminated land provisions of the Environmental Protection Act 1990, the costs which are recoverable pursuant to clean-up undertaken by the regulatory authority, are those which are reasonably incurred. NRA policy on
recovery has generally been to seek costs relating directly to investigatory, remediatory and aftercare work. In deciding whether to recover costs and if so how much, the enforcing authority is to have regard to any hardship which the recovery may cause and any guidance issued by the Secretary of State.

The Environment Act 1995 provides at Section 39 that the Environment Agency, in considering whether or not to exercise its powers and how such powers are to be exercised, shall take into account the likely costs and benefits of any such exercise or non-exercise of the power unless it is unreasonable to do so in view of the nature or purpose of the power or in the particular circumstances. Guidance on sustainable development which is to be issued by the Government under Section 4 of the Environment Act 1995 may be relevant in this regard.

Normally, there would not be an obligation on the plaintiff to clean-up. For example, in the Cambridge Water Company case, damages paid to the water company covered their costs involved in establishing a new source of water and the previous source of water remained polluted. It is understood that the NRA, the regulatory authority with the responsibility for protecting water resources, has required the defendant in the Cambridge Water Company to clean-up its contaminated site and the polluted water.

**Maxima**

Where civil liability is established there are no maximum limits to the damages recoverable, subject to the rules on remoteness of damage i.e. the plaintiff must be able to prove his losses resulted from the defendant's tort. Economic loss is generally not recoverable in tort.

**Minima**

There is no *de minimis* threshold to damages that may be recovered. However, claims in the County Court are subject to a £3,000 arbitration limit: where a claim is worth less than £3,000 the parties are encouraged to litigate without legal representation and legal costs will not be recoverable, even by the successful party.

**Remediation/Restoration Standards**

To date remediation standards have most commonly been imposed under planning (land use) legislation when a site is to be developed or where the use of a particular site is to be changed. Permission is required from local authorities to carry out such development and in granting their permission may impose certain conditions, one of which may be the standard to which the site must be remediated (Ref. Planning Policy Guidance 23). Guidelines have been produced in the UK by the Inter-Departmental Committee on the Re-development of Contaminated Land (ICRCL), which is an advisory body to local authorities and others who seek to redevelop contaminated land. Whilst these are intended for use in assessment of sites, they are often incorporated into clean-up standards required under the planning legislation. These were originally produced in 1983 and updated in 1987 (Ref. ICRCL).
In the ICRCL guidelines, which have no statutory force, trigger concentrations which are correlated to the intended use of the site, are assigned to various contaminants. If samples from the site show values below the trigger concentration, it is deemed reasonable to regard the site as uncontaminated and for no remedial action to be required. The ICRCL guidelines are generally regarded as inadequate, especially with regard to the neglect of the impact on groundwater and the government is committed to producing new guidelines for assessment (Ref. CM1161).

The "Framework for Contaminated Land" states that the government is committed to the "suitable for use" approach to the remediation of contaminated land. Remediation notices under the Environment Act 1995 will require things to be done by way of remediation which the local authority considers reasonable having regard to cost and the seriousness of harm or the likelihood of pollution of controlled waters. In determining what is to be done, the standard to which land is to be remediated and what is to be regarded as reasonable, the enforcing authority is to have regard to guidance to be issued by the Secretary of State. This guidance will reflect the "suitable for use" approach (see Section 78E(5) Environmental Protection Act 1990 inserted by the Environment Act 1995 and the Framework for Contaminated Land).

Ecological quality objectives

The Water Resources Act 1991 provides for the setting of Statutory Water Quality Objectives (SWQOs) to maintain and impose the quality of controlled waters. The Secretary of State may prescribe a classification system for water quality: SWQOs may then be set, requiring that a stretch of water meets a particular classification by a specified date. This will be achieved through the exercise of pollution control powers by the regulatory authorities for example, setting of appropriate discharge consents by the National Rivers Authority.

A classification system for river quality has been prescribed by The Surface Waters (River Ecosystem) (Classification) Regulations 1994 (SI 1994 1057) and a pilot programme for a number of SWQOs will be conducted to assess their practical operation.

SWQO's may be established for groundwater in the same manner as for other controlled waters, pursuant to the Water Resources Act 1991. The National Rivers Authority's "Policy and Practice for the Protection of Groundwater" states that it is intended that SWQOs for groundwater should be established after those for rivers. In setting appropriate standards for groundwater, it will be necessary to take SWQOs for surface waters into consideration.

Air quality standards for sulphur dioxide and suspended particulates, nitrogen dioxide and lead are established by EC Directives 80/779/EC, 85/203/EC and 82/884/EC respectively. These Directives are implemented in the UK by the Air Quality Standards Regulations 1989 (SI 1989 317, as amended). The Ozone Monitoring and Information Regulations 1994 (SI 1994 440), which implement
EC Directive 92/72/EC, set ozone concentration thresholds and require that the public is notified and health advice given if these thresholds are exceeded.

The Government has established an Expert Panel on Air Quality Standards to recommend air quality standards for the UK. To date, standards have been recommended for ozone, benzene, carbon monoxide, sulphur dioxide, particulates (PM$_{10}$) and 1,3-butadiene. The policy paper "Air Quality - Meeting the Challenge" sets out the Government's intention to establish a programme to review and put in place national air quality standards for ozone, benzene, 1,3-butadiene, sulphur dioxide, carbon monoxide, nitrogen dioxide, particulates, polycyclic aromatic hydrocarbons and lead.

The Environment Act 1995 at Part IV provides for the Secretary of State to establish a national air quality strategy with respect to assessment or management of the quality of air. It requires setting of both general and substance specific quality objectives. There must be prior consultation with the Agency as well as other appropriate bodies and the Agency must have respect to the strategy in discharging its pollution control functions.

Part IV of the Environment Act 1995 also requires local authorities to review the air quality and to consider whether the objectives will be reached. If the objectives set are not being achieved the local authorities must carry out a study and produce an action plan with deadlines for implementation of the improvement measures proposed.

The Secretary of State may at any time review air quality in any local authority area and require implementation steps.

The Environment Act 1995 also provides for regulations to be passed to provide for a wide range of powers and duties in relation to air, including setting objectives and substance specific quality standards.

As yet the Environment Act 1995 merely provides the administrative framework. The comprehensiveness of the quality standards will depend on the strategy and any regulations issued while guidelines from the Secretary of State will affect how the system operates.

**STUDY 2**

**AUSTRIA**

**Damages**

Personal injury, damage to property and pure economic loss due to an intentional act are recoverable. Pure economic loss is not recoverable in negligence. Liability for damages thus includes medical expenses, loss of earnings (usually for gross negligence), damages for pain and suffering and compensation for damage to property. Damages include clean-up costs.
Theoretically the guilty party is obliged to restore the land to its former status. Where this is impossible a monetary fine will be imposed. In practice, however, only a monetary fine is imposed. Punitive damages are not available.

Duty of plaintiff to apply damages to remediation

Under current Austrian law, the plaintiff has no responsibility to apply damages received to clean-up. However, under certain circumstances, the plaintiff may be ordered by the administrative authorities to clean-up.

Remediation/Restoration Costs

Clean-up costs awarded to a plaintiff may not exceed the total value of the property. Where there has been a breach of environmental regulations the authorities may order the party at fault to fund restoration. Restoration costs consist of all the costs necessary to assess to status of the site, carry out tests and remove and destroy contaminated material.

Maxima

Compensation for damage (including clean-up costs) to property is limited to the value of the property although in theory liability is not subject to a maximum.

Minima

No de minimis threshold for damages exists.

Remediation/Restoration Standards

In practice, it appears there are no specific standards set for clean-up, just suitability for end-use as determined by the authorities based on expert opinion. When restoration is not at all possible the authorities have the option to ask for measures which prevent any deterioration of the current status. The calculation of clean-up costs includes the cleaning up of the polluted area and the costs for destroying or recycling the polluted material.

BELGIUM

Damages

Damages must be direct and personal, although these criteria have recently been expanded by the courts (on the basis of Article 714 of the Civil Code concerning collective goods), so that the aesthetic or the ecological value of a "good" can be taken into account when evaluating the damages: for example, a formula has been devised by the administrative authorities to estimate the value of old trees. Punitive damages are not awarded by Belgian courts.
The plaintiff normally has the right to claim restoration to the previously existing situation. However, this is not always technically feasible or can be deemed to be abusive, if the clean-up costs are for example higher than the value of the property.

Duty of plaintiff to apply damages to remediation

There is no obligation on a successful plaintiff to remediate environmental damage. The damages are simply awarded to compensate the plaintiff’s loss.

Restoration/Remediation Costs

Under the Flemish decree of February 22 1995, the defendant may be liable for the following costs:

- determination of the location and vulnerability to environmental damage of the site;
- assessment of the contamination of the land;
- the clean-up itself;
- all possible damage caused by the above activities (extension of contamination, etc.); and
- any restriction of use due to the contamination.

Maxima

No maximum thresholds for liability exist.

Minima

No minimum thresholds for liability exist in theory.

Restoration/Remediation Standards

Under Flemish decree of February 22, 1995, Article 8, remediation will be required according to standards which are still to be given in more detail by the Flemish Government. The clean-up standards will be based on the level of soil contamination, above which serious prejudicial effects on man and the environment would be caused. The standards will vary in accordance with the characteristics of the land in question. The objective of the clean-up is the achievement of "standards of soil quality" to be elaborated on by the Flemish Government. This "standard" will be independent of the intended or actual use of the soil and will reflect the level of "contaminants" found in nature.

For soil contamination having occurred after the entry into force of the Decree (October 29, 1995), clean-up will have to be carried out when the level of soil contamination exceeds the standards. Until such standards exist, clean-up must be carried out when the "soil contamination constitutes a serious risk".
With regard to historic contamination (which occurred before October 29, 1995), a system of assessment for each individual case has been provided under the Decree and clean-up will be required when "soil contamination constitutes a serious risk".

The concept "soil contamination that constitutes a serious risk" is defined on the Decree. It means:

- level of contamination which will or could cause prejudice to the health of man, plants or animals; or
- soil contamination that could cause damage to (pollution of) water;

The assessment of the seriousness of the risk takes the following factors into account: features of the soil, the nature and concentration of substances or organisms present, the risk of it spreading, the use being made of the soil, the danger to man, plants, animals or water. Further, the BATNEEC principle is applied. If the minimum clean-up requirements cannot be met despite the use of BATNEEC, a higher quality of the soil must at least be achieved and any risk of danger due to the contamination must be removed. Where restoration is not possible despite state-of-the-art measures not entailing excessive costs, restrictions of use or other limitations shall be imposed on the owner or user of the land (Article 5).

**GREECE**

**Damages**

Whether or not damages and costs will be imposed and to what extent, is at the discretion of the courts and administrative authorities. Damages under tort law cover pecuniary losses, personal injury and pain and suffering. Compensation for ecological damage cannot be claimed as no economic loss has occurred to the plaintiff of the surroundings is not compensable.

**Duty of plaintiff to apply damages to remediation**

Where a plaintiff is paid damages there is no obligation to use those damages for the purpose of clean-up or restoration.

**Remediation/Restoration Costs**

In calculating clean-up costs, factors such as the costs, of the services employed, materials etc. are taken into account.

**Maxima**

Greek legislation does not provide for a maximum liability threshold. Theoretically liability is unlimited.

**Minima**
There are no *de minimis* thresholds in Greek legislation. In theory any damage may be compensated.

**Remediation/Restoration Standards**

Damage restoration and clean-up standards vary, according to the type and extent of the pollution, and the environmental value of the site damaged. Competent authorities try to effect clean-up/restoration to the extent that such clean-up/restoration is possible.

**ICELAND**

**Damages**

Tort law provides that the defendant shall compensate all the damage that the plaintiff suffers. All damages with a monetary value will be compensated. This includes for example, property damage, personal injury, loss of profit, the cost of restoration, rescue and medical costs and clean-up costs. An injured plaintiff can also claim compensation for pain and suffering. Punitive damages are not available.

**Duty of the plaintiff to apply damages to remediation**

In some instances, the plaintiff is obliged to clean-up pollution on his property. A plaintiff can claim his costs from the defendant. The relevant administrative body can also carry out the clean-up operation and then recover the cost.

**Remediation/Restoration Costs**

Iceland has not yet had any experience of having to regulate clean-up of pollution. Accordingly the courts have not yet developed any principles in relation to the level of clean-up costs and what aspects they should cover. When a case arises which makes addressing the issue necessary, the courts are likely to examine the law and practice of other jurisdictions and draw relevant principles from them.

In a civil case where restoration is possible the plaintiff can claim this and the Court may rule that this should be done. However neither the Court nor the plaintiff can force the defendant to restore the damage. The plaintiff can restore the damage himself and then claim the cost back if the defendant fails to act.

In a criminal case, a claim may be brought against the defendant for the restoration work and, provided that it is a relatively simple and straightforward matter, then the judge will hear the claim and award whatever damages he feels are relevant. If it is a more complicated matter, the judge will refuse to hear the claim and a civil action must be brought.

**Maxima**

Some maximum liability limits are set for personal injury cases but not otherwise.
Minima

There is no de minimis threshold for liability.

Remediation/Restoration Standards

Statutes do not establish any rule on the clean-up standards required, nor is there any case law to establish rules on this matter. It will take a court decision to decide this matter.

IRELAND

Damages

A claim for damages at common law and in private nuisance lies if a person is adversely affected and suffers damage, to his person, property or activities from unlawful activities. A plaintiff is not required to prove lack of due care by the defendants in the manner they conducted their operations. It is sufficient for the plaintiff to succeed by establishing that they do not have the comfort and healthy enjoyment of the land to the degree that an ordinary person would expect, whose requirements are objectively assessed as being reasonable in the particular circumstances (see Hanrahan -v- Merck, Sharp and Dohme (Ireland) Limited, (see 13).

A claim for damages in negligence can be sustained if it can be shown that the person claimed against had a duty of care to the plaintiff which has been breached and due to this, loss has occurred, provided that the damage claimed for can be shown to be a reasonably foreseeable consequence of the negligent act. Such damages could extend to cover clean-up costs in the event of environmental pollution. However, there is no requirement for a successful plaintiff to use damages awarded to clean-up the contamination/pollution. Punitive damages are potentially recoverable but highly unusual.

Duty of plaintiff to apply damages to remediation

There is no duty on the plaintiff to clean-up with damages awarded, however, in practice the courts will award damages in respect of clean-up costs incurred, but will be less likely to award compensation covering clean-up on the basis of estimates of the cost involved.

Remediation/Restoration Costs

Statutory liability can arise in relation to clean-up costs. Under the Water Pollution and Air Pollution Acts, local authorities can step in and clean-up if the person charged with that responsibility fails to do so. The expense involved can be recovered from the responsible party as a contract debt.
The polluter may also be required to clean-up the damage caused, for example under the Toxic and Dangerous Waste Regulations.

The prime factor that is taken into account when calculating clean-up costs is the expenditure incurred by the Authority in taking these measures. Whilst this is without a ceiling or financial limit, insofar as it may be recovered from the polluter as a simple contract debt, the local authority or EPA will have to incur the expenditure in the first instance and will, therefore, need to be absolutely sure, not only that liability can be extended to the polluter, but perhaps more importantly, that the polluter has the ability to pay.

Where restoration is not possible, the courts may increase liability as the EPA Act allows the court:-

"in imposing any penalty....to have regard to the risk or extent of damage to the environment arising from the act or omission constituting the offence".

Therefore, if the environment cannot be restored, then the courts may increase the liability of the offenders. No evidence exists of such sanction having been imposed. Courts will generally, and realistically, take into account the ability of the polluter to pay.

Maxima

No maximum limit on liability exist.

Minima

There is no minimum threshold apart from the level of jurisdiction of the court.

Remediation/Restoration Standards

The local and sanitary authorities or the EPA decide what measures are necessary. They are not bound by any standards or guidelines, each case being considered on its own merits.

LUXEMBOURG

Damages

Civil damages may cover clean-up costs. Clean-up can be undertaken by the plaintiff, who will then reclaim the costs in court, or the person or entity held liable for the damages can be ordered to proceed with the restoration. A civil party is entitled to pursue the execution of a decision ordering the defendant to clean-up (A.Maas "La protection de l'environement en droit pénal luxembourgeois", Bulletin du Cercle François Laurent 1988, I, P-30031).
The court has the alternative of requiring cleaning up at the cost of defendant or paying damages to the victim. There is a general principle in Luxembourg law namely "reparation en nature" which is intended to restore the victim to the same status enjoyed before damage was suffered as a result of the defendants act/omissions and it may be that a court would interpret this to require the defendant to clean-up the contamination. Punitive damages are not available.

**Duty of plaintiff to apply damages to remediation**

Currently this has not been demonstrated in practice and should the plaintiff be awarded damages there is no obligation to use them to clean-up contamination.

**Remediation/Restoration Costs**

Clean-up costs are at the discretion of the judge on the advice of experts. They are not limited and will include technical consultants fees, the cost of technical operations etc. but do not include legal costs.

**Maxima**

In theory there is no maximum level for liability but the courts in Luxembourg are rather restrictive in the level of damages awarded.

**Minima**

There is no *de minimis* threshold for liability.

**Remediation/Restoration Standards**

There are no mandatory clean-up standards. Such standards are at the discretion of the court or regulatory authority.

**NORWAY**

**Damages**

The Pollution Control Act provides for compensation of the following:

- financial loss arising from pollution damage;
- damage, loss of amenity or expenses arising from reasonable measures to prevent, restrict, remove or alleviate pollution damage;
- damage, loss of amenity arising from the fact that the pollution obstructs or impedes the exercising of common rights; and
- loss suffered by any employee because the pollution leads to stoppage of work or curtailment of an enterprise in which he is employed.

The Petroleum Act provides for compensation of the following:
- all damage and loss resulting from pollution caused by outflowing or discharge of petroleum; and
- expenses relating to reasonable measures taken to prevent or limit the damage, including damage and loss caused by such measures.

The Maritime Act provides for compensation of the following:

- all damage or loss which arises outside the ship by reason of pollution caused by the escape or discharge of oil, including bunker oil, from the ships;
- expense, damage or loss resulting from reasonable measures taken after the incident has occurred to prevent or minimise the pollution, loss or damage.

Damages for clean-up costs are awarded on a general basis. However, Section 58 of the Pollution Control Act gives special rules regarding compensation for restoration in cases of damage effecting the common rights for non-commercial purposes. Pursuant to the first paragraph of Section 58, compensation may be claimed for such damage in so far as it refers to reasonable expenses for restoring the environment so that the common right can as far as possible be exercised as before. A claim for such compensation may be presented either by the municipal pollution control authority, or by a private organisation or an association with *locus standi* in the case. The compensation shall accrue to the pollution control authority.

The clean-up expenses with regard to Section 58 must be "reasonable", i.e. they must not be too expensive compared to what is sought to be achieved. This will be assessed on a total evaluation of the case.

If restoration of the common rights is impossible, damages may be awarded for the expense of constructing a similar area to compensate for the damaged area. If no such solution is available, no damages can be awarded. The law does not acknowledge compensation/damages for loss of use of common rights.

**Duty of plaintiff to apply damages to remediation**

There is no obligation for the plaintiff to clean-up environmental damage. However, where a private individual brings an action for clean-up costs and the clean-up has not yet been undertaken, the money awarded is often paid to the local authorities who will carry out the requisite work. Alternatively, the costs may be awarded on a conditional basis. The private party will only receive the money where it is not in the public interest to effect a clean-up.

**Remediation/Restoration Costs**

Clean-up expenses have to be "reasonable", that is, they must not be too expensive compared to what is sought to be achieved. This will be assessed on a total evaluation of the case.
If restoration is impossible, damages may be awarded for the expense of constructing a similar area to compensate for the damaged area. If no solution is available, no damages can be awarded. The law does not acknowledge compensation/damages for loss of use.

**Maxima**

Damages for clean-up costs are limited only insofar as they must be "reasonable", that is, no too expensive in relation to what is to be achieved.

**Minima**

No minimum threshold for liability exists.

**Remediation/Restoration Standards**

Restoration standards and clean-up are at the discretion of the Ministry or municipalities on a case by case basis, but in accordance with internal guidelines.

**PORTUGAL**

**Damages**

Compensation for damage and restoration is, in general, governed by the Civil Code (Articles 562 and 566).

All damage may be compensated. This includes property damage, personal injury and economic loss. Punitive damages are not available.

**Duty of plaintiff to apply damages to remediation**

The compensation must, at least theoretically, be used by the successful plaintiff to restore the situation that would have existed if the damaging event had not occurred.

**Remediation/Restoration Costs**

Clean-up costs and all other costs necessary to restore the site to its original condition are borne by those who have breached the environmental laws, as per Article 48 of the Basic Law on the Environment which sets out the following system:

- the parties that caused the damage are obliged to remove the cause of the damage and to restore the situation as it was, prior to the commission of the damaging event;

- if the parties that caused the damage fail to accomplish the above obligation within the term allowed, the authorities have the power to carry out the demolition, repair or other works necessary to
restore the site to the original condition and to recover its costs from the parties concerned;

- if it is impossible to restore the site, the parties that caused the damage are obliged to pay a special compensation and to carry out the necessary works to reduce the consequences of the damage.

Maxima

No maximum level of liability is set.

Minima

There is also no *de minimis* threshold for liability.

Remediation/Restoration Standards

Clean-up standards are absolute in the sense that the party that caused the damage undertakes to restore the site to the original condition or to an equivalent level. Furthermore, there is also an obligation to stop the cause of the pollution.

If restoration is completely impossible, then the guilty party will be obliged to indemnify for all damages and to carry out any necessary work in order to minimise the damage.

**SWITZERLAND**

**Damages**

The compensated damage is determined pursuant to the Code of Obligations (personal damage and property damage is covered as well as damage resulting from these damages). Ecological damage, that means damage to the unowned environment (other than e.g. private property), is generally not compensated.

**Duty of the plaintiff to apply damages to remediation**

Plaintiffs (usually the State) may have an obligation to clean-up and then claim for compensation.

**Remediation/Restoration Costs**

Damages cover clean-up costs. Usually the polluter must take remedial action at his own cost when so ordered by the relevant authority. If the polluter does not take the necessary action, the Cantonal authority will carry out clean-up and reclaim the costs from the polluter. The concept of punitive damages is unknown in Swiss law. Even where there is no apparent damage to the environment such as a minor release of a substance into a river which kills nothing, if a regulatory authority opts to take clean-up measures which are arguably unnecessary, it will be difficult for a defendant to avoid paying these costs to the authority.
Maxima

No maximum for liability for environmental damage exists.

Minima

There is no minimum threshold for liability.

Remediation/Restoration Standards

Clean-up standards are absolute only in theory. The suitability of the end-use of a polluted site is taken into account. Restoration can, for example, be made by depositing excavated material on the same piece of land, with certain environmental protection precautions being taken. The factors which are taken into account when calculating clean-up standards are regularly negotiated between the persons liable and the State (or, rarely, private plaintiffs).

This can lead to relatively harmless, old waste deposits being left untouched. To give a recent example: in a huge railroad accident where many fuel containers burned or exploded, the city sewage system was severely damaged. The dispute between the Community and the Swiss federal railroads has not yet been resolved as to the standard of final restoration of the sewage system.
15. **THE LEGAL STANDING (locus standi) REQUIRED OF THE PLAINTIFF - ESPECIALLY IN RELATION TO THE UNOWNED ENVIRONMENT AND THE TYPES OF ACTION WHICH CAN BE BROUGHT.**

**STUDY 1**

**USA**

**Civil**

Under general principles of state common law, actions to recover damages for injuries to persons or private property may only be brought by the injured parties. Actions seeking injunctions to stop activities which are allegedly harmful to the unowned environment or to require the restoration of the unowned environment are generally not available to private parties unless they suffer a special injury beyond that of the general public. Such actions tend to be covered by state officials acting under public nuisance common law principles.

In some states, private parties can sue for public nuisance if they can demonstrate a "special injury" beyond that suffered by the general public (for example, a suit by fisherman for damage caused by marine pollution). The extent to which various resources (for example, groundwater, streams, coastal tidelands) are owned by private landowners or the public depends largely on state common and statutory law and varies significantly amongst the states.

**Administrative**

Under CERCLA, private parties have standing to recover their qualified clean-up costs, but not to recover natural resource damages.

For costs recovery actions, either the government or a private party who has incurred clean-up costs may seek to recover those costs from other liable parties. Usually, such private party clean-up costs are incurred by one of the otherwise liable parties, such as the current owner of the property.

Most of the major US federal environmental statutes also contain "citizen suit" provisions which generally authorise any person whose interests are affected to bring a suit to enjoin violations and to compel compliance with, applicable environmental requirements, or to compel the government to fulfil its mandatory statutory duties to issue and enforce regulations. See for example, Clean Water Act paragraph 505, 33 USC 1365; Clean Air Act paragraph 304, 42 USC paragraph 7604; Resource, Compensation and Recovery Act paragraph 7002, 42 USC paragraph 6972; CERCLA paragraph 310, 42 USC paragraph 9659; Emergency Planning and Community Right-to-Know Act paragraph 326, 42 USC paragraph 11046. For an overview of citizen suit requirements under federal environmental statutes, see S. Cooke, The Law of Hazardous Waste paragraph 16.03.
The most relevant citizen suit provision with respect to compelling response to environmental damage is paragraph 7002 of the Resource Compensation and Recovery Act ("RCRA"), 42 USC paragraph 6972. It authorises any person to bring suit to abate an "imminent and substantial endangerment" to public health, safety, welfare or the environment, caused by the treatment, storage or disposal of any solid wastes (which is defined to include hazardous wastes, liquid wastes, etc.). Under this provision, abutting landowners, environmental groups, (such as the National Resources Defense Council, the Environmental Defense Fund, the Sierra Club Legal Defense Fund and the Conservation Law Foundation) or concerned citizens may bring suit both to stop ongoing environmental pollution and to compel the clean-up of historical pollution against any person deemed legally responsible for such contamination. The US courts have broad equitable powers to fashion injunctive relief, which may include compelling the defendant to spend money on clean-up. See, for example, US -v- Price, 688 F.2d 204, 213 (3rd Cir. 1983). These citizen suit provisions generally authorise the imposition of civil penalties to be paid to the government for violations, and authorise the prevailing citizen plaintiffs to recover their attorneys' fees and litigation costs.

A wide variety of environmental groups exist in the US. Historically they have tended to be more radical and confrontational frequently bringing actions to challenge rules set down by the EPA or EPA decisions. More recently a number of more moderate groups have emerged such as the Environmental Defense Fund and National Resources Defense Council which are prepared to take a more cooperative approach.

Apart from the right of government to recover clean-up costs incurred under CERCLA, the federal and state governments (but not private citizens) have standing to bring a suit seeking an injunction to compel liable private parties to clean-up environment damage, and EPA may issue an administrative order seeking to compel such clean-up.

With respect to the major cause of action for damage to the unowned environment, natural resource damage actions under CERCLA, such claims may only be brought by the government authorities with trusteeship responsibilities for those recourse. No other government entities (for example, local governments) or private parties may bring such actions.

**Criminal**

Individuals or interest groups etc. may not bring private prosecutions. These are only within the power of the Federal and State Prosecutors (or District Attorneys). In practice they may act on information received from individuals.

**Joinder of Proceedings**

Both US federal and state courts generally have liberal joinder rules. These permit both joinder of differing claims against the same party (statutory and common law; federal and state); and joinder of additional parties (including third parties liable in contract or for a contribution (indemnity)).
Under CERCLA, the question of joinder primarily arises in the context of related cases surrounding the main EPA liability action, such as: contribution actions between the potentially responsible parties ("PRPs"); contractual indemnity actions by one responsible party against an alleged predecessor or successor corporation; actions by the PRPs against their insurers; tort law actions by injured private parties against some or all of the PRPs; and similar matters. It is also common for EPA to sue or issue an administrative clean-up order against only some of the major potentially responsible parties (PRPs), and for those PRPs to sue the others for contribution. Such "third party actions" are typically joined with the main EPA action. Other collateral, related suits (for example, against insurers or affiliated companies), are typically brought separately, but are sometimes consolidated with the main action. Alternatively, all such cases may be assigned to the same federal judge as related cases.

For state personal injury or private property damage cases, class actions may be available as a mechanism for consolidating the separate, similar claims of multiple plaintiffs, (see 16).

DENMARK

Civil

_Locus standi_ means having a legal interest, which will involve injury to person or property and in environmental law (for example, the Planning Act or Environmental Protection Act, 358/1991) an interest in avoiding "substantial change" in the neighbourhood in which the plaintiff lives. Environmental legislation recognises a rather more extensive interpretation of the term "legal interest" than in other legal areas. Case law from the Environmental Appeal Board and the Nature Appeal Board provides that the applicant must be living in the area in question. It is not enough to visit often or to use it. Acknowledgement as a party by the authorities with regard to the disputed issue, will give a legal interest and fulfil the demand for standing.

The question of rights for NGO's and citizens to claim for compensation to clean-up and/or restore the environment was considered in the preparatory work to the Act on Compensation for Environmental Damage 225/1994. A majority in the preparatory committee rejected the view, as did a very large majority of the Parliament. NGO's and citizens are not entitled to claim for compensation to restore or clean-up the unowned environment. An exception however is the Danish Freshwater Fisheries Act Section 34(3) which enables the Danish Angling Association and the Association of Commercial Fisheries to claim for compensation to restock polluted lakes or streams in "the public interest". The provision is more than thirty years old, but little used in practice.

The question of citizens' rights to issue injunctions to prevent damage to the unowned environment was also considered by the preparatory committee to the Act on Compensation for Environmental Damage 225/1994 but rejected. The majority of the preparatory committee argued that such standing might cause confusion on _res judicata_, when various parties could make different allegations.
on the same issue. The committee argued that class actions are, in any event, not permitted under Danish law. US citizens suits were not considered.

**Administrative**

Individuals who are directly addressed by administrative decisions can challenge those decisions in court. In addition, individuals who have the right to make claims to administrative authorities may subsequently seek review of the decisions in the courts.

There are special statutes governing the right of environmental pressure groups (or NGO's) to be applicants at administrative appeal. This includes a number of listed organisations as well as local organisations who make a request to be a party in a specific case. This right to administrative appeal gives the organisations standing in court on issues of administrative complaint. This includes cases where administrative appeal is excluded because the issue of the case is regulated by law, as stressed by the high court in Greenpeace -v- Minister of Traffic, (UfR.1944.780).

While the right to standing on environmental matters is quite extensive, it does not encompass all areas. It covers decisions concerning future use of land as well as conditions in permits for plants listed under the Environmental Protection Act, 358/1991 (Section 33) which resembles the list in the Act on Compensation for Environmental Damage, 225/1994, (see 2.1.6 above) but it does not permit anyone with a legal interest to make a claim for compensation to restore or clean-up the environment.

Citizens and NGOs are entitled to intervene before a permit is granted to establish a major plant or another use of the area or the landscape. This right includes the right to challenge the content of the proposed permit. The enforcement of the permit and the conditions attached are at the discretion of the regulatory authorities. However, if the authorities do not fulfil their commitment to enforce the permit they, as well as the polluter, can be reported to the police (see below). Where a failure to take enforcement action causes damage to third parties, the third parties have, under some circumstances the right to be compensated by the authorities. In Ishoj -v- Aalborg kommune, (UfR.1989.420) the municipality was found liable for granting a permit to a private house, because the construction of the house violated the planning law in the area.

Greenpeace is in continuing litigation concerning the projected bridge between Denmark and Sweden. It wants suspension of all construction activities on the grounds that the EIA Directive is breached, in particular, Article 1(5), based on the ECJ ruling in Factortame (C123/89). In the first instance this was rejected by the high court, and subsequently by the Supreme Court in May 1995 (Greenpeace -v- Minister of Traffic, (UfR.1995.634H). The Supreme Court reasoned that the conditions in the EIA Directive for investigations and monitoring were met when the Minister of Traffic gave his final approval in July 1994. Following the decision of the Supreme Court Greenpeace has again claimed for suspension of all construction on the grounds that since the decision of the Supreme Court in May
1995, a new project using raw materials has started, and under Article 9 construction cannot be carried out on a step by step basis.

In general interest groups act as lobbyists and by bringing issues of concern to them to the attention of the Media. There have been only a few cases brought to court.

**Criminal**

Only authorities are entitled to take criminal actions concerning environmental law. No private prosecutions are possible. Administrative authorities may report breaches to the police who then have the power to bring prosecutions. Individuals can make complaints of criminal breaches to the administrative authorities or directly to the police.

In some cases, environmental organisations, after fruitless complaints to an administrative authority, have complained to the police and, with media assistance, have indirectly initiated an enforcement procedure, sometimes by the police, and sometimes by administrative orders or injunctions.

Individuals can challenge a decision by the local police not to prosecute by means of an administrative claim to the Public Prosecutor. Complaints can also be made to the Ombudsman. However these decisions cannot be challenged in court.

**Joinder of Proceedings**

Joinder is regulated by the Procedural Act, Sections 250-254. Several parties can enjoin several claims into one case when the court has jurisdiction, when all claims are governed by the same procedural rules and no one objects. A third party can join an ongoing case as an independent party when the court has jurisdiction, when all claims are governed by the same procedural rules, when there is a close connection between the claim of the third party and the ongoing case, and the third party intervention does not cause unnecessary trouble for the original parties. Recourse claims will often be a relevant reason for joining a case.

The Procedural Act, Section 252 concerns circumstances where a third party does not have any independent claims but wants to join a case in the interest of one of the parties (a "bi-intervention"). This is allowed when the third party has a legal interest in an ongoing case.

In cases where environmental damage is caused by several actors, the defendant is allowed to serve a third party notice to other actors for contribution or full liability in case he will be found liable.

**FINLAND**

**Civil**
At present, NGOs or interest groups do not have standing in courts, unless, they themselves have suffered damage. However, the possibility of granting a right to take action in courts concerning compensation for damage caused to natural resources has been discussed, *inter alia*, in the Legal Committee of the Parliament (1994 vp - LaVM 10- HE 165/1992 vp). No provisions were introduced in the new Environmental Damage Compensation Act, 737/1994, but within the framework of the ratification process of the 1993 Lugano Convention which is presently under way, the matter must be further discussed, since the Convention (Article 18) grants NGOs a right to request certain action on behalf of the environment to judicial or administrative bodies. At present interest groups tend to address local problems usually by way of public demonstrations and lobbying rather than legal proceedings.

The plaintiff must have suffered damage (personal injury, property damage or pure economic loss) in order to be able to take action in the court. Consequently, no individual can take action in the court on behalf of the unowned environment, say for wild birds or animals.

In addition to compensation for personal injury and property damage the Environmental Damage Compensation Act, 737/1994 covers pure economic losses, that is, losses unconnected with personal injury or property damage. However, a successful claim for pure economic losses under Finnish law generally presupposes that an individual defined right has been infringed. Consequently, it remains unclear under the Environmental Damage Compensation Act, 737/1994 whether compensation can be awarded when the right is exercised on a public basis, for example, with regard to claimants exercising their common public rights (using roads, wetlands land for travelling, fishing, gathering berries etc.) and suffering economic loss. Such losses may also affect persons exercising their commercial activity, for example, commercial fishermen, people who are dependent upon unrestricted travel in their business and others who are dependent upon the ecosystem for their subsistence. The preparatory documents, particularly those of the Parliamentary Legal Committee, indicate that such damages were intended to be covered within the notion of economic loss in Section 5.

The system for ordering interim measures of protection has recently been modified (Legal Proceedings Act, 1952/91 Chapter 7). A plaintiff may ask the court to order, *inter alia*, an injunction, or specific performance. It may also grant the plaintiff a right to take certain measures. The provision is very flexible and has scope for wide interpretation. Since it is a very new provision (it entered into force on 1 December 1993), there is not enough court practice at this stage to assess what form the provision will take in practice.

Under Section 6 of the Environmental Damage Compensation Act, 737/1994 there is an express provision to the effect that the authorities may claim for costs incurred in preventing the effects of pollution and costs of remediation.
The actions of all public authorities are supervised and reviewed by the Parliamentary Ombudsman and the Chancellor of Justice. Both report to Parliament annually. The Chancellor of Justice is a permanent appointee of the President while the Ombudsman is elected for a term of four years by Parliament. Both have a duty to express opinions on the legality of acts and omissions of public authorities and may initiate proceedings for the reversal of administrative or judicial decisions. In addition, they can require prosecutions to be brought against public officials.

Individuals have the right to require review of administrative decisions in the normal administrative courts. The standing required will to some extent depend on the decision to which the challenge relates. If the decision directly concerns an individual's private interest, for example where a permit is refused, that individual may require review. Where a decision to develop land affects neighbouring landowners, they would have standing and where a decision affects the general public interest then anyone from the community could bring the review application.

Although there is some legislation already recognising such a right the Legal Committee of the Parliament has also proposed *locus standi* in administrative injunction and reinstatement matters to be generally extended to environmental organisations in order to meet the requirements of Article 18 of the Lugano Convention. This would also include the right to appeal to an administrative court. The Waste Act 264/61 includes a similar provision on the standing of organisations, being applicable especially to soil pollution and litter. A similar amendment to the Air Pollution Prevention Act has been made in April 1996.

**Criminal**

The possibility of private parties initiating criminal proceedings is very limited as regards environmental matters. As a rule, it is for the public prosecutor to initiate such proceedings. The public prosecutor is under a duty to bring charges where there is sufficient evidence and the act in question fulfils the criteria of the crime. Decisions of the prosecutors may be referred to the Chancellor of Justice who is responsible for supervision of the prosecutors. This is, however, not a judicial process therefore it remains difficult to effectively challenge the decision of a prosecutor. In addition there are still no special rights for interest groups in this regard.

**Joinder of Proceedings**

It is possible to join more than one legal proceeding and under certain circumstances separate actions must be handled in the same proceedings (Legal Proceedings Act, 1052/91, Chapter 18):

- if the same plaintiff has simultaneously brought several actions against the same defendant which are based on essentially similar grounds and facts;
- if a plaintiff has simultaneously brought actions against several defendants that are based on essentially similar grounds and facts;

- if several plaintiffs have brought actions against one or more defendants that are based on essentially similar grounds and facts;

- in the case of claims and counter-claims; or

- on the request of a person who is not party to the legal proceedings but who brings an action against one or more parties to the dispute concerning the same matter.

According to the general rules of tort law a right or recourse exists, for example, if several defendants are held jointly and severally liable for the same damage. The defendant who has compensated the damage, totally or partially, has the right to demand from each of the others jointly and severally liable the sum that he has paid on their behalf and which exceeds his own share. According to Section 75 of the Insurance Contract Act, 543/1994 an insurer has a right of recourse against a third party who has caused the damage deliberately, by gross negligence, or if the third party is strictly liable for damage. Since liability for environmental damage is strict in all but a few cases (see 5 and 6 the insurer's right to recourse will in practice be extensive). In addition, the right to recourse under Section 75 of the Insurance Contract Act, 543/1994 can be extended by agreement.

FRANCE

Civil

Civil actions before the courts usually involve claims for damages by the victim of the damage. The right of interest groups and NGO's to act before the civil courts is not expressly provided for by the laws on protection of the environment. However, Article 31 Nouveau Code de Procédure Civile (NCPC) provides:

"the action is open to all those who have a legitimate interest in the success or failure of a claim, with the proviso that in cases where the law accords a right of action to individuals only that he/she is qualified to bring or defend a claim or to defend a defined interest".

As well as the right of action to which they are personally entitled, associations responsible for the protection of the environment can, if they are appointed by at least two concerned individuals, act in the name of these individuals in an action before any jurisdiction (civil, administrative or criminal).

Although the evolution of case law is developing, the rights of interest groups before the civil courts is still more restrictive than in other jurisdictions of the French courts.

Administrative
Administrative decisions may be challenged through the administrative courts by individuals who have sufficient standing. The standing required is a certain and direct interest in the matter by the person making the challenge.

The administrative jurisdictions have always been quite liberal in admitting the actions brought by interest groups to the extent that the collective interests which these groups are protecting are threatened. Interest groups cannot however claim damages in administrative proceedings. Even the interest groups which are not officially declared to the "Préfecture" may bring an action. Such interest groups may however not defend rights on behalf of others but they can contest the decision or acts of public authorities which may have a negative impact on the environment:

"Any association coming within the definition of Article L252.1 has a right of action against any administrative decision which directly effects its stated purpose or activities and which has damaging environmental effects in part or all of the territory accorded to it by the agreement".

Generally interest groups act in confrontation with the authorities, but there is a tendency for large NGO's to work in co-operation with other large organisations, such as trade associations.

Criminal

Article 5 III of the Law 95/101 of 2nd February 1995 provides for a general and uniform right of accredited ("agréés") interest groups and NGO's to act before the criminal courts. Prior to the adoption of this law, the right of NGO's and interest groups in this respect was provided for separately in each major law on the protection of the environment.

According to the provisions of the new law:

"Authorised interest groups mentioned in Article L. 252-2 may exercise the same rights as the ones granted to private persons, to initiate an action for damages with respect to the acts causing a direct or indirect damage to the collective interests that the accredited interest groups have to protect and constituting an infringement of the laws relating to the protection of nature and the environment, the improvement of standards of living, the protection of water, air, soils, sites and landscapes, town planning or the purpose of which is the prevention of pollutions and nuisances, as well as the tests enacted for the application of such laws."

These rights of action before the criminal courts are quite broad because they authorise the action before the criminal court even when the damage to the collective interests protected by the interest group is an indirect damage. This means that the damage may not only result directly from the act constituting a breach of specific legal provisions (direct damage) but can also result from any consequence of such a breach.
An example is where an industrial plant producing chemical substances does not comply with its obligations and causes a pollution to a river, resulting in the deaths of thousands of fish. An interest group whose purpose is the protection of fish, or of the polluted river, suffers direct damage (resulting directly from the breach of obligation). An interest group whose purpose is the protection of birds may argue (and will have to prove) that the violation of the law by the industrial plant caused a prejudice to the collective interests it protects, because the birds died as a result of the death of the fish which were their customary feeding stock. This damage is indirect. Indeed in the Protex case in 1992 a number of environmental associations brought criminal proceedings and were able to claim indemnity for costs incurred in clean-up and restocking waters with fish, see 13. (In the Protex case however, that is before the adoption of Law 95-101, most of the interest groups having suffered an indirect damage did not receive any compensation).

The Public Prosecutor will act on a complaint by private individuals (environmental organisations or the administrative authorities) but there is no scope for individuals to bring a prosecution. The decision of the Public Prosecutor is not open to review or challenge.

**Joinder of Proceedings**

According to Article 367 of the Civil Code which sets out the new rules of civil procedure ("Nouveau Code de Procédure Civile") the judge may, either on his own initiative or upon the request of the parties, decide to join (or disjoin) legal proceedings. The number of legal proceedings which can be joined together is not specified and it is therefore possible to join more than one legal proceedings into another. Cases will be joined in situations where they are closely connected. In most cases this requires that not only are the facts very similar but also that at least one of the parties is the same.

There is no right of recourse against such decisions (articles 368 and 537 of the New Code of Civil Procedure). The reason is that such decisions fall within the category of "measures d'administration judiciaire" (that is, "measures dealing with the organisation of court proceedings").

**GERMANY**

**Civil**

A plaintiff in the first place has to affirm (and later prove) that he has been injured in his rights (that is, in his life, his health, his body, his property, etc.). This means that an individual is not entitled to claim the remediation of damage to the unowned environment.

The following examples illustrate this:

- if his health is impaired as a result of polluted air (for example, emission of toxic gas), he is entitled to claim medical costs and the loss of earnings suffered as a result of the illness. In addition, he can
claim the prevention of future pollution which may lead to a further impairment of his health. However, the plaintiff has no claims in connection with the air pollution if this has not caused impairment to his health;

- if the ground is polluted (for example, by mineral oil), the owner of the property can claim remediation of the pollution due to the fact that he owns the ground;

- in general, the clean-up of polluted groundwater cannot be claimed by an individual due to the fact that groundwater is an unowned environment. It is the duty of the administrative bodies to safeguard the purity of groundwater (administrative environmental liability). A claim by an individual would only be possible, if this individual is (by way of exception) entitled to use and produce groundwater and he suffers damage to his protected rights (life, health, body, property, etc.) as a result of the polluted groundwater.

**Administrative**

The unowned environment is not a right of the plaintiff but a right of the general public. It is the duty of the administrative bodies to safeguard the rights of the general public. In principle interest groups and NGOs have no rights in administrative proceedings. However, according to some statutes, these interest groups and NGOs are to be heard before an administrative body takes its decision. They do not have any right to lodge an appeal against its decision. A right to lodge an appeal is only granted to those individuals who are injured in their own rights; the environment is not a right of the interest groups and the NGOs themselves. At a general level, the role of interest groups and NGOs appears to be more one of confrontation with the authorities and industry than co-operation.

Claims against administrative bodies before civil courts are restricted to damages. A plaintiff is not entitled to claim before a civil court that administrative bodies take measures against third parties or that administrative bodies remedy situations caused by themselves. The appropriate jurisdiction to achieve these aims is the administrative jurisdiction.

If the administrative bodies do not comply with their obligations, a person injured thereby is entitled to claim the enforcement of his rights before the administrative courts (administrative court, higher administrative court, federal administrative court). Examples of the sort of cases which might come before the administrative court include:

- when the administrative authorities have given permission for a building and its use has affected the rights of third parties (in this case, the plaintiff), the court quashes the disputed permission;

- if a third party causes the harmful emissions without or in contravention of permission, and the authorities do not take any
action themselves, the person who suffered damage may bring a claim with the aim that the officials will be obliged by the court to institute the required measures against the third party. The authorities can, for example, be obliged to demand that the third party undertakes a technical modernisation of the equipment or (when this is not possible) refrains from using the equipment.

A claim is nevertheless only then likely to succeed where the plaintiff is injured in his own rights.

So far as there is no special regulation by statute which provides for a specific court, the administrative courts are competent to decide on all matters of public administration. The administrative courts decide mainly on actions against building permits or permits for plants causing emissions which damage the environment. If such damaging emissions are caused by a third party without or in contravention of a permit, the administrative court may be asked to order the relevant administrative body to take appropriate measures against the third party. However, the plaintiff will only succeed with this action, if the permit itself or the damaging emission is contravening regulations, which are specifically intended to protect the plaintiff. A contravention of regulations which are set up only in the public interest and are not intended to protect the plaintiff's interest in particular is not sufficient. For example, an action against damage to the landscape or an act against nature will fail, if the plaintiff is not injured in his own rights (for example, his property, his health etc.). Interest groups and non-governmental organisations, which protect the general interests of their members and of the population, do not have such rights. Therefore, they are not entitled to claim for cessation of environmental emissions or for the remedying of environmental damage before administrative courts.

In general, court proceedings are subject to a so-called protest procedure (Widerspruchsverfahren) which is a preliminary proceeding prior to suing the administrative body, in which the administration itself examines the legal aspects of the decision and its merits. If an action is being brought to the administrative courts before the plaintiff has carried out the protest procedure, the action is deemed to be premature and will be dismissed.

After recourse to the civil or administrative jurisdiction has been exhausted, the Federal Constitutional Court can be called upon under certain conditions to make a ruling. This court is entitled to render earlier decisions void if they contravene constitutional law.

Criminal

Criminal prosecution may only be brought by the public prosecutor. Should suspicion arise that a punishable offence has occurred, the public prosecutor must, with the help of the police (criminal investigative authorities), establish the facts and once these have been determined, bring charges before the Criminal Court. Anyone who learns of a punishable offence committed, however, may report it. This report must be examined by the criminal investigative authorities.
It is in principle possible to bring private prosecutions, but not, however, for environmental torts. Subject to certain conditions an injured person may become involved in criminal proceedings as a so-called joint plaintiff (a private person joining the public prosecutor in the prosecution of certain offences).

By way of exception an injured person is entitled to claim any damages in the case of criminal proceedings pursuant to paragraph 403 of the Code of Criminal Procedure, which he would otherwise have had to claim in separate civil proceedings.

Where a person makes a complaint and the public prosecutor does not proceed with a prosecution the complainant if he was also the victim can challenge the decision not to prosecute. This procedure is available under paragraph 172 of the Criminal Code (Strafprozeßordnung). The complaint must be made to the public prosecutor within two weeks of the previous decision. A further complaint if the matter is not resolved can be made to the general public prosecutor within one month from the further refusal to prosecute. Review of this decision may then be requested in the Higher Regional Court (Oberlandesgericht). The procedure is however, not widely used and is particularly unlikely in environmental law. Only the victim of a crime may bring such a complaint so pressure groups will not have the standing to do so.

**Joinder of Proceedings**

A plaintiff may bring a claim against several owners, tortfeasors or interferers in one proceeding, but is not obliged to do so.

Several owners, tortfeasors or interferers who are jointly and severally liable have to divide their liability amongst themselves according to the extent that they caused the damage. The liable person who has settled the claim can take recourse against any other liable person in separate proceedings. In order to avoid the possibility that in the separate proceedings the judge will decide in a different manner regarding the liabilities, the person who had settled the claim can issue a third party notice to the other liable persons, paragraph 72 onwards of the Code on Civil Procedure (ZPO). According to ZPO, joinder is permissible where a large number of plaintiffs wish to make a joint claim (paragraph 59 onwards, ZPO).

**ITALY**

**Civil**

Individuals will have a right to bring a civil action for damages in the courts where they have suffered some injury, damage to property or loss. Under Article 13 of Law 349/1986 environment interest groups recognised by the Ministry of the Environment may intervene in existing civil actions for the assessment of liability for environmental damages. They have, however, no individual right of action in such cases and no right to claim damages.
Administrative

The Civil Code provides that the seashore, beaches, bays, ports, rivers, lakes and the other waters defined as public by the special applicable laws, as well as work intended for national defence, belong to the State and constitute part of the public domain. Furthermore, the following goods are part of the public domain if they belong to the State: the roads, freeways, railways, airports, aqueducts and immoveable objects identified, according to the applicable laws, as having an historic, archaeological or artistic interest, as well as the collections of museums, picture galleries, archives, libraries and all the other goods which are governed by the rules of the public domain, (Article 822).

The goods which form part of the public domain, are the exclusive property of the state and cannot be transferred to private parties.

Article 826 of the Civil Code provides that the woods protected by special laws, mines, quarries and turf pits (when the right of the owner of the land to dispose of them is removed), the objects of, amongst others, historic, archaeological and artistic interest discovered by whoever and however in the subsoil, constitute the nondisposable inheritance of the state, as well as wildlife (according to Law No 152 of 11 February 1992).

*locus standi* has been recognised for the State, the territorial bodies (regions, provinces and municipalities) and for environmental associations which have been previously identified by the Ministry of Environment and which are authorised to file complaints and to intervene in lawsuits already started (Article 18, Law 349/1986). Such associations cannot claim damages; they can only require administrative authorities to take action.

Under Article 13, Law 349/1986 national environmentalists' associations and associations which exist in at least five regions are to be identified by the Minister of Environment as being competent to file complaints. Ministerial Decrees of 20 February 1987 and 26 May 1987 identified the following associations: Amici della Terra, Associazione Kronos 1991, Club Alpino Italiano, Federnatura, Fondo Ambiente Italiano, Gruppi ricerca Ecologica, Italia Nostra, Lega Ambiente, Lega Italiana Protezione Uccelli, Mare Vivo, Touring Club Italiano, World Wildlife Fund, Greenpeace, Agriturist and Lega Italiana per i Diritti dell'Animale.

The Environmental Associations recognised pursuant to Article 13 can bring actions before the Administrative Courts for the annulment of unlawful acts (for example, buildings in parks or protected sites) and intervene in actions, civil or criminal, already started for the assessment of liability for environmental damages; in view of the fact that, besides being generally non-profitable they have no direct economic interest involved in any action, administrative complaint or intervention is made for the protection of a so-called widespread interest ("interessi diffusi").

Individuals can bring actions before the administrative courts for the unowned environment only when the polluting event constitutes a violation of their rights or has caused damage to their properties. Otherwise, they lack interest to file
complaints, which will have to be filed by groups of citizens or by an association, to show that the interest is "public enough".

The deadline to oppose an order or administrative decision before the competent Regional Administrative Court is 60 days from knowledge thereof.

The majority of environmental action groups are highly independent and unpredictable. They are usually local interest groups and therefore are usually active in confronting local governments.

Criminal

Criminal prosecution is reserved to public prosecutors who are members of the Judiciary; private parties and environmental associations merely, have the power to request the initiation of a criminal action by filing complaints. It will then be for the prosecutor to decide whether there are grounds for an action to be started or not; if a decision is taken out to start an action the matter may be resumed if further information is disclosed or it can be shown that the prosecutor had not fulfilled his duties. Once a criminal action is started, private parties who have suffered damage may file a civil claim, the deadline being the opening of the trial which will be handled according to the outcome of the criminal case.

The new Code for Criminal Procedure, approved in 1989, provides (Article 74) that a civil action for damage caused by a crime may be brought by the person(s) or entity/ies to which the crime caused a prejudice, and (Article 93) non-profit associations recognised as acting for the protection of the interest damaged by the crime have the same locus standi in the criminal procedure as the person directly damaged, see 13.

Joinder of Proceedings

Pursuant to the rules of criminal and civil procedure, and subject to the conditions specified for the various cases, several existing proceedings can be joined into one or heard together if they are connected subjectively or objectively. The defendant can also join a third party in the existing proceedings say under a third party indemnity or if he considers that the issues are relevant to the third party. The request for joinder is made at the start of legal proceedings and has to be authorised by the judge. Joinder is common in civil proceedings and much more unusual in administrative proceedings.

THE NETHERLANDS

Civil

To have standing in civil law, a plaintiff must generally personally have suffered damage. It will therefore not be easy for an individual to bring an action in relation to the unowned environment. However, it is unlikely no damage whatsoever will occur as a result of pollution of the unowned environment. No unowned land exists in The Netherlands. According to the Civil Code, the State is

(51998936.01)
owner of all land which had no other owner, the bed of the territorial sea, the beaches and the bed of public waterways unless maintained by another public authority.

Apart from claiming damages preventative and injunctive relief is available to plaintiffs.

Two articles have recently been introduced into the Civil Code providing for standing for interest groups (Articles 305a and 305b, Book 3). Interest groups can obtain (injunctive) relief in as much as they can request the courts to order polluting activities to be stopped. Damages cannot be claimed on behalf of others. For an environmental organisation to have standing, the action must follow from the aims of the organisation provided in its constitution. The organisation must have entered into dialogue with the defendant before commencing the proceedings for there to be standing.

Also, damage can be claimed if suffered by the interest group itself. For instance, the "Arrondissementsrechtbank" Rotterdam, before Article 3:305a and b came into force, declared the Dutch Society for the Protection of Birds to have sufficient standing to claim the costs of removing oil from sea birds that it cleaned up (Rb Rotterdam 15 March 1991, re Borcea).

Administrative

To request a review or lodge an appeal in an administrative case, the plaintiff must be an "interested party" according to Article 1:2 of the General Administrative Code. His interests must be "directly related" to the administrative decision. This definition is broadly interpreted. Article 1:2 expressly states that the interest of legal entities can also include the general and collective interests they represent according to their constitution and actual activities.

In principle the interested party is the addressee of a decision, however, if the addressee is not a legal entity, it has no standing.

Natural persons and corporations possessing legal personality have standing in administrative cases if they have an own, personal, objective, direct and actual interest.

Own interest:

Afd. Rechtspraak 28 November 1978: An accountants firm was held not to have standing to appeal a decision not to subsidise a bakery, as the accountants firm did not possess a power of attorney to lodge an appeal for the bakery and did not itself have an interest in the decision.

Personal interest:

Afd. Rechtspraak 8 November 1984: A number of architects appealing a decision to build a theatre which they felt not to be architecturally and
aesthetically up to standard, were held not to have standing as they did not have a personal interest in the decision.

Objective interest:

Afd. Rechtspraak 13 October 1986: A person appealed a decision to grant a permit for the reconstruction of a concert hall as her father, a well-known member of the orchestra, was buried from that building. The plaintiff contended the reconstruction would mean an infringement of the building to which the memory of her father was attached. She was held to have no standing as the interests involved were only emotional and not objectively ascertainable.

Direct and actual interest:

The interest involved must be direct. For example, a creditor cannot appeal a decision to refuse to subsidise a debtor. It must be actual in the sense that it may not be dependent on uncertain future expectations.

Collective interests may be defended by organisations possessing legal personality if the interests involved are set out in its Articles:

Afd. Rechtspraak 12 January 1984: The Association Energy Committee Apeldoorn was held to have no standing in its appeal against a building permit for a waste storage building in Borselle as its Articles stated the area of interest of the Association was limited to Apeldoorn and environs.

In general the role of interest groups is not clearly co-operative or confrontational with the authorities, however, they are beginning to act in an advisory capacity with the authorities. In relation to industry they act in reporting polluting activities and challenging awarding of licences and their conditions.

Criminal

Criminal prosecutions are brought by the State, through the "Openbaar Ministerie". Private criminal prosecutions are not possible. The Openbaar Ministerie has a discretion as to whether to bring a prosecution. Its decisions are open to challenge by private persons who have a direct interest in the decision not to prosecute. The challenge is made in the Gerechtshof which can order the prosecution to be resumed if the complaint is justified.

Joinder of Proceedings

Proceedings can be joined if they are pending before the same court, between the same parties and have the same subject or if they are pending before the same court and have a strong connection. A strong connection exists if the outcome of one case necessarily has a direct influence on the other.

(51998936.01)
A defendant, who believes a claim against him should lead to liability of a third party (for example his insurer), can request that the party be enjoined with the same proceedings. Also, an interested party can voluntarily request to be enjoined in the proceedings.

Either the party wishing proceedings to be joined, a third party who is to be enjoined in the proceedings or an individual wishing to join the proceedings must file a request for this by way of a written statement to the court. The other parties can then file a statement of defence against this request. The request will be decided upon in an official court judgment.

Counterclaims can be made at the beginning of the proceedings by the defendant. These do not need to be related to the original claim in content.

If a fund is formed on the basis of the Oil Tanker Liability Act or Nuclear Ship Liability Act, all claims must be made against this fund and will be dealt with by the same court.

**SPAIN**

*Civil*

The plaintiff must be the person that has suffered the damage, either to his property or to his own being. Therefore, for the time being, in relation to the unowned environment there is no standing for particular individuals. As they cannot show any economic loss suffered by them in relation to environmental damage interest groups cannot take actions for damages under civil law.

*Administrative*

The authorities have standing to protect the unowned environment, under administrative law, not under civil law. Administrative authorities have an obligation to protect the environment under the Constitution. This will vary from region to region. The administration brings actions to protect the environment.

Certain special laws provide that anybody thus including individuals and pressure groups can require implementation of the law by administrative authorities and this can be actioned through the courts. An example is Law 22/1988 which includes provisions on costs in relation to industrial spills and spills at sea. Article 109 of this law states that ensuring enforcement of this law is a public right. Theoretical arguments exist that by virtue of Article 45 of the Constitution which confers on everybody a right to the enjoyment of the environment any person can require enforcement by administrative authorities or challenge decisions of administrative authorities in relation to the environment. This is, however, not supported in practice.

*Criminal*
In Spain anybody can bring a criminal prosecution regardless of whether they have suffered loss or injury by exercising the so-called people's action ("acción popular"). This possibility is used by environmental interest groups to protect the environment. Where a regulatory body discovers a criminal breach of environmental law it passes the file to the public prosecutor who then decides whether to pursue a prosecution or not. Due to the right of any person to bring a prosecution if the public prosecutor takes no action an interested person or group has the right to pursue the matter. The judges may require the person exercising the people's action to deposit a sum of money to prove an interest and as compensation to the defendant if the accusation proves false. The right to bring a people's action is also available to non-Spanish citizens. Using this procedure a pressure group "Green Alternative ("Alternativa Verda") joined an appeal filed in the Supreme Court by certain plaintiffs damaged by the defendants.

Criminal prosecutions are generally becoming more common in the environmental field (especially since about 1990) since it is felt that a successful criminal prosecution has a deterrent effect to others not to pollute the environment. A prosecution may be made by either the Public Prosecutor or an individual (in practice, environmental organisations).

**Joinder of Proceedings**

This may take place where there is the same defendant and causation, but different levels of damages. Third party proceedings are not possible.

Where a number of plaintiffs are bringing an action in relation to the same matter and against the same defendant they may join together, pool resources and share legal representation, however, each plaintiff maintains its individual action with individual rights in respect of this action.

**SWEDEN**

**Civil**

Standing under the Environmental Civil Liability Act 1986 requires suffering bodily harm and/or damage to property and/or "pure" economic loss. There is no standing for the unowned environment. Standing under the Environmental Civil Liability Act is an economic claim, and thus may be assigned to someone else.

In a recent case of the Supreme Court T679/93 27th December 1994 which concerned noise nuisance from a ship passing close to residential property an interested association involved in noise matters, and funded from general contributors, took over the action on behalf of the aggrieved residents. The Court held that the right to receive damages could be transferred to the plaintiff organisation but the right to stop the activity could not.

**Administrative**
locus standi under the Environment Protection Act 1969 enables a plaintiff to request the authority to bring action against the polluter (operator). If the regulatory authority does not act, it is then possible to refer to the Ombudsman in order to bring an action against the regulatory authority for breach of statutory duty. It also means that a private person can ask for a prohibiting injunction to be handled in the court. To have standing the plaintiff must be affected in some substantial way. An employee in a factory close to an operation causing pollution normally has no standing but his employer may have. A tenant living close to an operation causing pollution may have standing but a tenant further away may not, if not substantially affected. A person who has standing under the Environment Protection Act 1969 cannot assign this to another person, because "standing" under the Environment Protection Act 1969 is not an economic claim.

Individuals or organisations who have an interest in an administrative decision and therefore have standing may challenge decisions of administrative authorities in the Supreme Administrative Court.

There are various environmental organisations in Sweden such as Miljöcentrum i Uppsala (Environmental Centre in Uppsala), Naturskyddsföreningen (the Society for the conservation of Nature), Greenpeace etc. There is no general right for environmental organisations to bring law suits in accordance with the Environment Protection Act against the State or companies unless they themselves have an interest. The organisations can, however, act as representatives on behalf of individuals who are affected. Miljöcentrum i Uppsala, a foundation led by Björn Gillberg, has in several cases represented individuals in law suits against companies and also at least in one case against the Swedish National Road Administration. Generally can be said that law suits under the Environment Protection Act against the State are not very common. However, there are a number of law suits against the Swedish National Road Administration by individuals. Miljöcentrum i Uppsala have been quite successful in law suits regarding damages against businesses.

Even if a person or organisation does not have standing they are free to express a view. Before a licence is granted an operator must have a public information meeting and must take into account the views expressed. This procedure can be important as the authorities are under a duty to protect public interests. If the views put forward are important the authorities must take them into account although in practice it is very difficult to establish whether an issue has not been taken into account properly or was merely considered to be outweighed by other issues put before the licensing board.

Criminal

Under the provisions of the Environment Protection Act 1969 involving criminal sanctions the regulatory authority must approach the public prosecutor and request that a prosecution is carried out. Individuals who were the victims in the matter and who therefore have standing may challenge a refusal of the prosecutor to proceed. Similarly individuals may go directly to the police with a complaint and if the public prosecutor refuses to act a challenge to the decision may be brought.
In both cases the challenge may be made to the regional prosecutor who will review the decision.

**Joinder of Proceedings**

It is possible to join together more than one legal proceeding and the possibilities, according to the Code of Procedure, are fairly liberal as long as the cases are handled according to the Environmental Civil Liability Act 1986. Two or more legal proceedings against the same defendant can be joined if the grounds of the cases are more or less the same, and in some cases proceedings from more than one court may be combined into proceedings in one court.

**UK**

At present, there is no provision in civil liability law for dealing with the unowned environment, comprising air, water (broadly, within territorial waters), space and the earth below a certain depth. This civil liability system is based around the concept of ownership of property and damage to that property.

The Government's policy document on contaminated land "Framework for Contaminated Land" expressly states at paragraph 6.1.7: "it would be inappropriate to try to extend the concept of common law by statute to include the compensation for damage to the unowned environment or to give special standing in that respect for non-Governmental organisations (NGO's) lacking an interest in a case."

The unowned environment is protected by and seen as the responsibility of regulatory authorities under certain provisions of the criminal and administrative regulatory regimes.

The *locus standi* required is dependent on the source of law through which the plaintiff is seeking to pursue his claim.

**Civil**

Under the common law the plaintiff's *locus standi* varies according to the common law right on which he is basing his claim. Claims in nuisance require the interference with the property rights of the plaintiff, whilst a claim in negligence is dependent upon the existence of a duty of care being owed by the defendant to the plaintiff and an ensuing breach of that duty. The precise nature of the standing required is defined in the relevant case law.

The Environmental Protection Act 1990 sets out a list of the categories of statutory nuisances which may be required to be abated by the service of abatement notices by local authorities (see 3).

The provisions also have relevance to "private rights" to remedy environmental damage, in that the local authority is under a duty "to take such steps as are reasonably practical to investigate" a complaint by a person living within the area.
of the alleged statutory nuisance and any "aggrieved" person has the right to make a complaint at a magistrates' court in respect of an alleged statutory nuisance with a view to the court issuing an order on the defendant to abate the nuisance.

Administrative

Where an individual has no right of action in law, he may have recourse through judicial review of administrative action. This is a procedure by which an applicant can request the High Court to review a decision of a body empowered by statutory public law to make decisions leading to administrative action. It allows judicial control over administrative decisions made by such bodies. On judicial review, the court is not concerned with the merits of a decision but simply with the legality of the manner in which it was reached.

Since the bodies responsible for environmental enforcement in the UK are public bodies exercising public powers then judicial review is an important avenue open to an applicant to challenge a decision. The scope of judicial review as a remedy has widened considerably over recent years and covers not only the decisions of central and local government, and inferior courts and tribunals, but also other bodies which exercise functions which are deemed by the court to be public law functions.

Decisions that an administrative body purportedly made outside its powers may be challenged on three major grounds. Broadly these are:

- legality;
- irrationality; or
- procedural impropriety.

Should a decision be ruled unlawful then the orders (called Prerogative Orders) that may be sought from the High Court are:

- **Certiorari**: this enables a decision of an inferior tribunal or body to be scrutinised by the High Court. If the tribunal has not acted within its jurisdictional powers, its decision will be quashed, that is, rendered a nullity.

- **Prohibition**: this prevents an *ultra vires* decision from being taken, that is, a pre-emptive order.

- **Mandamus**: this forces a statutory body to act by compelling it to perform its public legal duty.

In addition, the court has the power to grant a declaration or injunction (in certain specified circumstances) or to award damages (where the court is satisfied that the applicant would have been awarded damages in a civil action begun at the same time).
An application for judicial review is made in two stages. Firstly, there is an application for leave to make the full application. This stage is designed to eliminate cases which are clearly unmeritorious, and those made too late or by people with no sufficient interest to have the necessary "standing" for a judicial review. A vital element at this stage is speed; there must be no delay at all between the decision in issue and starting the judicial review procedure. An absolute maximum of three months is allowed for this, but a court may well hold that an applicant who has taken that long (or even quite a bit less) had delayed unduly, and should not be allowed to proceed with its application. Secondly, where leave to proceed has been granted, there is a full hearing of the application. This will often be after a year or more has elapsed since the application for leave is applied for. The hearing is normally conducted purely on the basis of written (affidavit) evidence and not the oral examination of witnesses. The applicant's evidence will mostly, and perhaps completely, be what had to be prepared for the application for leave. The other party, whose decision is subject to review, may not necessarily have prepared evidence for the first instance application for leave, but will necessarily do so later.

In order to pursue the claim for judicial review a plaintiff must by virtue of Section 31(iii) of the Supreme Court Act 1981 have "sufficient interest" in the decision he wishes to challenge. A recent case in this area is R -v- Pollution Inspectorate, ex parte Greenpeace (No. 2) [1994] 2 All ER 349, where the judge followed the approach in R -v- Monopolies and Mergers Commission, ex parte Argyle Group plc [1986] 2 All ER 257 at 265 which required a first assessment whether the plaintiff has any interest at all. If some interest is found the strength of that interest is to be assessed when considering standing at the substantive hearing. Further, the nature of the plaintiff, the extent of his interest in the issues raised and the remedy and relief sought are to be considered: the influence and resources of Greenpeace and the fact that it could claim to represent 2,500 people in the relevant area were significant. Otton J considered the view in IRC -v- National Federation of Self Employed and Small Businesses Limited [1981] 2 All ER 93 at 117 that it would be more difficult to attain leave to apply if seeking the more stringent relief of mandamus. In this case certiorari was the relief sought. This relief is less stringent leaving the question of injunctions at the discretion of the Court. Otton J went on to grant standing to Greenpeace.

The question of whether an applicant has a sufficient interest appears to be "a mixed question of fact and law; a question of fact and degree and the relationship between the applicant and matter to which the application relates, having regard to all the circumstances of the case" (commentary to order 53 in The Supreme Court Practice).

In the recent case of R -v- Secretary of State for Foreign Affairs ex parte World Development Movement Limited [1995] 1 All ER 611 the pressure group were again awarded standing. The judge in that case considered there to have been an increasingly liberal approach to the issue of standing in the Courts. He emphasised that the decision must depend on all the circumstances of the case particularly the merits. He based his decision in this case on: the importance of upholding the rule of law; the importance of the issues in question; the lack of
another responsible challenger; the nature of the breach and the relief sought; and the high profile of the applicants in giving assistance and guidance on the subject in question.

The two cases do appear to show an increasingly liberal approach with regard to standing of pressure groups. In the latter case the group could not claim to have individual members who were directly affected by the decision. The status of the group and the ability of other parties to bring a challenge appear to be important issues the Court will consider.

When an interest group or NGO is acting in the "public interest" within its specific sphere of interest, there has, in recent years, been a broadening of the judicial interpretation of the "sufficient interest" requirement for a judicial review application. Otton J. in his ruling R -v- HMIP and MAFF ex parte Greenpeace [1994] 4 AUE.R 329 first espoused a new line of judicial thinking when he said that Greenpeace was "an entirely responsible and respected body with a genuine concern for the environment" and, as such, had a bona fide interest in British Nuclear Fuel's activities. It was considered significant that 2,500 Greenpeace supporters came from Cumbria, the area affected, and, more importantly, that Greenpeace were the most appropriate body to bring such an action. He commented that there were many advantages of Greenpeace acting in place of the individuals directly affected by the judgment, namely, that they could "mount a carefully selected, focused, relevant and well-argued challenge", which would save Court time. This case will have a bearing on whether to give NGOs standing, however, in practice, a decision on locus standi tends to be unpredictable depending on the judge deciding the issue and on the facts of the case.

The Law Commission in its recent publication "Administrative Law : Judicial Review and Statutory Appeals" proposes reforms for judicial review to include a two tier test for standing, namely:

- whether an applicant has been or would be adversely affected; or
- the High Court considers that it is in the public interest for an applicant to make the application.

This recognition of the public interest consideration reflects the recent judicial decisions and takes them a step further toward granting locus standi to NGOs.

The costs issue is important with regard to judicial review, which is generally considered an expensive recourse. In recent decisions, the Courts have made no order as to costs thus saving the applicants, where unsuccessful, from having to bear the other side's costs (R -v- Environment Secretary ex parte Greenpeace) [1994] The Independent 8 March 1994. This was supported by the Law Commission in its 1993 consultation paper which considered that "it may be appropriate to disapply the usual cost rules, on the footing that they are inappropriate to the nature of the jurisdiction" (paper number 126).

In the World Development Movement Limited case Rose L J refers to the decision in R -v- Secretary of State for Foreign and Commonwealth Affairs ex parte Rees-
Mogg [1994] 1 All ER 457 where standing was awarded on the basis of the applicant's "sincere concern for constitutional issues". If a similar test is applied in future pressure groups or even concerned individuals may be able to obtain standing.

**Criminal**

Private individuals may bring private prosecutions for environmental offences and where the facts of an offence are clear, this is by no means uncommon. More frequently, however, redress for private individuals is best achieved by complaint to a regulatory authority which has statutory powers for example, to bring its own prosecution or alternatively to require remediation or carry such remediation itself. In some circumstances and for certain types of remediation, the costs borne by the regulatory body in undertaking anti-pollution works may be recovered from the certain specified persons. A complaint to the relevant body by an individual will often be considerably cheaper and a more expeditious way of getting redress than bringing a personal action for an injunction and/or damages. However, if compensation for damage is sought, a claim under civil law brought by the person suffering damage in the normal recourse.

In 1991, Greenpeace carried out a private prosecution against the chemical company Albright and Wilson for the offence of breaching their permitted discharge levels. The NRA (the Regulatory Authority) had decided not to prosecute so Greenpeace took over the case in a private action. This was the first time any chemical company has ever faced a private prosecution in the United Kingdom for pollution. However, although the pressure group, Friends of the Earth, has threatened to take up private prosecutions against a number of major industrial concerns, the prosecutions have never taken place.

In 1994 Greenpeace attempted to bring a further two private prosecutions in respect of alleged emissions into water of toxic substances against ICI (Imperial Chemical Industries plc). The basis of its prosecution was that the effluents contained in the compounds were not permitted specifically under the discharge consents and were capable of damaging the environment.

Greenpeace brought a total of three charges under the Water Resources Act 1991 Section 85(1) and (6). The issue of whether discharge of chemicals not specifically mentioned in the consents is illegal was not addressed as all three charges failed on difficulties in relation to analysis of the discharges.

Greenpeace were ordered to pay £29,849 of ICI's costs of £72,793.

**Joinder of Proceedings**

A number of legal proceedings can be joined into a single action in the following ways:

- by joinder of an action, under the RSC, Order 15.
Under Rule 1, multiple causes of action may be joined into a single action by the leave of the court or where the action is between the same parties, as long as the defendant is acting in the same capacity with regard to each cause.

Under Rule 4, (subject to the discretion of the court set out in Rule 5) parties can be joined to an action as plaintiff or defendant with the leave of the Court

- where there is a "common question of law or fact" which would arise in independent actions, and

- all rights to relief claimed in the action are in respect of or arise out of the same transaction or series of transactions.

The notes to the Rule state this second proviso is to be widely interpreted and includes relief arising out of the same set of circumstances or circumstances involving a common question of law or fact. For example, in Thomas -v- Moore [1918] 1 KB 555 a joint claim for damages for conspiring by eight plaintiffs against six defendants was allowed to be joined with claims against several defendants for separate slanders.

- by way of class action, whereby several plaintiffs can be represented by one firm who brings a single representative action on their behalf. (See, for example, the actions by Lloyds Names against several Lloyds syndicates). This will be common where a number of individuals have suffered damage as a result of a single act of pollution. (See also 3.10). Legal aid is also available for bringing class actions of this nature.

Third Party proceedings (see above) also create the potential for potentially distinct proceedings and/or a separate cause of action to be included in an action previously begun by a plaintiff against a defendant. The third party proceedings can be continued independently of the main action. Alternatively, a defendant may serve a contribution notice against another defendant in order to establish/apportion liability between them. Contribution proceedings can also be continued after the main action has settled.

Thus there is some mechanism for ensuring that a party pays the proportion of the damages for which it is responsible. In practice, where the defendants can be identified and are joined to the action, the high cost of litigation will often encourage potentially responsible parties to settle the matter out of court and to seek to apportion liability between them by way of agreement.

In criminal proceedings for an environmental offence where there is more than one defendant, the defendants may be charged with the same information. They will normally be tried together. If a single defendant is charged with more than one
offence by separate informations, the separate charges may be heard together if the defence agrees.

Where an action is brought for the recovery of clean-up costs, for example under Section 81(4) of the Environmental Protection Act 1990 or Section 161 of the Water Resources Act 1991, the proceedings (against "persons responsible" or "persons who have "caused or knowingly permitted" pollution as the case may be) may be brought against one or more defendants provided that the claims against them involve the same questions of law or fact and the claims arise out of the same circumstances.

STUDY 2

AUSTRIA

Civil

The plaintiff must have suffered damage to goods which are owned by him or where he has a right to use those goods (owner or lessee). Where there is expectation of damage in the near future standing may be established. With respect to the unowned environment it is, at the moment, impossible to file a claim (in the draft of the Environmental Liability Bill such a possibility is proposed).

At the moment, interest groups and NGOs have no special rights with respect to claims under civil law. NGOs cannot commence actions in court if they are not directly injured.

Environmental action groups act both as lobbyists and in challenging the authorities. They are not entitled to bring actions in any special capacity other than that enjoyed by other citizens. Generally they notify the authorities of a breach of administrative law and require the prosecuting authority to prosecute the perpetrator.

Administrative

In the case of administrative proceedings, NGOs can also just notify the administrative authority which is then, depending on the case, obliged to investigate the allegations. Actions can be brought against administrative authorities for breach of statutory duty where failing to act. This is exemplified by the Borax case (see 13 and 3) in which a group of property owners, who had suffered loss and could not claim against the company causing the loss because it was insolvent, brought a successful action for breach of statutory duty against the City of Vienna. On a regional level there exist "environmental solicitors" (Umweltanwälte) who may oblige other administrative bodies to act.

Criminal

To bring a private prosecution, an individual must file a complaint with the Public Prosecutor, who must then investigate it. If he decides not to proceed, the
individual can then proceed on his own behalf but such an action is likely to be expensive.

With respect to criminal prosecutions environmental interest groups have the same rights as individual persons (for example, they can notify the Public Prosecutor).

**BELGIUM**

**Civil**

The right to take action is vested in those that are directly and personally harmed. There is consequently no *locus standi* for actions related to the unowned environment. Air and water are classified as *res communes* (things common to all people) and wildlife as *res nullius* (things on which no right of property can be established); no responsibility can consequently be allocated to the state in relation to them and no citizen has a "real right" to them.

**Administrative**

An enlargement of the standing has nevertheless been adopted by the law of January 12, 1993, on the *locus standi* for environmental protection matters; associations complying with minimum conditions (association under the law of 1921, with environmental protection as their purpose, existing actively for at least three years and whose actions are confined to a specific territory) shall have the right to require an injunction before the president of the Tribunal of first instance, without having to prove their personal interest in the matter. No reparation can however be claimed by the plaintiff under this law.

Under the law of January 12, 1993 cases brought by environmental associations are to be heard by the President of the Court of First Instance who may order the cessation of the polluting activity and may impose measures against damage to the environment.

**Criminal**

An injunction or a penal fine (astreinte) can be requested from the judge so as to stop the activity causing the damage. Clean-up can also be required in some cases.

The Law of January 12, 1993 also applies to give environmental associations standing in relation to criminal offences relating to the environment.

**GREECE**

**Civil**

Under Article 68 of the Code of Civil Procedure, only persons with a direct legal (see below) interest may have standing. The plaintiff must have substantive rights forming the basis of the action. Third parties or interest groups with an indirect
interest or purporting to act in the public interest do not have standing in Greek civil law.

**Administrative**

In general, the only person (natural or legal) who can apply for a "petition for annulment" in respect of an act having an effect on the environment is the person who has been affected by the act. It has been proposed to extend the scope of the persons entitled to submit the petition for annulment, in order to allow the involvement of citizens in environmental protection. The Supreme Administrative Court has ruled that local self-administration organisations, legal persons whose purpose relates to environmental protection, residents of the said area or of a neighbouring area, residents of an area where an industry is located and other groups of people are entitled to submit a petition for annulment to the Court.

The notion of direct legal interest is most used in administrative law.

Legal interest must be personal. A special relationship between the person and the administrative act must exist. It derives from the relationship between the person and the legal or natural situation which is harmed by the act or omission of the person. The need for the legal interest to be personal excludes the possibility for "actio popularis".

Legal interest must be present: this means that the legal or natural situations with which the person is connected personally is still present or if not the effects of the situation are present.

The legal interest must be direct: this means that the legal interest must be directly connected with the personality of the person, *inter alia* that the person himself suffers the harmful act or omission.

**Criminal**

Under Article 28 Section 7 of Law 1650/86 administrative authorities, local self-administration organisations and the Technical Chamber of Greece may participate in a criminal trial and require the restoration of the environment to the extent that this is possible, regardless of whether damage to their own property has occurred. Interest groups and NGOs are not granted this right.

**ICELAND**

**Civil**

Article 21, Paragraph 2 of the Act on Civil Procedure no 91/1991 generally requires the plaintiff to have a legal interest in pursuing the claim. If the pollution originates from the unowned environment (air, wildlife, certain land such as mountains and the sea) and the pollution is causing damage to the plaintiff's interest, then the plaintiff can make a claim as if someone is at fault. If no guilty
party can be found, then for the government to be found liable for the damages there must have been some fault on behalf of the Government.

Generally, the government is not obliged to restore the polluted unowned environment if no guilty party is found, however, pressure from the public may force the government to act. If a statute grants the right to a governmental authority to clean-up the unowned environment, then it must do so. However, if the pollution on the unowned land is not affecting anyone else and no guilty party can be found, then it is unlikely that the authority will take any action. This is partially due to the perceived idea by the public that environmental quality is high and so the environment is not of great concern in Iceland.

Interest groups are not given any special rights in civil law to claim restoration of environmental damage. According to Article 21, Paragraph 3 of the Civil Procedure Act No. 91/1991 the group, or at least some of its members, must have some interest protected by laws in order to pursue such a claim. In this case, such an action must be coherent with the purpose of the group, for example labour unions, if some of their members have been affected. Pressure groups are not seen as important and no major cases exist. Greenpeace are active in Iceland with respect to whaling.

A person who suffers environmental damage may in some instances file a complaint to a regulatory body or a municipality and ask for a remedy against environmental damage. The scope of this right and effectiveness varies from one area of environmental law to another. Generally, this method is more efficient than pursuing a civil claim in Court.

Administrative

Under administrative law the rights of individuals or interest groups to challenge decisions of regulatory authorities are basically the same as under civil law, they must have a legal interest in the matter. Thus individuals and interest groups will have to show that some statutory right or some agreement has been infringed to be able to have standing in administrative law, (see also 2).

Criminal

An individual cannot bring a private prosecution, but a request can be filed with the relevant authority for them to bring a prosecution. Prosecutions are carried out by the public prosecutor. Individuals or pressure groups are not able to challenge a decision of the prosecutor not to prosecute, although in theory a request for the decision to be reviewed at a higher level could be made.

IRELAND

Civil

Ireland has probably the most liberal third party rights of access and appeal in relation to environmental matters in Europe.
In Chambers -v- An Bord Pleanala and Sandoz decided in 1992 (see 13), it was held that where a person (here, members of a local interest group) was an aggrieved person he has, by definition, *locus standi*. Matters such as a failure to make use of other procedures or having an interest in the land affected, are not relevant to *locus standi*.

An important organisation in this area is An Taisce, which is a voluntary, non-profit making environmental protection organisation with an active role in protecting the environment. Their principal aim is to conserve and develop the Nation's physical heritage. It is a prescribed body under the Planning Acts and as such is entitled to:

- copies of draft development plans;
- specific notice of applications for certain types of development;
- copies of environmental impact statements;
- notice of decisions on all planning applications accompanied by environmental impact statements;
- notice of Applications to the Minister of the Environment by Local Authorities proposing to carry out developments in respect of which environmental impact statements are required.

Other bodies involved include:

- Bord Failte (The Irish Tourist Board) which is a corporate body established under the Tourist Traffic Act 1963 which enjoys many of the statutory privileges of An Taisce;

- The Arts Council which, although not perceived as very active in the environmental area, will get involved if the issue concerns/affects the arts and culture;

- The National Heritage Council, whose task it is to form policies and priorities to protect and preserve awareness of flora, fauna and certain inland waterways;

- The Industrial Development Authority (IDA) which promotes and grants aid for industrial development, both foreign and domestic, in Ireland. Grant terms and conditions often specify stringent environmental standards to be achieved; and

- finally the ESB (Electricity Supply Board) is granted by Section 42 of the Electrical Supply Amendment Act 1945, a measure of control over rivers and streams serving electricity generating stations. This prohibits any person without written permission of the Board from discharging or allowing into a river, which is to be used by the Board in connection with the generation of electricity, any chemical or other substance which might injure any part of the generating station or any works subsidiary to it or connected to it.
Organisations such as Greenpeace and Friends of the Earth, whilst not enjoying the statutory recognition of some of the other organisations mentioned above, have played an important role in ensuring the protection of the environment. Indeed such environmental organisations perform a very important role in highlighting abuses and breaches, often to the cost of industry or the inhibition of industrial development.

Administrative

The decision in Chambers -v- An Bord Pleanala and Sandoz 1992 would seem also to apply to administrative review applications meaning that any aggrieved party can challenge a decision or act of a regulatory authority.

Criminal

Even without the decision in the Chambers case, Acts such as the Water Pollution Acts provide that a prosecution for an offence may be taken by "any person". This gives a general locus standi to anyone interested in protecting water from pollution.

LUXEMBOURG

Civil

Prior to 1982 environmental interest groups did not have standing to make claims under environmental law. A number of limited exceptions to the general principle on the admissibility of claims have been created or added to existing environmental legislation. Ecological associations can act as civil parties for infringement as provided for by the environmental laws in question (Article 43 of the law of 11th August 1982, extended by Article 7 of the law of 10th August 1992 on the right to act granted to associations involved in the protection of nature, Article 34 of the law of 17th June 1994). In general, and partly due to Luxembourg being a small country, ecological associations do not become involved in legal proceedings but rather act through lobbying and the media to draw attention to environmental issues.

Administrative

However, such provisions allow only ecological associations to act as civil parties in criminal proceedings. Ordinary rules of admissibility remain fully applicable for their actions brought before the administrative jurisdiction (C.E. 22.07.93, Rôle No. 8823).

Proposals to extend the scope of the exception to such cases are under discussion, but the Conseil d'Etat has taken a resilient stance (Projet No. 3837, Avis Complémentaire Conseil d'Etat).
Ecological groups have furthermore encountered problems relating to their incorporation (CE 22.12.1992, Rôle No. 8522) or to the bodies empowered to represent them in Court (C.E. 11.03.1992, Rôles Nos. 8536-48-49).

**Criminal**

Ecological groups have had to demonstrate that their object is different from the interests of the community, for which only the public prosecutor is entitled to act (C.E. 12.04.90, Role No. 8391 Mouvement Ecologique / TrefilARBED). A high number of claims brought by individuals and especially by ecological groups have been held to be inadmissible. A single decision has ruled that the claim of an ecological association "Mouvement Ecologique" was admissible as being outside the scope of cases provided by the law (Trib. 22nd December 1989), but this decision is in contradiction with established case law.

**NORWAY**

**Civil**

The right of action relies on the plaintiff's legal interest in the matter. The owner or the specific user of a property damaged by pollution will always be considered to have a legal interest.

In relation to the exercise of common rights, the Pollution Control Act states that a claim for compensation may be asserted by private organisations or an association with a legal interest in the case. Persons who in their business make use of common rights (for example, fisherman fishing in waters or farmers letting their animals graze on common land), have standing on an individual basis.

An individual may carry out clean-up measures before bringing his action for costs. However, he must be careful to avoid leaving himself open to liability by proceeding with measures against the express prohibition of the authorities (or the owner). Due to the expense involved, it is more usual for individuals to request that the authorities act instead.

Other users of common rights may also take action as a group and standing has primarily been given to the administration in the municipality. If the damage involves several municipalities, the right belongs to the county. In cases of national interest, the right belongs to the national authorities.

The rights of interest groups and NGOs depend on the legal interest in the matter. There have been court judgments which acknowledge the legal interest of these organisations. Many factors combine to provide the threshold for the legal interest: the purpose of the organisation, the number of members, the age of the organisation, the authorities' acknowledgment of the organisation and the organisation's level of activity. The courts are more ready to accept a claim from an organisation than a claim from a private person, but an organisation founded only with the purpose to claim damages will not be accepted.
NGOs play a significant role in ensuring environmental protection in Norway. This reflects the environmental awareness of the population. The pressure groups tend to be local interest groups acting on a local level against local authorities, for example in respect of the quality of a local river. As far as the National Government is concerned, pressure groups tend to act more in an advisory and policy-determining role rather than in an adversarial role.

Administrative

If administrative decisions go beyond the scope of legislation or are contrary to the provisions of the legislation they may be held to be invalid. Anyone with legal interest in the matter, including interest groups, may challenge the decision in the courts.

The interest groups and NGO's in Norway usually use the media rather than the courts to attract attention to a pollution damage case.

However, on a few occasions interest groups have brought suits before the Norwegian Courts.

In the "Alta River" case, Norges Naturvemforbund ("The Norwegian organisation for the preservation of the natural environment") brought a suit before the Norwegian Courts claiming that the Government's decision to develop the Alta River for water power industry was illegal. The river has been developed.

In the "Sagbruksforeningen AS/Borregaard Industries Ltd." case from 1992 two NGO's claimed compensation under the third paragraph of Section 58 of the Pollution Control Act for expenses to restore the environment after unlawful pollution of the coastal water. The claim was settled out of court.

Criminal

Generally, a private individual in Norway cannot bring a criminal prosecution. There are very limited exceptions to this rule, however, none of them impinge on environmental matters. A decision by the prosecuting authorities not to prosecute cannot be challenged in the courts but the question can be referred up to the State Attorney and ultimately to the Ministry.

PORTUGAL

Civil

Associations for protection of the environment are able to institute legal actions with the purpose of preventing or ceasing acts or emissions from public or private entities that cause damage to the environment.

Administrative
The state is liable for the unowned environment. If the unowned environment is polluted, it is likely that the State will carry out the clean-up and then seek to recover the costs from the guilty party. If no guilty party can be found, then the state will cover the cost. The unowned environment includes air, water, wildlife and, in general, all the things that might be included in the concept of *res nullius*.

The associations for the protection of the environment are governed by Law No. 10/87, of April 4 1987. These associations are entitled to participate and intervene in the development of environmental policy and to consult and receive information from the local authorities on all environmental matters; to lodge appeals against administrative acts that infringe legal rules protecting the environment and the quality of life.

**Criminal**

The association may also intervene, as a third party, in criminal legal actions against those who perpetrate crimes against the environment.

All rights referred to above are effectively used.

**SWITZERLAND**

**Civil**

Individuals have standing in civil cases where they have suffered some damage or loss and therefore have an interest sufficient to claim before the civil courts. NGOs have no standing to make civil law claims.

**Administrative**

NGOs are, however, recognised as plaintiffs, with standing to sue environmental protection associations, provided their statutes of incorporation state that they are engaged (exclusively) in the protection of (certain aspects of the) environment.

According to the Protection of the Environment Act environmental interest groups (Umweltschutzorganisationen) have the right of standing to sue if their scope of activities covers the whole of Switzerland and if they have existed for more than ten years. Following lengthy debates in the Federal Parliament, such organisations have been given explicit powers with respect to the protection of the unowned environment.

Governments and parliaments in Switzerland usually represent large coalitions of most major political parties. Pressure groups therefore are often represented in government bodies. Pressure groups therefore often have possibilities to influence legislative and administrative processes informally.

On the other hand, pressure groups rely heavily on electronic and print media to influence the public and the government or the parliament to protect the
environment. Federations or associations fighting for environmental interests are numerous on federal, cantonal and regional levels.

**Criminal**

Criminal procedure varies somewhat between the Cantons. The Geneva procedure involves initiation of the proceedings by the Public Prosecutor. The case is then handed to the examining judge. The Prosecutor may decide not to proceed if the prosecution is undesirable. The examining judge must establish the strength of the case and bring charges if there is sufficient proof. The Chambre d'accusation controls the examining judge and the parties may make an application to it at any stage. Only the parties can therefore challenge the decision of the examining judge.

Under the procedure in the Canton of Zürich the decision on whether to proceed with a prosecution is at the discretion of either the District Attorney or the State Attorney's Office depending on the type and seriousness of the case. This decision can be challenged by the parties.
16. CLASS ACTIONS

STUDY 1

USA

Although class actions are not specifically authorised or prohibited by CERCLA, they are not generally relevant, since CERCLA authorises private parties only to bring cost recovery or contribution actions to recover their clean-up costs (and not to seek injunctions or natural resource damages against polluters). A class action by numerous similarly situated plaintiffs which have incurred similar response costs is theoretically possible, but unlikely.

Class actions are available for state law tort claims stemming from similar injuries to person or private property arising from a common source, assuming that certain threshold criteria are met. This is true whether the action is pursued in a state or federal court. See Fed. R. Civ. P.23.

The basic prerequisites for a class action are that the lead plaintiff's claims are typical, that the named plaintiff adequately represents the interest of the class, that the class members' claims raise substantial common questions of law or fact, and that the similar claims are so numerous as to make joinder of all parties impracticable. See Fed. R. Civ. P. Rule 23(a).

An example of a situation where a class action for environmental damage may be appropriate is where an entire community or neighbourhood has been exposed to contaminated drinking water resulting from the contamination of the municipal water supply by one or more companies' discharges of solvents. Under such circumstances, one or more classes could be certified (for example, a class including all plaintiffs claiming personal injuries or seeking medical monitoring as a result of alleged exposure to the contaminated drinking water, or all plaintiffs seeking to recover for diminution in their property values as a result of the surrounding groundwater contamination) and may involve hundreds of thousands of residents. Other examples are suits by numerous persons affected by an environmental disaster (for example, the Exxon Valdes oil spill in Alaska). Several such class actions are currently pending in Phoenix, Arizona against manufacturers which allegedly caused several "plumes" of groundwater contamination.

DENMARK

Class actions are not possible. Class actions were considered in the preparatory work for the Act on Compensation for Environmental Damage 225/94 concerning standing for green organisations, but rejected. Class actions for citizens were outside the scope of the preparatory work of the committee preparing the Act and has until now been rejected in Danish law. However, this does not imply that citizens suffering injury are not able to take legal action as one legal case. This was for example done in the Aalborg Portland-case on workers exposure by
asbestoses. But the decisions of the court are made for each individual party, not for the plaintiffs as a group.

FINLAND

Class actions are not currently possible but a draft Government Bill concerning legislation has recently been prepared by a working group nominated by the Ministry of Justice and presented to the Ministry of Justice on 30 December 1994 (entitled Proposal for an Act on Group Complaints - a Report of a working group. Publication of the Ministry of Justice 1/1995).

The term "class action" is defined in the proposal as a civil action which is brought without special authorisation on behalf of a group so that the decision will become binding on all the members of the group. A class action would be possible both in ordinary and special courts in situations where several people have claims against the same defendant that are based on the same or similar grounds and facts. It could be brought by a member of the group or in some cases by an association acting on behalf of the claimants.

According to the proposal, the person who has brought the class action would be responsible for the costs. The applicant might, however, ask that the state take the responsibility for his costs and those that the claimant may be held liable to pay to the defendant.

FRANCE

The possibility of a certain type of class action has just been introduced into the French system, by Law 95/101 of 2 February 1995.

Article 5 IV of this law provides that a new article is inserted in the Rural Code which states as follows:

"Where several identified individuals have suffered personal damage by the same person (individual or legal entity) and had a common origin, in the fields mentioned in Article L 252-3, any interest group which is authorised ("agréé") in accordance with Article L252-1 may, if it is has been commissioned by at least two of the affected individuals, bring an action before any jurisdiction in the name of these individuals".

As opposed to what usually happens, in a class action, the judge does not have to evaluate at the preliminary stage the foundation of the claim which can be brought by any number of people.

This flexible procedure therefore has the same objective as some forms of class action but does not suffer the same procedure of bureaucracy.

This right of action exists in all jurisdictions.
The "fields mentioned in Article L252-3" are the "acts causing a direct or indirect damage to the collective interests that the authorised interest groups have to protect and constituting a violation of the laws relating to the protection of the nature and the environment, the improvement of standards of living, the protection of water, air, soils, sites and landscapes, town planning or the purpose of which is the prevention of pollutions and nuisances, as well as of the texts enacted for the application of such laws." (free translation)

Under Article L252-1, authorised interest groups must have as their purpose the protection of the environment, have existed for at least three years, and be duly registered. Apart from the above provisions, no other type of class action is possible.

**GERMANY**

Class actions are not possible.

**ITALY**

Class actions are not possible.

**THE NETHERLANDS**

If not all parties suffering damage wish to start their own action, a technique sometimes used is that one plaintiff will ask a "legal declaration" to be made by the court to declare, for example, that certain emissions are higher than permitted levels. Those suffering damage as a result of these emissions can then obtain compensation more easily.

**SPAIN**

Class actions are not possible in Spain. Only a person who has a direct interest in a civil claim may bring an action. Therefore it is not possible for one case to be decided which will apply to all other plaintiffs in the same class.

**SWEDEN**

Class actions are not possible currently but a recent Government Official Report, SOU 1994:151 from December 1994 proposes legislation to enable class actions, possibly in about two years time.

There have been a few cases in Sweden concerning houseowners who consider that their properties have reduced in value because of nearby polluting operations. Even if they do not initiate proceedings at the same time against the polluter, under the Environmental Civil Liability Act 1986 all of their cases can be heard together so that the court does not have to deal with a number of individual proceedings.

**UK**
Class actions as perceived in the US are not possible under the rules of any Court of England and Wales. Representative proceedings are allowed where numerous people have the same interest in any proceedings. This implies that all members of the alleged class have a common interest, a common grievance, and the relief sought is beneficial to all. The last criteria may prove a problem to most environmental issues because, although the cause may be universal to all the possible plaintiffs, the damages sought may be different and therefore representative proceedings cannot be used.

Where there is a commonality of issues or interests, but it is necessary to consider the issue of damages individually, then a group action may be started. There are no formal regulations on group actions contained in Court rules, however, the Supreme Court procedural committee issued a "Guide for use in Group Actions" in May 1991. This guide was an attempt to develop a procedure for dealing with group actions and it refers to claims arising out of environmental pollution as an example of the type of action which might be usefully covered. The guide includes some major organisational changes for dealing with group actions. A single High Court Judge will be appointed to the action, who will have a wider control on the procedure of the case than a usual judge. The action will then be divided to discuss the generic contentious matters apart from the separate damages claim for each individual.

The Lord Chancellor's department is currently reviewing group actions and has issued proposals which are currently being discussed.

There are two well known environmental group action cases and a third may be about to begin. The first is A.B. and others -v- South West Water Services Limited [1993] (C.A.) 2 W.L.R. 507, which involved personal injury claims by customers of a water company suffering damage due to contaminated drinking water. A quantity of aluminium sulphate was accidentally introduced into the drinking water system and some 180 plaintiffs brought actions against the defendant for breach of statutory duty, negligence and nuisance. Apart from the usual claim for compensatory damages for the injuries sustained as a result of drinking the water, the plaintiffs also sought exemplary and aggravated damages due to the arrogant manner in which the water company dealt with the matter. However, the claim for exemplary and aggravated damages was not allowed.

The other main action is against the London Docklands Development Corporation which was established by the Government to help regenerate part of the Docklands area. These are commonly referred to as "the Docklands cases". The claims are either in public or private nuisance, depending on whether the claimant has an interest in land which has been affected, due to excessive noise and dust pollution. The injuries they have suffered are either stress related or respiratory ailments. Due to the number of people involved within this action, it means that a group action takes even longer than normal to progress through the litigation procedure so these cases are still to be heard even though the claim dates from 1991.
Public nuisance should also be mentioned. Nuisances are divided into public and private nuisances. A public nuisance is a crime while a private nuisance is only a tort. A public or common nuisance is one which materially affects "the reasonable comfort and convenience of life of a class" of individuals who come within the sphere or neighbourhood of its operation. The question whether the number of persons affected is sufficient to constitute a class is one of fact in every case.

For as long as only the public (or some section of it) suffers damage, no civil action can be brought by a private individual for a nuisance. For example (not in the environmental context), where a public highway is obstructed, an individual cannot sue for nuisance if there is no damage beyond being delayed on several occasions in passing along it or being obliged to take another route, because these are inconveniences which are common to everybody else. The reason normally given for this rule is that it prevents multiplicity of actions, and if suing were allowed, the large number of people who might do so could lead to unacceptable results. Thus, a criminal prosecution is deemed appropriate. The Attorney - General (the principle law officer of the Crown and usually a member of the House of Commons) will usually bring an action at the suggestion or information of an individual. If for some reason a criminal prosecution is an inadequate sanction, the Attorney - General may bring a civil action for an injunction.

If he refuses to take action the courts are not at liberty to enquire the reason for this and a private individual has no remedy (see Gouriet -v- Union of Post Office Workers [1977]).

A local authority may bring proceedings for an injunction to restrain a public nuisance where they "consider it expedient for the promotion or protection of the interest of the inhabitants of their area". However, the increase in powers of environmental regulatory authorities (including the local waste regulation authorities), and of the new Environment Agency in 1996, means that actions in public nuisance have declined in importance.
17. **FUNDING (INCLUDING LEGAL AID)**

**STUDY 1**

**USA**

In general, no special funding is available from the Government to allow private parties to pursue civil liability actions to remedy environmental damage. Rather, plaintiffs will need to pay their own costs from one source or another (ranging from contributions to environmental NGOs to contingency fee arrangements with personal injury lawyers) and then seek to recover those costs out of the damages awarded. There is some tradition of private US attorneys bringing environmental suits on a *pro bono* basis, which may increase as the "environmental justice" movement seeks to redress the effects of pollution on minority and low income groups. Various US environmental organisations (for example, the Natural Resources Defense Council, the Environmental Defense Fund, the Sierra Club Legal Defense Fund, and the Conservation Law Foundation) have a 25 year history of "public interest" environmental litigation against the Government and private defendants to abate pollution. A portion of the groups' budgets are funded by attorneys' fees recovered under citizen suit judgments and settlements.

**DENMARK**

Section 330 of the Procedural Act provides for legal aid to anyone below a certain income. This legal aid is not available in administrative actions. It is, however, possible to supplement with state money granted to parties in principle cases, a provision which supports actions brought by environmental organisations. This last grant was made in *Greenpeace v- Minister of Traffic*, involving the EIA Directive and the bridge between Sweden and Denmark, to pay both parties' expenses for lawyers and court fees including interlocutory proceedings.

Funding under the Procedural Act is decided by the Minister of Justice. Approval by the department of funding covers necessary expenses for lawyers and collection of data, court fees, including interlocutory proceedings as well as costs for execution of decree by the court.

This funding is supplemented by legal expenses insurance, an insurance contract which is very common and included in all ordinary private public liability insurance, covering a large majority of Danish households. This insurance can only be used for disputes concerning damages and is limited to DKr 70,000.

**FINLAND**

Cost free proceedings are available under certain conditions to persons who cannot bear the costs of legal proceedings (Act on Cost Free Proceedings 87/73.) A person who has been granted cost free proceedings may also obtain free legal aid. Legal aid is available for all types of civil actions as well as for administrative actions.
FRANCE

No specific funding relating to civil liability actions for environment damage is available.

Under French law, if someone wants to bring an action in court but cannot afford to pay a lawyer in this respect, he/she can benefit from the legal aid system if his/her income is very low. (In such cases, the lawyers are paid unrealistically low rates). This applies to both civil and administrative actions.

GERMANY

There is no funding by statute apart from legal aid. Legal aid is granted to those persons who cannot afford to conduct an action. A prerequisite of legal aid is that the action must have sufficient prospect of success. Although success does not have to be certain, some probability of success must exist.

Legal aid has not acquired great significance in the context of environmental damage. This might appear surprising at first, however, persons eligible for legal aid do not in general own property (real property, other property) which could be damaged by environmental effects. As a result, these persons are mostly restricted to claiming compensation for damage to health which is mostly caused by several factors apart from when it is caused by accidents, (sudden emission of toxic gas or explosion). In particular when harm to health cases is caused by several factors, it is very difficult to judge the success of an action without having first appointed an expert to give an opinion, which often turns out to be expensive.

Apart from this, the possibility remains for several injured persons to join forces and fund a test action.

Legal aid is available for all types of civil action if the prerequisites are satisfied (prospect of success of the claim, lack of financial means). Legal aid is also available for administrative actions. The same prerequisites apply.

ITALY

Legal aid is available for any type of criminal, civil and administrative action upon condition that the conditions required by the law are met (Articles 24 of the Constitution and Royal Decree of 30 December, 1923 No. 3282).

The admission to legal aid in Italy is decided by a special commission and is subject to the existence of specific requirements: a poverty status and probability of success. The certificate of "poor person" is issued by the mayor of the municipality in which the person is resident.

The need to prove the poverty status which consists of showing impossibility to pay any legal cost, makes the actual use of this procedure difficult and quite rare.
THE NETHERLANDS

Legal aid is available to private persons earning below 2,105 Dutch guilders net (single) or 3,005 Dutch guilders net (couple) per month. This legal aid covers lawyers' fees, but not legal costs awarded to the other party. The person seeking legal aid must pay a contribution ranging from 110 Dutch guilders to 1305 Dutch guilders. The authority giving legal aid (the Legal Aid Council) will decide if legal aid will be awarded. Legal aid in respect of commercial interests cannot be obtained.

Legal aid is also available in administrative actions.

SPAIN

Under Article 13 onwards of the LEC, access to justice is given for no payment to those persons who can prove that they do not have sufficient resources to litigate, and to those persons to which a specific law grants this privilege. Courts will grant this privilege to those having an income of less than twice the minimum professional wage (at present Ptas 62,700).

The benefits that may be obtained are:

- non-payment of court costs;
- free publication of legal advertisements;
- exemption from the requirement to make deposits; and
- free legal advice.

It is a principle in Article 119 of the Spanish Constitution that justice is available for free when required by law and that justice is available to parties otherwise with insufficient funds to litigate. Accordingly, legal aid is available for all types of action both civil and administrative.

SWEDEN

Legal aid is not available in all types of civil action. It is available in tort actions and criminal actions but not yet in administrative actions. Businesses can receive legal aid and it is only available to persons who are genuinely poor. Even when it is provided these persons will depending on their resources be required to make some contribution and if unsuccessful in bringing a claim a legally aided party must still reimburse the other party for its costs from his own pocket.

Insurance for legal costs is available and this has the benefit that it covers the party's costs and the costs of the other party if the case is lost up to a total of both costs sources of 75,000 SEK.

UK

Legal aid is available in all civil disputes with a value of more than £1,000. An award of legal aid is dependent on the merits of the case and on the means of the
applicant: the applicant must have a reasonable chance of success and the applicant must undergo a means test which concerns both his income and any capital. If he is below a minimum threshold he is eligible to full legal aid (that is all of his costs), if he is between the minimum and the maximum levels he is required to make a contribution towards his costs, to be paid from either his capital or his income.

It is important to note, that where a recipient of legal aid is a losing party the other party will only recover limited costs from him. This is due to Section 17 Legal Aid Act 1988 which provides that an order for costs against an unsuccessful assisted person cannot exceed the amount (if any) which is a reasonable one for him to pay having regard to all the circumstances, including the means of all the parties and their conduct in connection with the dispute.

Under Section 18, Legal Aid Act 1988 a defendant who is not legally aided is provided some relief in that he may recover his costs from the Legal Aid Board provided it is just and equitable to do so, and the defendant will suffer severe financial hardship unless such an order is made.

It is a general principle of group actions that all plaintiffs within the coordinated arrangements, whether funded by legal aid or not, should share equally in the costs of the lead actions and all "generic" work, such as the work of the coordinating committee.

Legal aid is not available for private prosecutions.

Under Section 58 of the Courts and Legal Services Act 1990 conditional fee arrangements are permitted in specified proceedings as long as these arrangements comply with the regulations made by the Lord Chancellor.

Under the Conditional Fee Agreements Order 1995 No. 1674 conditional fee arrangements are permitted in personal injury cases, insolvency proceedings and proceedings before the European Commission of Human Rights and the European Court of Human Rights. Where a client has legal aid the agreements are excluded. The maximum uplift to fees is 100 percent. This order came into force on 5 July 1995.

Apart from the types of action listed above contingency fees are not permitted in any sort of contentious proceedings. At present therefore the application of contingency fees to environmental cases is unlikely.
ALLOCATION OF COSTS IN PRIVATE ACTIONS

STUDY 1

USA

Under the general "American Rule", each party bears its own attorneys' fees, unless a statute specifically and unambiguously authorises an award of attorneys' fees to the prevailing party, (Alyeska Pipeline Service Co -v- Wilderness Society, 421 US 240, 240 (1975)). However, a number of US environmental statutes have authorised the recovery of attorneys' fees by prevailing parties under citizen suit provisions, although the amount of the fee award is at the discretion of the federal district court.

Under CERCLA paragraph 107(a), the Government is entitled to recover its attorneys' fees as an "enforcement cost" (one of the types of "response" costs listed in CERCLA paragraph 101(25)). However, the US Supreme Court recently held that plaintiffs in private cost recovery actions cannot recover their attorneys' fees or litigation costs, as the statute did not clearly authorise this result, (Key Tronic Group -v- United States, 114 S.Ct. 1960 (1994)).

Under state common law actions for personal injury or private property damage, the general American Rule that each party bears its own fees and costs applies, although currently popular "tort reform" proposals may ultimately require that the loser pay the winner's fees and costs.

DENMARK

Expenses for legal assistance and other consultants in cases before the Environmental Appeal Board and Nature Protection Appeal Board are paid by the claiming party irrespective of the outcome of the claim. In civil law cases, the losing party has to pay legal costs of the winning party. However, courts are reluctant to estimate the legal costs of the winning party, which is why in major cases only a part of the legal costs are borne by the losing party.

FINLAND

As a general rule, the losing party has to pay the legal costs of the winning party (Legal Proceedings Act, Ch. 21, 1013/93). There are some exceptions to this rule, for example, if the case involves several claims and each party has won a proportion of the claims, the parties must carry their own costs.

FRANCE

Costs follow the event in some respects. The defendant who is found liable may be ordered to pay, apart from the damages due to the victim, the costs of the trial.

It should be noted that, under French law, "costs" include only very moderate court costs and an amount granted on the basis of Article 700 of the Code, which sets
out the rules of civil procedure, which is supposed to cover the legal expenses incurred by the plaintiff but in fact does not cover legal fees, and therefore does not reflect at all, in practice, the real expenses incurred by the parties.

The above comments are also relevant with respect to the administrative jurisdiction. The legal basis is, in the administrative context, Article L.8.1 of the Code of Administrative Tribunals and Administrative Courts of Appeals which states as follows:

"In all proceedings before Administrative Tribunals or Administrative Courts of Appeal, the judge holds that the party who is ordered to pay the costs or, failing that, the unsuccessful party, shall pay to the other party the sum which he decides (thinks fit) as expenses incurred which are not included in costs. The judge takes into account the equity or the economical situation of the liable persons. In the light of these criteria, he can, even automatically, decide that there is no ground for such "payment".

GERMANY

The party losing the legal action has to bear the court fees and the legal costs of the successful party. Court fees in particular include experts' costs.

ITALY

Generally the losing party bears the costs of the suit (including lawyers' fees assessed by the courts at either party's request). There are no administrative provisions.

THE NETHERLANDS

The Dutch Courts will generally award legal costs to the winner according to a formula dependent on the amount of work involved with a case. The costs awarded usually only partly cover the costs actually incurred. Under certain circumstances, the courts can decide each party will bear its own costs.

In administrative law, the courts have discretion to award set amounts of legal costs (Art. 8:75 Awb)

SPAIN

As a general rule, (Article 523 LEC) the losing party bears the costs, except where the court deems that there exist exceptional circumstances for not applying this rule. Courts have, therefore, a certain amount of discretion.

The party which bears the costs has a right of appeal (Articles 427 to 429 LEC).

In administrative proceedings, costs follow the event only in the appeal before the Supreme Court ("recurso de casación") (Article 102 of the Law on the
Administrative Jurisdiction, of December 27, 1956), and in proceedings concerning the defence of fundamental rights (Article 10 of Law of 62/1978).

Exceptions to this rule depends on the court. For example, in a complex legal issue, it is possible that the court may decide to deviate from the "cost follows the event" rule, provided that neither party has acted in bad faith.

**SWEDEN**

No legal costs are "refunded" under the Environmental Protection Act 1969. Under the Environmental Civil Liability Act 1969, the losing party has to pay the legal costs of the winning party according to the Code of Procedure. However the Court has a right to decide otherwise if there is any special reason, for example, if the winning party does not win the level of damages he has sued for. If so, each party may have to pay a proportion of the other party's costs or whatever the Court finds appropriate.

**UK**

Section 51(1) Supreme Court Act 1981 gives a judge a discretionary power to award costs as he thinks fit. It states that the court has full discretion to determine by whom and to what extent costs are to be paid.

The general principle is that "costs follow the event", that is, that the loser will be ordered to pay the winners' costs and will be left to bear his own.

It is important to note that where any order is made for the payment of another party's costs, it covers only "his reasonable costs". The claim for costs is subject to "taxation" by the court, a process whereby all costs incurred are reviewed to determine what amount is reasonable. This will be between 50% and 70% of the costs actually incurred. Thus, costs remain a significant issue when contemplating litigation even when sure of the outcome. For example, in *Cambridge Water Company -v- Eastern Counties Leather* [1994] A.C. 264, where costs were ultimately awarded against the plaintiff, it was estimated that the total of the costs bill amounted to some £5 million.

In certain circumstances though, the court may award the winner only a proportion of his costs or will make no order as to costs, in which case each party will be left to bear his own.
19. THE BURDEN OF PROOF

STUDY 1

USA

Under both CERCLA and general principles of common law, the burden of proof is on the plaintiff to show, by a preponderance of evidence (that is, more likely than not), that the defendant is liable.

Under CERCLA, there are situations where, in effect, the burden of proof is reversed for certain parts of the plaintiff's case through the use of "rebuttable presumptions." For example, liability under CERCLA is presumed to be joint and several unless the defendant can show that the harm is divisible. Likewise, EPA's response actions are generally presumed to be "not inconsistent" with the National Contingency Plan (an element of the government's case) unless the defendant demonstrates inconsistency. Also, in a natural resource damages case, damage calculations done according to governmentally issued methods are presumed to be accurate unless rebutted by the defendant.

Causation

Under CERCLA's basic liability provision, paragraph 107, the plaintiff must show that a "release" of hazardous substances at the site "caused" the occurrence of response costs, (42 USC paragraph 9607(a)). The courts have interpreted this provision as applying a very low threshold for the plaintiff's demonstration of causation, particularly where the plaintiff is the government. For example, owners and operators will be considered to have "caused" contamination solely on the basis that they owned or operated the site at the time the hazardous substances on the site were released or threatened to be released. Similarly, generators of hazardous substances may be liable for the entire clean-up costs if they arranged to send any amount of any hazardous substances to the site, and such substances were "similar" to those hazardous substances which were released or threatened to be released on the site, (see generally, United States -v- Wade, 577 F. Supp. 1326, 1333; (E.D. Pa. 1983); United States -v- South Carolina Recycling and Disposal, Inc., 653 F. Supp. 984, 991-92 (D.S.C. 1984). For a general discussion of liability under CERCLA paragraph 107, see, S. Cooke, The Law of Hazardous Waste paragraph 14.01.

The plaintiff is not required to "fingerprint" the defendant's wastes and show that the defendant's specific waste material was actually detected at the site or is part of the required clean-up. Indeed, in cases involving liability for "threatened releases", one appellate court held that the plaintiff needed to show only that it reasonably believed its property was threatened by the defendant's wastes and that the plaintiff reasonably incurred costs in response to the perceived threat, (Dedham Water Co. -v- Cumberland Farms, 889 F. 2d 1146, 1157 (1st Cir. 1989)).

Under general principles of state common law, however, the normal rules of causation apply, imposing a much higher standard. The majority-rule common
law negligence standard for proximate causation requires that the injuries in question were in fact caused by the defendant's negligence, and that they were reasonably foreseeable. Some courts apply a "but for" rule to the determination of whether or not the plaintiff's injuries were in fact caused by the defendant's negligence, while others require only that the defendant's negligence was a "substantial factor" in the plaintiff's injuries. See S. Cooke, The Law of Hazardous Waste paragraph 17.01[b][iv]; see generally W.P. Keeton et al., Prosser & Keeton on the Law of Torts paragraph 41 (West Publishing Co., 5th ed. 1984).

Proof of causation generally requires scientific testing, significant amounts of technical data, and the use of expert witnesses. It is therefore costly, and the resources required to litigate such cases can be a significant obstacle to individual plaintiffs bringing claims against large corporations. Moreover, the rule recently established by the US Supreme Court in Daubert -v- Merrell Dow Pharmaceuticals, Inc., 113 S.Ct. 2786 (1993), requiring federal judges to scrutinise the scientific validity of expert testimony, has resulted in the dismissal of a number of environmental tort claims for lack of admissible expert testimony on the issue of causation. See for example, Dana Corporation -v- American Standard, Inc., 866 F. Supp. 1481, 1499, 1501-03, 1527 (N.D. Ind. 1994); see also Murrelet -v- Pacific Lumber Co., 1995 WESTLAW 122048 at *21 (N.D. Cal 1995). For a general discussion of the impact of Daubert, see S. Cooke, The Law of Hazardous Waste paragraph 17.02[c][i] at notes 145-55 and accompanying text.

DENMARK

Under both classical civil liability and liability under the Act of Compensation for Environmental Damage, 225/1994 and the Environmental Protection Act, 358/1991 the plaintiff must prove that the damage was caused by the defendant. The level of evidence required by the court depends on the circumstances. Even if other sources might have caused the pollution, the defendant will still be liable if the damage could have been caused by his negligent act; the defendant should not benefit from wrongful acts by others.

There are no examples of reversed burden of proof under civil law. However, in the administrative law case concerning Phoenix (H.1989.692) relating to hazardous activities the burden of proof was reversed. The defendant company had been convicted in 1958 by the Supreme Court for causing pollution. Another case against the same defendant was brought regarding contamination discovered in the 1980s. There was a problem of res judicata in that it could not be proved that the newly discovered contamination was caused after 1958 (the pre 1958 pollution having already been the subject of litigation). The defendant had violated another provision in 1966 and was convicted for this. The court held that the 1966 breach and the lack of further information justified an inference that the recently discovered contamination had been caused after 1958 unless the defendant could show otherwise. This case would appear to be a policy decision standing on the particular facts but illustrating how the burden of proof can be reversed by the courts. The burden of proof has in a few cases been more cautiously reversed, as in the Aalborg Portland case, (UfR. 1989.1108) in relation to personal injury caused by exposure to asbestos where the court decided on the
available evidence and the difficulty to prove a definite causal link that the
defendant should have to prove that the illness was not caused by the exposure to
asbestos.

Causation

As stated above, even if other sources might have caused the pollution, the
defendant will still be liable if the damage could have been caused by his act or
omission. However, the defence of "no causation" was used successfully in re:
M/T Carona where it was demonstrated to the satisfaction of the court that the
discharge of oil from a ship had not caused damage to a beach; evidence relating
to the weather and sea currents was relied on.

FINLAND

The burden of proof, according to the explanatory notes to the Environmental
Damage Compensation Act, 737/1994, requires the plaintiff to demonstrate that
the defendant is liable on a "probability" of clearly more than 50%. Under this
Act there is no provision for reversal of the burden of proof.

In some court cases the burden of proof concerning the fault element has been
reversed so that the operator is under an obligation to prove that the damage had
not been caused because of fault or negligence on his side in order to be relieved
from liability.

The best example is offered by the Supreme Court decision 1989:7. In this case
sulphur-containing soot from a thermal power station damaged cars parked at a
nearby car park. The onus was on the owners of the power station to demonstrate
that the generation of soot was not due to their negligence.

This possibility of reversing the burden of proof has been developed and used by
the courts. It is theoretically possible that they may apply this general principle to
cases under the new Environmental Damage Compensation Act 737/1994 but the
fact that the Act contains no provision for this makes this unlikely and harder for
the courts to justify.

Causation

According to the Environmental Damage Compensation Act, 737/1994, the
plaintiff has to prove that there exists "a probability of a causal link", (that is, a
likelihood of clearly greater than 50%) between the alleged offending activity and
the damage. In judging this probability account should be taken of, *inter alia*, the
nature of the activity and the damage, and other possible causes of the damage.
The Government Bill names as an example the question of how common the
damage is in comparable circumstances. If there are several possible explanations
for the source of the damage, those possibilities must be compared and the most
probable must be chosen. The burden of proof is the same for administrative
authorities as for other plaintiffs.
FRANCE

In cases of civil liability the plaintiff is required to bring evidence that the defendant is liable. However, there is no concept as specific as standards of proof except in very limited occasions.

The burden of proof is reversed for strict liability based on Article 1384 onwards: the operator or "gardien" is de facto the person at fault and is obliged to prove external cause ("cause étrangère") in order to be exonerated. It is enough for the victim to prove that an object was instrumental in the damage for it to be held as one of the causes of the damage or was dangerous per se.

Causation

Proving that a party has "caused" the prejudice or damage, is often very difficult to establish with respect to environmental damage. For example, in the case of soil contamination, the causal connection is very difficult to establish as the pollution is often the result of a slow, gradual process and can have a diffuse origin.

In most cases, public authorities will automatically consider that the operator of the site is liable; alternatively, they may turn towards the owner, if he is a different person. There is a tendency to seek "deep pockets" solutions, in order to avoid spending public funds.

The difficulties encountered in proving the chain of causation are addressed by Article 1353 of the Civil Code which allows the judge to base his decisions on grave, precise and corroborative presumptions. In this way when it appears that no other cause exists which could be the cause of the damage, except the incriminating act, the judge decides that this is the chain of causation. In other words, where there are several possible causes of the damage, the judge can hold jointly liable all the authors of the damage. This solution is not always systematically applied.

In administrative clean-up cases, the causation aspect is not essential (which is different from the civil cases where the three elements need to be established); there is basically a presumption of damage and a requirement of clean-up imposed on the operator and/or the owner of the site. The case law is very clear on this point and is based on Article 1 of the law of 13 July 1976, as modified, on listed sites, which provides:

"subject to the provisions of this law are the plants, workshops, warehouses, sites and more generally all installations operated or owned by any individual or entity, public or private, which can present dangers for (...) the environment" (emphasis added).

GERMANY

In principle the person bringing the claim has the responsibility for proving that the claim exists. With regard to environmental damage, case law had already
granted an easing of the burden of proof before the UmweltHG came into force. According to this it was sufficient that the injured party proved that:

- the person against whom the claim is being brought emitted certain substances;
- the emission was, in principle, capable of creating the ensuing damage; and
- according to the specific facts, the damage probably came about as a result of the emission.

If the injured party could furnish proof, the person responsible for the emissions had to bring forward the possibility of a different cause for the emissions. The judge had to be convinced of the truth of this matter beyond reasonable doubt (a high level of proof), but there were no set rules.

**Causation**

The core of the new UmweltHG is the introduction of the so called "presumption of causation" (paragraphs 6 and 7 UmweltHG). This presumption of causation has developed from the easing of the burden of proof granted by case law. Pursuant to the presumption of causation an injured party no longer has to establish a high degree of causation, but simply has to prove the suitability of a plant to cause the ensuing damage. Despite this, the following proof still has to be furnished by him:

- a plant has to emit certain substances (as the injured party does not generally know the nature of the emitted substances, it is entitled to enquire of the owner of the plant as to their nature (paragraphs 8 and 9, UmweltHG));
- the injured party has to prove how the damage could possibly have come about (spatial and temporal relations between the source of the emissions and the area suffering the damage);
- the injured party has to prove the damage; and
- the injured party has to prove the correlation between the emissions and this specific kind of damage.

**ITALY**

The burden of proof is on the party claiming damages, in accordance with the general principle on evidence (Article 2697, of the Civil Code), under which any party affirming something or raising an objection must supply evidence in respect thereof. Where definite evidence is not available the judge must decide on the balance of probabilities.

Article 2050 of the Civil Code provides that a party performing dangerous activities is considered *prima facie* liable for damage caused by such activities, unless it can prove that all proper measures in order to prevent damage were taken at the appropriate time. The judge has a discretion as to the level of proof required and must give reasons for his decision. A higher level of proof (with no fixed criteria) on "immediate and direct" link to the defendant must be proved.
Causation

The evidence that a party has caused environmental damage is generally given in a court case via reports drawn up by or confirmed by experts, be it *ex parte* (similar to the US "affidavits") or within a specific procedure of *ex officio* expertise, made by a sworn expert appointed by the proceedings judge. The judge has a discretion to determine the decision he will take based on evidence provided by the experts.

The elements necessary to prove that a party has caused environmental damage, and to quantify the latter, cannot be stated *a priori*: a case-by-case analysis is to be conducted. Relevant aspects, accordingly, could for example, be the actual carrying out of a polluting activity or of an activity which, in the judgment of the Court, can be considered potentially polluting; the violation of legal provisions or regulations; a causal link between the activity and the damage.

The main difficulties reported have been in proving and apportioning responsibility for contamination in the event of succession in ownership of a polluted site, as well as in the quantification of the damages, due to the difficulties in proving when the contamination took place.

THE NETHERLANDS

The burden of proof is on the plaintiff, on a prevailing probability. The courts are quite strict on this matter. For example, the mere fact that pollution is found in the soil on a company's property by substances commercially used by the company, is often held not to be sufficient proof that the company has also caused the pollution, although in two cases this was held to be sufficient proof, namely, *Rb Breda*, 18 October 1988; *Rb Arnhem* 24 August 1989.

The courts may reverse the burden of proof for example where there is no acceptable alternative explanation or if strong indications of liability such as warnings from local authorities can be shown. In cases involving recovery of soil clean-up costs by the State, there have been various examples of a reversal of the burden of proof.

In the case of *State -v- Van Beelen* (Rb The Hague, 22 April 1987, 19 October 1988 and 13 December 1989), the court first ordered Van Beelen, a reconditioner of used drums for chemicals, to prove that he did not cause the soil contamination found. The court came to this decision because the substances found in the soil were the same as those which Van Beelen collected from the used drums. The court appeared to accept the "*res ipsa loquitur*" rule. In the later decision of 19 October 1988 the court decided that Van Beelen had not been able to satisfactorily prove any other cause of pollution than its own activities.

The case of *State -v- Kuwait* (Rb Roermond, 17 December 1992 and 27 May 1993) involved pollution of the soil by oil under a petrol station. The State considered the pollution was caused by leakage from the pumps, underground tanks and pipelines. The pipelines had been replaced in 1981/1982. Upon this replacement, the old pipelines were classified by the oil company as "bad" and a
form filled in by the oil company showed oil was found in the soil at the time. The court decided the oil company had to prove the pollution was not caused by leakage of the tanks and pipelines. The court took into account the tanks and pipelines were 15 to 20 years old when they were removed, which further strengthened the probability of leakage.

The case of State -v- Liewes (Gerechtshof Arnhem, 4 May 1993, 22 February 1994) involved pollution of the soil by solvents used by a dry cleaning company. The court had ordered the State to prove that Liewes had caused pollution after 1 January 1975. Various witnesses had testified that certain solvents were carelessly used by Liewes in this period. Liewes had contended there were other causes of pollution, without being particularly specific about this. In view of the testimony of the witnesses, the court ordered Liewes to prove there were other causes of the pollution than its own activities.

These cases serve to illustrate how the courts are prepared to reverse the burden of proof by requiring the defendant to show an alternative cause in situations where there appears to be no alternative explanation for the damage or where there is strong evidence indicating that the defendant caused the damage.

Causation

Damage which is connected with the event, for which the defendant is liable, in such a way that this can reasonably be attributed to him bearing in mind the type of liability and damage suffered, must be compensated. Sufficient connection will be accepted more easily in cases of personal injury than in cases of damage to property. For example, the courts have been ready to accept causation in cases of illness and death as a result of working with asbestos.

Furthermore, causation will be more quickly accepted if safety norms have been breached. In literature, it has been argued that environmental norms should be seen as safety norms.

If more than one defendant has caused the pollution, it is often impossible to prove who is responsible for what. This can sometimes be remedied by proposing joint and several liability, but this is not always accepted by the courts.

Foreseeability of the damage also plays a role in determining whether this can be said to be caused by the event. The more foreseeable the damage was at the time of the event and the closer the damage is in a chain of related facts or in time, the sooner it will be judged to be connected to the event.

Reasonableness always plays a role. Accordingly, damage caused in the course of commercial activities will be attributed to the defendant sooner than damage caused in non-commercial activities.

It is often technically impossible to prove when pollution found in the soil was caused. Some courts have dismissed claims by the State as there was no proof the...
pollution caused after 1 January 1975 in itself merited cleaning up and therefore caused the damage.

In a number of cases, other courts have used a *pro rata parte* allocation of liability, related to the number of years in which the company was operational before and after 1 January 1975.

Examples of these cases are:

- Gerechtshof Arnhem, 22 February 1994, *State -v- Liewes* (see above). In this case the court decided the State had not proven certain solvents had been used after 1 January 1975. The court estimated that 35% of the pollution had been caused after 1 January 1975;

- Rechtbank Zwolle, 19 January 1994, *State -v- Heijboer*. In this case pesticides were used by the defendants during a certain period. The defendant contended he had used pesticides from 1966, according to the State these were used from 1975. The court ordered Heijboer to prove he had used the pesticides from 1966, stating that if this could be proven, the court could have reason to hold the defendant liable only *pro rata parte* for the period after 1975 in which the pesticides were used.

The Hoge Raad has not yet decided whether a *pro rata parte* approach should be used, or the claim should be dismissed if the State cannot technically prove enough pollution was caused after 1 January 1975 to merit cleaning up.

**SPAIN**

Since civil liability is fault-based, the plaintiff is the person that, in principle, must prove the existence of such a negligence. This was held to be the case in relation to proof of damage and loss in the Supreme Court decisions of October 21, 1925, March 25, 1954 and March 18, 1992, as well as decisions of the Audiencia Provincial of Valencia of October 2, 1991 and Barcelona of February 10, 1993.

There is no defined level of proof. In practical terms, the level required will be that sufficient to convince the judge, and that will depend on the specific case in question.

The courts have in practice developed doctrines whereby the burden of proof for negligence is reversed. The doctrine in relation to hazardous activities is that the person who conducts hazardous activities must assume the cost when the risk causes damage. According to the Supreme Court decisions of February 15, 1985 (in a case of a fire), the person whose activity creates a risk is obliged to prove, in case the risk leads to a specific damage, that he took all necessary measures that may be reasonably required from him to prevent such damage. The second doctrine is that where a party derives benefit from conducting a certain activity it must also carry the cost caused by the activity. The defendant may avoid liability
if he can show he acted diligently, however, in some cases the courts have held that the mere existence of damage is sufficient proof of negligence. In this respect, the following decisions may be cited: March 25, 1954, March 2, 1956, October 30, 1963, March 17, 1981 and January 31, 1986. The Supreme Court decision of January 13, 1986 involved the death of cattle due to a spill of lead into a river from which they drank. The Court expressly followed case law on the *ius tantum* presumption of negligence once this damage is proved, effectively reversing the burden of proof.

**Causation**

The civil case law of Supreme Court does not follow a clear line as to how the plaintiff must satisfactorily prove the causal link between the activity of the defendant and the environmental damage. There are different theories that try to explain where "causation" exists; theory of equivalence of conditions, theory of the adequate cause, theory of the efficient cause; however, from case law (for example, Supreme Court decisions of June 4, 1980, July 14, 1982 and October 27, 1990), it would appear that, for the time being, the Supreme Court decides on a case-by-case basis.

As to the theory of the adequate cause, the Supreme Court decision of October 27, 1990 is relevant. In this case, relating to the death of animals as a result of the contamination of a river, the Supreme Court stated that in order to determine the negligence of the defendant, it is necessary that the damage is a natural, adequate and sufficient consequence of the action. For this purpose, "natural consequence" is that which originates between the action and the damage, a relationship of necessity, according to present knowledge; in each specific case it must be examined whether it is possible to consider that the damage from the action derived from the action.

As to the theory of the efficient cause, the Supreme Court, in its decision of July 14, 1982 (concerning dust emissions from industrial premises), stated that the efficient cause is that which, although occurring with others, is the decisive and determining one with respect to the damage, taking into consideration the circumstances of the case and common sense. Another example is where the Supreme Court assumed causation by the defendant (because there were, at least apparently, very few possibilities of the defendant not having caused it), in the decision of March 14, 1978. In this case, the defendant passed by a pile of straw, driving a tractor. After having passed the pile of straw, it started to burn. The actual cause of the fire was unknown. However, the lower courts considered that the owner of the tractor was liable for the fire, and required him to pay damages. The Supreme Court upheld this view holding causation to have been established.

Given the facts contained in the Supreme Court decision, the cause of the fire was doubtful (see, in this respect, the comment on this decision by Diez Picazo, "Derecho y masificación social. Tecnología y Derecho privado", Madrid 1987). The Supreme Court, however confirmed the opinion of the lower courts, that the fire had been caused by the tractor.
There are no examples of case law concerning environmental civil liability where the theory of equivalence of conditions has been applied.

**SWEDEN**

Under the Environment Protection Act 1969, it is sufficient for the authority to show that there is a risk of damage to the environment (SW paragraph 6). Under the Environmental Civil Liability Act 1986, the plaintiff must show that there is a prevailing probability that the activity has caused the damage. However, in the case of blasting work or excavation, the plaintiff has to prove the cause beyond doubt, since causation is easier to prove in such cases.

It is effectively reversed under the Environment Protection Act 1969 but not under the Environmental Civil Liability Act 1986 where the special rules on proving causation apply.

**Causation**

Under the Environment Protection Act 1969 there is no explicit statement as to the elements necessary to prove causation. If necessary the Licensing Board could fall back on the Environmental Civil Liability Act 1986 and its principle of "prevailing probability".

Under the Environmental Civil Liability Act 1986, the plaintiff must fully prove that there has been an emission and that the damage is related to the emission. It is enough if the plaintiff can show that there is a prevailing probability that the activity has caused the damage (the Environmental Civil Liability Act 1986, paragraph 4). This means that the plaintiff has to give evidence that what he claims to be the cause is probable, and not a mere hypothesis. What the plaintiff claims about the cause must also be likely regarding the circumstances, and clearly more likely than any other cause the defendant has claimed to be the cause of the damage.

**UK**

In civil cases the plaintiff must establish that the defendant was liable "on the balance of probabilities".

There are no express provisions reversing the burden of proof, either in common law or under statute. The Framework for Contaminated Land states at paragraph 6.16 that Government policy is not to reverse the burden of proof in common law. However, the rule of "res ipsa loquitur" ("it speaks for itself") allows the court to draw an inference of negligence against the defendant where the circumstances suggest that there can be no other explanation. The onus is then on the defendant to rebut the inference.

**Causation**
There is a substantial body of UK case-law that goes to make up the principles of causation. The critical factor under this head is remoteness of damage: the plaintiff will not be entitled to recover those losses which are considered too remote from the cause.

General difficulties in proving causation are:

- multiplicity of operators and/or owners, as it may be impossible to establish whose act was responsible for causing damage;
- potential lack of identifiable parties.

"Causing and knowingly permitting" has relevance to criminal and administrative liability (see 8). "Causing" in this context is generally considered to require a positive act or control over a process rather than passive inaction on the part of the defendant. "Knowingly permitting" is generally considered to be the failure to prevent pollution when it is in one's power to prevent it and requires a knowledge that the event resulting in the pollution is taking place. The terms are not statutorily defined and their respective meanings must be gleaned from case-law.

In brief, causing has been considered by the courts to be a strict liability offence. There will be no need to show a defendant had been negligent or even has knowledge that he has "caused" contaminative substances to be on land. Knowingly permitting requires a mental element of knowledge be proven but it is generally accepted that under current interpretations, constructive (as opposed to actual knowledge) will suffice, thus bringing this head of liability into the realm of strict liability.

"Causing" or "Knowingly Permitting" cases are:

Reg. -v- Stephens - [1866] LR 1 QB 702.
Yorkshire West Riding Council -v- Holmfirth Urban Sanitary Authority - [1894] 2 QB 843
Sherras -v- De Rutzen - [1895] 1 QB 918.
Rochford Rural District Council -v- Port of London Authority - [1914] 2 KB 916
Moses -v- Midland Railway - [1915] 84 LJKB 2181.
Berton and others -v- Alliance Economic Investment Co. Ltd. - [1922] 1 KB 742
Impress (Worcester) Ltd -v- Rees - [1971] 2 All ER 357.
Price -v- Cromack - [1975] 2 All ER 113.
Lockhart -v- National Coal Board - [1981] SLT 161
Westminster City Council -v- Croyalgrange Ltd and another - [1986] 2 All ER 353.
Welsh Water Authority -v- Williams Motors (Cwmdu) Ltd - QBD 7 November 1988.
Durham County Council -v- Peter Connors Industrial Services Ltd. - [1993] Env LR 197.
National Rivers Authority -v- Wright Engineering Co. Ltd. - QBD, Independent, 19 Nov 1993
National Rivers Authority -v- Yorkshire Water Services Ltd. - QBD, Independent, 19 Nov 1993

**STUDY 2**

**AUSTRIA**

The level of proof is prevailing probability. In the fault liability system, the burden of proof lies with the plaintiff and rests on three elements: fault, causation and damage.

In strict liability systems, the burden of proof is much lower and certain rules for a change in the burden of proof have been introduced.

**Causation**

The plaintiff has to prove that the defendant conducted certain activities which resulted in certain emissions and that these emissions resulted in the damage. However, it is acknowledged that it is very difficult to prove causation and, therefore, the so-called "prima-facie-proof" is allowed. It is presumed that causation has been proved if it is typical that a certain act, which can be proved, normally causes the damage. The defendant must then prove that there is a serious alternative which might have caused the damage. The heavy burden of proof relating to the causal link is a major difficulty under the liability rules of the Austrian General Civil Code and is one of the main reasons why the introduction of a new Environmental Liability Bill is being proposed.

**BELGIUM**

The burden of proof is on the plaintiff, and the degree of proof is "judiciary certitude", that is, that the judge must be convinced by a high degree of probability. It is necessary to show damage, causation and fault.

In strict liability systems, the burden of proof is much lower as no fault must be proven.

**Causation**

Belgian caselaw gives a wide interpretation to the concept of causal link. It applies the theory of the "equivalence of conditions", which is that an event is considered to be a cause of the damage if it has contributed to the occurrence of...
the damage: A is a cause of B if B would not have occurred without A. All possible causes are judged on an equal basis.

The theory of "the breach of the causal link" by a legal or contractual obligation has prevailed during the last decade (see the Walter Kay case, April 28, 1978 at 13) where public authorities are unable to claim the reimbursement of clean-up costs from the person liable for the damage because they are already obliged to organise such a clean-up by virtue of a law) but has now been abandoned.

However it is still very difficult for the plaintiff to prove the causal link in environmental cases, mainly because of the technical difficulty of not being able to identify the source of pollution.

This difficulty has been exemplified in a recent case in which people living close to a landfill brought an action for damages suffered to their health from polluting leachate from the landfill. Despite the preparation of medical studies, it was not substantiated to the satisfaction of the Court that the leachate had caused the damage claimed.

GREECE

In case of fault liability the burden of proof is on the plaintiff to establish the requisite elements of fault liability. In cases of strict liability (that is, CC 334 - liability of the employer, CC 932 - tortious acts and Article 29 L. 1650), the burden of proof is effectively reversed.

In civil liability the general standard of causation which the plaintiff must show is that of *causa adequata*. Accordingly it must be shown that the action of the defendant could and did provoke damage in a sufficiently proximate manner.

ICELAND

The plaintiff must prove fault, causation and damage to be able to receive compensation. The level of proof of criminal law is beyond all reasonable doubt. Otherwise, the burden is to prove the various facts to the satisfaction of the judge. This is greater than a balance of probabilities, but not as extreme as beyond all reasonable doubt. If an aspect (say, damage) is difficult to prove the level of proof may be reduced.

In certain situations the requirement to prove causation and damage is relaxed if the fault is clear, but it is theoretically difficult to prove the single act that caused the damage is caused by one action or other. This exception is more likely to be applied in matters concerning personal injury rather than property damage. When it is difficult or impossible to prove the monetary value of the damage, a court can award the plaintiff reasonable compensation if it is clear that damage of some monetary value has occurred.

Without a provision in statute reversing the burden of proof, courts have not applied such rules. However, if the plaintiff has made certain facts of a case very
likely without proving it, in a manner generally accepted as satisfactory, the courts may, in some instances, relax the requirements for proof and turn the burden of proof on the defendant.

It is also a general rule in civil procedure that if the facts of a case are obscure due to a lack of investigation after the damage occurred, the party who has an obligation to initiate such investigation, or is in a better position to investigate the matter, shall prove the obscure facts.

Causation

The general causation principle is based on the condition *sine qua non* theory and only a proximate cause will become liable. Where two or more independent actions have caused damage, it is generally enough for the act to have effected the damage which occurred, for example, two factories polluting a lake. If an action by the defendant is only a trivial cause of the damage, then the defendant may not become responsible while the major contributor to the damage will take on all the responsibility.

There are no environmental cases considering what is proximate and there are very few cases at all on causation. It will depend heavily on the facts of the case and the relevant circumstances.

**IRELAND**

In civil actions, as a general rule the plaintiff in the action must plead and prove negligence on the part of the defendant in order to succeed. Therefore, other than in cases where liability is strict, he must convince the judge on the balance of probabilities that the defendant was negligent.

Henchy J. said in Hanrahan -v- Merck, Sharp and Dohme (Ireland) Limited

"The ordinary rule is that a person who alleges a particular tort must, in order to succeed, prove (save where there are admissions) all the necessary ingredients of that tort and it is not for the defendant to disprove anything".

In criminal matters there is a burden of proof upon the prosecuting party which cannot be reversed, that is, there is a rebuttable presumption of innocence. and it must be proved beyond reasonable doubt that a person has contravened or failed to comply with the statute or statutory regulations in question.

In a common law civil action for negligence, the burden of proof will only be reversed where it is shown that the circumstances of the accident are such that, ordinarily, it could not have occurred if the defendants had used proper care. This is the doctrine of *res ipsa loquitur*. In such cases, however, the burden of proof still rests initially with the plaintiff but shifts to the defendant.

Causation
To prove that a party has "caused" environmental damage, a plaintiff has to show that there has been a breach of some element of statutory law governing the environment, of which the principal ones are:

- the Local Government (Planning and Development) Acts 1963 to 1993;
- the Local Government (Water Pollution) Acts 1977 to 1990;
- the European Communities (Toxic and Dangerous Waste) Regulations 1982;
- the Air Pollution Act 1987;
- the Environmental Protection Agency Act 1992; and
- regulations made under each of the above.

Under the Planning Acts and regulations made under them, the local authority is restricted to considering the proper planning and development of the area of the authority, regard being had to the provisions of the area development plans. Therefore, in this situation, the primary element necessary to prove that a party has caused environmental damage is that what has been done or is proposed to be done is contrary to the proper planning of the area as laid down in a planning permission for a particular development.

To prove that a party has caused environmental damage under the Water Pollution Acts, the essential element is to prove that polluting matter has entered the water. Polluting matter as defined includes any poisonous or noxious matter, and any substance which is liable to render those waters poisonous or injurious to public health, fish or the water bed.

To prove that a party has caused environmental damage under the Toxic and Dangerous Waste Regulations one needs to show that the waste has been disposed of in a manner which would endanger human health or harm the environment and, in particular, which would:

- create a risk to waters, the atmosphere, land, soil, plants or animals;
- cause a nuisance through noise or odours; or
- adversely affect the countryside or places of special interest.

Under the Air Pollution Act, to prove that a party has caused environmental damage, one needs to show that that party has emitted a pollutant into the atmosphere in such quantities as to:

- be injurious to public health;
- have a deleterious effect on flora or fauna or have damaged property; or
- impair or interfere with amenities or the environment.

LUXEMBOURG

The burden of proof has been a significant obstacle to the success of proceedings for the violation of environmental legislation.
In criminal proceedings, the great majority of infringements require proof of a malicious intent (A. Bodry "Le juge pénal et la protection de l'environement", Mélanges Delvaux, P.1 and f.) except for the law of 16 May 1929 on pollution of water ("infractions purement matérielles").

The plaintiff has the burden of proof, the extent of which depends on the legal basis of the action (fault-based or strict liability).

The fact that under strict liability no fault need be proven effectively reverses the burden of proof.

Causation

The general principles of causation are applied in environmental cases which generally follow French case law. This means in practice that there is a high burden of proof on the plaintiff to establish the causal link. In civil proceedings, the parameters of strict liability are too narrow to provide civil parties with an effective means of action. The "adequate probability" theory is usually applied to establish the link between the damage and the fault/negligence of the defendant under normal circumstances, rather than as a result of exceptional circumstances.

The theory of "equivalence of conditions" (that is, all elements having contributed to produce the damage are deemed to have each caused the damage as a whole) is becoming popular.

NORWAY

The plaintiff must prove, on a balance of probabilities, that there has been environmental damage and that the activity/installation/property etc. in question is capable of causing the relevant damage. The defendant will not be held liable if he is then able to prove, on a balance of probabilities, that the damage could be due to another cause.

The burden of proof, according to the Pollution Control Act, is not exactly reversed, but lessened.

Causation

In order for the responsible party for pollution damage to be liable for such damage, the plaintiff must prove the following on the basis of a balance of probabilities:

- the plaintiff must prove that the damage in question is "pollution damage", which is covered under the relevant provisions of Norwegian law regarding compensation for pollution damage. If not, the damage is governed by the general, usually fault-based, compensation rules;
the plaintiff must prove that the pollution which has caused the pollution damage has originated from the defendant's activities.

However, under the first paragraph of Section 59 of the Pollution Control Act:

"Any person who causes pollution which by itself or together with other causes of damage may be capable of having caused the pollution damage shall be deemed to have caused such damage if it is not established that some other cause is more likely."

Thus, generally it will be sufficient for the plaintiff to prove that the pollution in question may be capable of causing the relevant damage. If such proof is brought, the defendant who has caused such pollution must exculpate himself by proving another cause for the pollution damage;

- according to the general unwritten rules in compensation law, it is also a requirement for liability that the cause and the damage are sufficiently proximate. For instance, if a person is extraordinarily sensitive to substances which are generally harmless to humans, it is doubtful whether such person could obtain compensation for pollution damage (or any other kind of compensation in tort) for health damage caused by those substances;

- the plaintiff must prove the nature and the extent of the damage suffered.

**PORTUGAL**

The burden of proof is on the plaintiff. The judge must be fully convinced and any doubt will be construed against the party that has the burden of proof. This is the same for civil, administrative and criminal liability.

The burden of proof may be reduced if an injunction is being sought, in that it may be easier to convince a judge that an injunction is necessary.

There are no examples of the reversal of the burden of proof in relation to civil liability deriving from damage caused to the environment.

**Causation**

The plaintiff must in fault-based civil law prove satisfactorily a causal link between the activity of the defendant and the environmental damage. The relevant level of causation is that of adequate cause which requires that the damage is a natural consequence of the act or omission.

**SWITZERLAND**

(51998936.01)
The burden of proof is on the plaintiff. This seems to be less of a problem than the definition of damage and the definition of the measures that are necessary and/or economically reasonable, with respect to repair of environmental damage.

The level of proof for civil and administrative cases depends on the nature of the liability. In civil and administrative proceedings, prima facie evidence is not sufficient.

In criminal cases the basic rule is in dubio pro reo, that if the facts are not absolutely clear the court will give the defendant the benefit of any doubt. Hence the judge has to acquit the defendant if he has doubt that the evidence is sufficiently proved. The standard applied requires a reasonable view of the evidence.

There are no examples where the burden of proof of damage is reversed.

**Causation**

The elements necessary to prove that a party has "caused" environmental damage are primarily defined by the administrative legislation on a "healthy" or "sound" status of the environment (soil, air, water, plants, animals etc.) or secondly, by standards allowing for some pollution (such as emission standards with respect to air pollution, noise etc.).

The plaintiff has to prove that a natural causal connection exists. Furthermore, the defendant is only liable if, according to the usual and general experience of life, the action was likely to cause the damage ("adequate causal connection").

In environmental cases this proof often cannot be absolute. According to numerous decisions it is sufficient to prove a predominant probability for a causal connection.
20. EXPERTS REPORTS AND TECHNICAL EVIDENCE

STUDY 1

USA

Each party is responsible for providing its own technical, economic or other experts. The work of those experts and the experts themselves are then available for discovery, as well as for examination during trial. The court also has the authority to appoint an independent expert, but this rarely occurs. Under recent amendments to Rule 26 of the Federal Rules of Civil Procedure, expert witnesses are required to prepare and submit to other parties detailed reports disclosing the expert's methodology, opinions, supporting data, exhibits, credentials, compensation and prior testimony. Such reports may or may not be admitted as evidence at trial. Oral depositions of expert witnesses are commonly taken before trial, after the filing of the expert reports, enabling examination of the expert reports and enabling examination of the expert's opinions. Expert testimony is generally critical in establishing liability and damages in Superfund cases.

DENMARK

Any party is allowed to appoint an expert as a witness in court. However expert testimonies are given more weight if experts are appointed by the court, by the parties unanimously or by an independent body.

FINLAND

A court may appoint an expert if it is regarded as necessary for the assessment of a question requiring special professional knowledge. Before the appointment of an expert, the parties must be heard. If the parties have agreed on an expert then that expert may be appointed at the discretion of the court. If a party to the dispute calls an expert who is not appointed by the court then that expert shall be treated as a witness.

The quorum of the Water Court and the Superior Water Court includes legal, technical and ecological expertise. In the permit-related proceedings for damages under the Water Act 264/1961 the court gathers the necessary evidence itself.

Experts must give a well-founded report on questions referred to them. Expert reports must be given in writing if the court does not find a reason to allow an oral statement, (Legal Proceedings Act, 91/1952 Chapter 17).

FRANCE

When a matter requires technical proof, the judge can, on his own initiative or at the request of the parties (or the Public Minister in a penal matter) order an expert. Experts appointed by judiciaries the courts, called "experts judicies", are chosen from professional lists of qualified professionals which are available in each jurisdiction.
The expert is appointed by the judge according to Article 263 onwards of the Code stating the rules of civil procedure. The judge defines the role of the expert and the time limit for the expert to execute his assignment and submit his final report. The expert can only pronounce on questions of fact (how the damage could have been caused, researching its causes). He cannot determine who is liable. Although he has to rely on the facts established by the expert in his report, the judge is not bound by the conclusions of the expert, but in practice, judges usually rely on the expert's conclusions. Either party may always produce unofficial expert reports in evidence in court.

These reports have lesser authority than official reports (that is, reports made by court-appointed experts). However, should an unofficial report bring sufficient evidence of a fact and be accepted by the party to whom it is opposed, the judge may rely on such report to make his decision.

In the civil courts the judge may designate a party who must pay for the experts without being certain that he will be reimbursed. In the penal courts, the fees of the expert are not charged to the parties (Article 232 NCPC).

**GERMANY**

As far as civil proceedings are concerned, the court will examine proof furnished by the parties (witnesses' declarations, documents, judicial inspections) to the extent that facts are in dispute. If an expert's report is required, the court will appoint a suitable expert and will also entrust him with this function.

Experts' reports furnished by the parties themselves have little proof value. These serve more as a means of determining internally the point of view to be taken and further as a means of elucidating what the party is claiming in court.

**ITALY**

Experts can be appointed by the court in the course of proceedings, as well as by the parties, for example, in order to identify the sources of pollution or quantify damages or costs for the clean-up. Usually, when an expert is appointed by the court each party may appoint its own consultant, who is entitled to participate in the various phases of the study and may render a separate report, which is kept among the party's court documents.

**THE NETHERLANDS**

Experts' reports may be produced by parties during the proceedings. In environmental cases, this very often occurs to substantiate the claim that pollution has been caused. The courts will weigh this evidence as they see fit. If they require any (further) technical evidence, they may appoint an expert themselves. The appointing of experts by the court may also be requested by one of the parties. No appeal is possible against a decision not to appoint an expert.
If the experts are appointed by the courts, this is usually done after a court appearance of the parties has taken place in which they can suggest experts to be appointed. If the parties cannot agree, very often the court will appoint an expert suggested by each party and one found by the court itself. The court will give a decision on who will pay an advance on the costs of the experts' work in the official proceedings in which the expert is appointed. These costs will be part of the legal costs to be awarded at the end of the proceedings.

The expert can accept or refuse the appointment. If he refuses, the courts will appoint a replacement expert.

The report to the court may (but does not have to) show the separate opinions of individual experts. The court may weigh the expert evidence as it sees fit. This means an expert found by the court itself does not necessarily carry more weight, but may do so in practice.

**SPAIN**

Either party may present to the court any expert report he may deem appropriate, although the court will always take it as a biased document. Therefore, there is no need for these reports to be agreed beforehand. This type of report is just a means of proof, and, therefore, the parties will only be bound by them to the extent that the court takes them into consideration.

It is also possible for each party to appoint an expert, who will then have to agree on a final report to which the parties will be bound; should the experts not reach an agreement, a third one, appointed by the court, will decide. Alternatively, the parties may agree on a sole expert, who will make his own decision. The same will happen if the court, ("motu proprio"), decides to appoint an expert.

In cases where technical aspects may have an essential influence on the final court decision (as will be in many cases of civil environmental liability), the role of the expert (or experts) will be decisive. In addition, an expert may be appointed within the proceedings if any of the parties ask for it, and/or the judge considers it appropriate (Articles 610 to 632 LEC). In the latter situation it would seem that in practice the Court expert reports will be taken into consideration by the judge with more interest, since it has now been appointed by neither party.

**SWEDEN**

Mostly each party will call his expert as a witness and to give evidence about the expert's own technical report. An expert witness may also be appointed by the court, which will have more weight than the parties' experts.

**UK**

As a general rule, experts are appointed by each party. Experts are normally limited to a certain number per party (Order 38, Rule 4 of the RSC). There is no limit, however, to the number of experts that a court may allow each party to call.
Each party must disclose a report of any expert upon whom they intend to rely at trial. (Order 38, Rule 37 of the RSC). Disclosure will usually take place by each party mutually agreeing to send all other parties reports of experts of like discipline at the same time. In certain circumstances, it may be possible to serve supplemental experts' reports, but leave of the Court is required (Order 39, Rule 37 of the RSC).

It is not usual for an expert to be appointed by the court, but Order 40 of the RSC provides that the parties to an action may agree between themselves that an expert shall be appointed by the court, and the parties will then agree to be bound by that expert's decision.

The court frequently provides that experts should meet on a "without prejudice" basis, with a view to narrowing the issues. It will then also require that a note be produced by the experts setting out those areas upon which they agree.

The aim is increasingly to ensure that each party is aware of the other party's evidence prior to trial. No party may call evidence unless it has previously been disclosed, except in special circumstances. In practice, therefore, the importance of experts' reports and technical evidence is recognised and the parties are encouraged to disclose all favourable evidence in their possession as early as possible in the action.

Only experts are entitled to give opinion evidence, either in their report or at trial. Witnesses of fact may not give an opinion on liability.

**STUDY 2**

**AUSTRIA**

The experts are appointed by the judge from a list of approved experts. Both parties have the right to appoint their own expert and present the expert's opinion to the court. However, where there is a dispute between the parties on an expert's opinion, the judge will appoint his own expert.

**BELGIUM**

Experts are appointed by the courts or tribunals. The parties can propose their own experts but the decision to appoint them is always left to the courts or tribunals.

**GREECE**

The Civil Procedure Code provides for the possibility of appointment, either by the court or by the parties, of experts whose reports are used as means of proof (794, 392 CPC).

**ICELAND**
There are essentially three possible methods which are used to prove technical matters in an environmental case. Firstly, either the plaintiff or the defendant can obtain and present expert reports on the issues in dispute. This method does not require any formal procedure and the opponent does not have to be notified about it until the evidence is presented in the case. Secondly, either party can file a motion with the court for an appointment of experts to evaluate certain matters. In these cases, both parties are given a chance to present their views on the issues involved to the experts. Thirdly, if a judge deems it necessary and the case involves technical matters that need to be addressed, the judge shall appoint two laymen, specialists in the field involved, who sit as judges in the case along with the normal judges.

The second and third methods are the most practical since the courts generally reach their decision on the conclusions of the specialists, where it is inconsistent with the conclusions of other experts.

IRELAND

The experts' reports and/or technical evidence are submitted by each party. The experts will also be appointed by the parties in question and not by the court. Once in court, both parties will have the opportunity to question their own experts on the evidence and to cross-examine the other party's experts. The experts will, of course, be questioned orally under oath. Experts' reports can be agreed by the parties and tendered in evidence per se but a defendant will seldom forego an opportunity to cross-examine a plaintiff's expert witness, particularly if there is any doubt on the claims made in the expert's report.

LUXEMBOURG

Experts' and technical reports are decisive evidence if all the parties involved have had the opportunity to present their observations. In general, courts will designate such experts at the request of a party.

NORWAY

There are several methods for presenting expert reports/technical evidence.

Firstly, the court may appoint experts to act as judges. Such appointments are not made unless required by the parties or found to be necessary by the court. Secondly, the court may appoint expert witnesses to give a written and/or oral report on the causes and/or consequences of the damage. Usually the court appoints two experts in order to ensure that all elements of the case are covered. However, the parties may agree to appoint only one. Thirdly, the parties may present expert witnesses.

One court case may, therefore, involve several experts, thus ensuring that all technical aspects of a case are covered. Expert opinions are quite important and
they usually have a large influence on the judge's decision. However, the courts
are not obliged to rule in accordance with the expert opinions.

Technical evidence other than expert opinions/reports is presented by each party.
However, the court may decide to inspect the location where the damage occurred.
If the evidence at the relevant location could be destroyed, the court may decide to
inspect the location early on in the proceedings.

**PORTUGAL**

Any party is allowed to retain experts to testify on technical issues. Both parties
may raise and discuss in court the specific questions to be answered by the experts
within their technical ability. Each party appoints one expert and the court appoints a third who has a casting vote. An expert can be any person whom the
parties and the judge consider to have the necessary experience.

Except in urgent cases, the expert report should be produced within five days after
the appointment of the experts.

The experts reach their conclusions and the parties are informed of these before
the trial. If requested by any party, the experts are required to attend the trial to be
examined on their reports.

**SWITZERLAND**

Technical evidence is gathered primarily by administrative bodies and their
internal experts, although they also refer to outside (private) laboratories and
individual experts. There are also a number of federal expert institutions (annexed
to federal universities) with highly respected expertise.

The parties can (and often do) agree on jointly appointed experts (negotiations or
out of court settlements). When it comes to court trials, however, the court
appoints the experts from persons or institutions named by the parties.
21. RIGHTS OF REPRESENTATION

STUDY 1

USA

If an individual has standing to bring an action, that individual then has a general right to appear individually representing herself or himself "pro se" and not to be required to use an attorney as an advocate. Corporations and other legal entities cannot appear pro se, however. In general, however, only a licensed attorney may represent the interests of other parties in US courts. In some cases, the court will appoint private counsel (either paid or unpaid) to represent indigent parties.

DENMARK

The use of an advocate is not mandatory in court, unless the court decides it is in the interest of the party and the court. The possibility of legal aid, means that this is not any substantial barrier to a citizen's right to legal action.

FINLAND

It is not mandatory to use an advocate; everybody may represent him/herself in the court. Yet, in most cases people do use an advocate.

FRANCE

Under French rules of procedure, individuals have a right of representation before certain jurisdictions but must be represented by an advocate (or in certain cases by other qualified lawyers before certain courts) otherwise:

- Tribunal d'Instance: parties may also be represented or assisted by the persons listed in Article 828 of the Code of Civil Procedure, which include a barrister, spouse, relatives and employees.

- Tribunal administratif: parties should normally be represented by an "avocat", and "avoué" or an "avocat au Conseil d'Etat et à la Cour de Cassation. ("Avocat" is a barrister. "Avoué" is a barrister before the Court of Appeal.)

However, a right of representation is granted to individuals when their action relates to specific fields of competence of the tribunal or to specific activities (such as listed sites, ill-health): which in practice, includes most of the actions for environmental damage).

Obligatory representation is as follows:

- civil courts: "avocats"
- Tribunal de Grande Instance: "avocats"
- Cour d'Appel: "avoués pré la Cour d'Appel"
- Cour de cassation (Supreme Court): "avocat au Conseil d'Etat et à la Cour de Cassation"
- criminal courts: "avocats"

**GERMANY**

A party can appear without legal representation before a local court (that is, concerning claims up to DM 10,000). Legal representation is mandatory before regional courts and higher courts.

**ITALY**

The assistance of attorneys is usually mandatory. However, under Article 82 of the Code of the Code of Civil Procedure there is an exception which provides that the assistance of an attorney is not required before the lowest jurisdiction ("Guidice di Pace") when the value of the matter is below 1,000,000 Lira or upon the judge's authorisation, having considered the nature and the value of the controversy. It appears highly unlikely that this provision will ever be applied in matters concerning environmental damage.

**THE NETHERLANDS**

Cases below 5,000 Dutch guilders are dealt with by the "Kantonrechter". Here, use of an advocate is not mandatory. It is mandatory before the Arrondissementsrechtbank, the Gerechtshof and the Hoge Raad.

In administrative cases it is not mandatory to use an advocate.

**SPAIN**

Under Article 3 LEC, it is mandatory to use a special representative, called a "procurador" (not an advocate) which is a representative of the party to a proceedings. This general rule has a few exceptions, included in Article 4 LEC (namely, minor proceedings).

**SWEDEN**

It is not mandatory but very common to use an advocate.

**UK**

Individuals may represent themselves in court but it is usual to have legal representation. The arbitration procedure in the County Court is particularly appropriate for unrepresented individuals.
22. THE EXISTENCE OF OR PROPOSALS FOR SPECIALISED (ENVIRONMENTAL) COURTS/TRIBUNALS

STUDY 1

USA

Other than the administrative law judges ("ALJs") who hear and decide administrative complaints and appeals within the EPA, and similar officials in some state agencies, there are no specialised environmental courts or tribunals in the US. While the possibility of establishing such courts has been discussed for many years, there are no serious proposals to do so now pending.

DENMARK

There are no specialised courts for civil liability. Administrative liability is to some extent covered by the courts on administrative appeal. There are not, for the moment, proposals for other specialised courts dealing with environmental liability.

FINLAND

The Water Courts and Superior Water Court are in some respects specialised environmental courts with competence in relation to water pollution and permit issues. The quorum of the Court includes persons with technical and ecological expertise.

A proposal is also in existence for these Courts to be transformed partly into independent Environmental Permit Boards to meet the future requirements of the IPPC Directive, and partly into Environmental Courts as a medium appellate stage to operate mainly under the Supreme Administrative Court.

FRANCE

There are no specialised courts or tribunals and no proposals for any.

GERMANY

No specialised courts exist within the civil courts. The administrative courts are organised in such a way that certain divisions of a court are competent for specific legal areas (for example, waste) thus providing a certain degree of specialisation. There are no proposals for any further specialisation.

ITALY

There are no specialised divisions or courts for environmental matters nor are there any proposals to establish them.

THE NETHERLANDS
Cases involving environmental damage are procedurally dealt with by the civil courts in the same manner as cases involving other forms of damage. Within the various courts certain judges have specialised knowledge, but the question of which judge will deal with which case is an internal matter for the courts.

In administrative cases, the "Afdeling Bestuursrechtspraak" is often appointed as the competent court for environmental matters and as such is specialised to a large extent.

There are therefore no proposals to create specialised (environmental) courts/tribunals.

**SPAIN**

There are no specialised courts/tribunals for environmental matters nor are there any proposals to establish them

**SWEDEN**

There are no specialised environmental courts although many environmental claims are heard in the Real Estate Division of the normal courts. The National Licensing Board and the County and Municipal Boards do have some judicial functions.

**UK**

There are no specialised courts for environmental law. However, there is much debate, mostly academic, on the desirability of establishing an environmental court or tribunal. The most likely route would be the adoption of an existing tribunal (such as the Planning Inspectorate (which deals with land use/planning inquiries) or the Lands Tribunal (which deals with a number of specific property matters)).

**STUDY 2**

**AUSTRIA**

There has been one important environmental tribunal in Austria since 1994, the so-called Environmental Senate ("Umweltsenat") under the Environmental Impact Assessment Act (EIA-Act) and the Environmental Senate Act. This tribunal is a very specialised one for it deals only with appeals against authorisations according to the EIA-Act. Besides, the federal provinces have established an "Attorney for the Environment" who is party to all administrative proceedings which may have environmental aspects and has the right to apply to the competent authority for certain measures.
BELGIUM

There are no specialised environmental courts and no proposals at present exist. Most courts or tribunals have however appointed a specialised magistrate to deal with environmental cases and a specialised chamber is in charge of those issues at the Conseil d'Etat/Raad van Staat. It is unlikely that there will be further developments in this area in the near future due to the small amount of cases.

GREECE

No such courts exist, nor are there any proposals for them to be established.

ICELAND

Environmental claims are currently heard before the general district courts and there are no proposals for change.

IRELAND

There are no specialised environmental courts. The Environmental Protection Agency exercises no judicial or quasi-judicial function, other than in connection with appeals in cases of integrated pollution control licensing.

LUXEMBOURG

There are no specialised courts for environmental issues, nor any plans to create such courts.

NORWAY

There are no specialised environmental courts, nor proposals for such courts to be established. The Petroleum Act and the Planning and Development Act have their own tribunals but their decisions may be appealed to the ordinary courts.

PORTUGAL

There are no courts specialising in environmental matters and there is no known proposal for their establishment.

SWITZERLAND

Highly specialised administrative bodies and chambers of courts with high levels of technical and legal expertise exist. Environmental matters are decided by special chambers which are part of administrative tribunals and administrative appellate commissions, on which lawyers and technical specialists sit. The environmental protection offices support the investigations of the courts.

Administrative agencies (part of cantonal administration) in charge of environmental protection enforce the applicable legislation. Decisions/ordinances
can be appealed to cantonal administrative tribunals with specialised chambers in some cantons. Such tribunals (and the federal Supreme Court of last instance) are however ordinary courts.

No new structures are planned.
23. THE DISCOVERY PROCESS

STUDY 1

USA

Under both CERCLA and general principles of state and federal law, extremely broad discovery of documents and other relevant evidence is available to both plaintiffs and defendants. In judicial proceedings the scope of discovery, including document production, written questions ("interrogatories") oral examination ("depositions") and request for admission, is generally governed by Rules 26-37 of the Federal Rules of Civil Procedure and their state counterparts. The general scope of discovery under Rule 26 is any relevant information which is not privileged.

US civil discovery, particularly in complex multi-party environmental cases, is frequently a long, costly and contentious process. In late 1993 the Federal Rules of Civil Procedure were amended to limit and expedite discovery (for example, by requiring automatic disclosure of certain information and documents, limiting the number of interrogatories and depositions, and requiring production of detailed expert reports). Also, US courts often control the scope and timing of discovery through case management orders and setting discovery deadlines. The cost and duration of discovery has been a factor driving the trend towards increased use of alternative dispute resolution ("ADR") methods (for example, mediation) to avoid or settle civil litigation.

Under CERCLA itself, the government also has broad, administrative investigatory powers which it often uses in place of traditional discovery mechanisms. These include: requests for information under CERCLA paragraph 104(e), site entry and inspection authority, and administrative subpoena authority. In instances of suspected criminal violations, the government can obtain a search warrant upon application to the court.

Once a civil court case is filed by the Department of Justice on the government's behalf, then normal civil discovery proceedings may be invoked by both sides. However, the government often attempts to limit defendants' discovery rights concerning remedial issues to EPA's administrative record, to resist the oral examination of EPA decision makers, and to resist disclosure of internal EPA decisional documents on the grounds of the so-called "deliberative process privilege" and certain other doctrines.

DENMARK

There are not any formal requirements on what documents should be discovered in court. However, documentary evidence of technical analysis is required. If documents have disappeared the person who requested the documentation is free to use other evidence. Expert testimonies are given more weight if experts are appointed by the court, by the parties unanimously or by an independent organ.
Public authorities have broad administrative investigatory powers based on the Environmental Protection Act, 358/1991. If companies obtain knowledge of contamination of their plants or of release or imminent threat of release of hazardous substances, they are obliged immediately to notify the authorities, (Section 71) and can be penalised as well as held liable in damages for not doing so. If authorities have any factual reason to believe that a company is causing contamination, authorities can order the company to give data which the company actually has in its possession. Furthermore, the authorities have the discretion to order the company to make further investigations, monitoring, drilling and to elaborate proposals for clean-up actions (Section 72).

Private parties have under the Danish Act on Administration, free access to public records on their case, with few exceptions. However, the defendant does not have access to correspondence with legal experts on the case.

FINLAND

At the request of the parties, a court can order the parties to disclose documents if the court considers the documents to be relevant. The court may also impose a conditional penalty in order to ensure the disclosure of a document. As a general rule, anyone in possession of a document may be ordered by a court to produce the document if it has significance as evidence. However, there are also some exceptions to this rule. For instance, in criminal cases the defendant cannot be ordered to produce documents containing evidence against him.

FRANCE

There is no discovery procedure under French Law. The only obligation in this respect is, when a party wishes to produce documents as evidence during the proceedings, to communicate copies of such documents to the other party before the hearings. (Article 132 and 763 of the Nouveau Code de Procedure Civile).

Moreover, Article 11 of the French Code of Civil Procedure provides that:

"The parties are bound to lend their support to investigation measures, and the judge may draw any conclusion from their abstention or refusal to do so.

If a party holds an element of proof, the judge may, upon request of the other party, require the first party to produce such an element of proof and, if need be, a penalty may be imposed. The judge may, upon request of either party, ask or order, with or without providing for the same penalty, the production of any documents held by third parties if there is no legitimate impediment to do so."

The parties, both the plaintiff and the defendant, are not obliged to produce all the documentation they have relating to the case under discussion.
Moreover, should an expert be appointed by the judge, which is frequent in the field of environmental damage, then the parties are required to disclose to a larger extent the relevant documentation to inform the expert.

In penal matters, a victim who constitutes a civil party before in the proceedings has a right to be notified of the most important parts of procedure (Articles 89 and 183 of the Penal Procedure Code).

Before the administrative jurisdictions modification of supporting testimony and evidence is carried out by the relevant Clerks Office without the parties having to request it.

GERMANY

Within the scope of application of the UmweltHG, the injured party has a right to information and inspection of documents:

- against the proprietor of the plant pursuant to paragraphs 8 and 9 UmweltHG; and
- against the authorities pursuant to paragraph 10 UmweltHG.

It is only necessary to furnish information to the extent that it is necessary to establish whether a claim for compensation under the UmweltHG exists in order to prevent exploitation of industrial information. It is only possible to request information about the following facts:

- the equipment used,
- the type and concentration of the used or emitted substances,
- the other effects which arise from the plant,
- special duties with regard to the operation of the plant.

A duty to provide information is limited to the extent that information cannot be required (paragraph 8(2) UmweltHG), if:

- the processes have to be kept secret because of legal regulations; or
- the secrecy corresponds with an important interest of the proprietor of the plant or a third party.

In principle, only information can be claimed. Inspection of available documents can only be required when the assumption is well founded that:

- the information is incomplete, incorrect or insufficient; or
- the information is not made available in a reasonable time span (paragraph 8(3) UmweltHG).

In practice, disputes can arise very easily as to whether information or inspection of documents is to be granted as a result of the detailed nature of the legal provisions. It can be very difficult in all these cases to succeed in a claim for information or inspection of documents.
The claim for disclosure under paragraphs 8 and 9 UmweltHG is to be brought before the civil courts, against the proprietor of the plant (Inhaber der Anlage). The claim for disclosure under paragraph 10 UmweltHG against the authorities must, however, be brought before the administrative courts. The proceedings are respectively subject to different procedural rules.

ITALY

Discovery is not required, nobody being forced to submit evidence against himself under either civil or administrative law. However, a defendant has a right to obtain copies of documents or information during the administrative proceedings (Law 141 of 1990).

As far as the collection of evidence is concerned, it should be noted that a party to a civil case is under a general obligation to behave with fairness and good faith, but cannot be forced to submit evidence "contra se". No discovery rules exist in Italy but there are certain procedural means available for one party to compel the other to answer specific questions or to obtain compulsory submission of documents (such as certain corporate books, account's etc.) which can only be done by an express request to the court identifying the information or materials requested, or listing the "chapters" (statements) on which a witness is heard.

As regards the accessibility to documents held by public entities, Article 22 of Law No 241 of 7 August 1990 provides that any interested party is entitled to request, examine and obtain copies of the administrative documents under the terms and conditions provided by the law. Private parties have a right of recourse to the administrative courts against the administrative authorities' decisions. The court can order the production of any required documents.

THE NETHERLANDS

Parties will have to prove their allegations in court proceedings. This will usually be done by producing documents as evidence. If insufficient proof has been provided, the court can order the party on whom the burden of proof lies to provide sufficient proof. This will usually entail producing the relevant documents. A party not willing to produce certain documents cannot be forced to do so, but this will lead the court to the conclusion that the proposition involved has not been acceptably proven.

A party referring to any particular document in the proceedings must produce this document at the time of referring to it, unless the document is in the public domain.

Documents in the possession of a governmental authority can be requested to be made public to any interested party on the basis of the Administrative Disclosure Act ("Wet openbaarheid bestuur"). This possibility is sometimes used by parties involved in proceedings against governmental authorities to gather evidence.
SPAIN

As a general rule for civil proceedings, any party must show to the court (not to the other party) any document connected with the case that the court may ask for.

The court may decide, either by itself or as a consequence of the petition of one of the parties, to ask for a certain document. The decision of the court may be contested by the party in question, but if the court confirms its decision, the document must be delivered. Before filing a claim, a person may ask for the court to require from a third party a document that may be needed to prepare the claim.

There is no general privilege that may allow a party not to present a document requested by the court. Limits on the right to ask for documentation do however exist for example, in connection with the right of information of a shareholder concerning the accounting of the company.

From the administrative law point of view, Directive 90/313/EC (see 24) has not been implemented in Spain yet. From a more general point of view, Article 37.1 of Law 30/1992, on the Legal Regime of Public Administrations and Common Administrative Procedure, establishes that citizens have the right of access to registries and documents held by the authorities.

On the other hand, certain administrative environmental rules empower the authorities to require information from the persons that are subject to the rule in question (for example, Article 44.2 of Royal Decree 833/1988, on Toxic and Hazardous Waste, expressly establishes that the authorities shall be able to require information and to examine and control the fulfilment of applicable regulations).

SWEDEN

In all civil cases the Code of Procedure is applicable. According to the Code, any party has the right to obtain documents which are deemed to be relevant as proof under the Environmental Civil Liability Act 1986.

The defendant in Sweden has access to all documents and information held by the state and state bodies. This is a fundamental constitutional right and under the Environment Protection Act 1969. The defendant therefore has full access to information.

Also under the Environment Protection Act 1969, regulatory authorities have rights of entry and inspection. The operator also has to provide the authority with information and documents (the Environment Protection Act 1969, paragraphs 42-43). The authority can also require the operator or anyone else, (for example, a consultant), to carry out surveys which are deemed necessary. The operator has to pay for such surveys. One problem the authority faces when they request a survey is that the authority must set out in detail what is going to be investigated. This is because the operator has to rely on the authority for the method and level of clean-up to be specified clearly in order to avoid incurring a fine for not carrying the
survey out properly. The regulatory authorities are under an obligation of confidentiality in respect of commercially sensitive information.

**UK**

Discovery of documents is required as part of the litigation process under Order 24 of the RSC the purpose of which is to enable parties to better evaluate the strength of their case in advance of the trial so as to promote the compromise of disputes and saving of costs.

Discovery in this sense is part of the litigation proceedings, and takes place within a certain period after close of pleadings. In the High Court, pleadings close 14 days after the Defence has been served and/or a Reply and Defence to Counterclaim has been served.

In the County Court, Order 17, Rule 11 provides for automatic directions under which lists of documents must be exchanged 14 days after close of pleadings. Order 14 of the CCR provides for Discovery generally, enforcing Order 24 of the RSC. In the High Court, formal directions are usually set by the Master or District Judge.

Discovery is given by way of an exchange of lists of documents. Each party to the action must list all those documents in their possession, custody or power which are relevant to the proceedings. In practice, it is often the subject of some debate to decide which documents are relevant. It is open to either party to apply for specific discovery of certain documents (Order 24, Rule 7 of the RSC), but that party must identify the documents sought and demonstrate why they are relevant to the proceedings.

The parties to the action are obliged to disclose all documents in their possession relevant to proceedings, unless those documents are privileged. Privilege commonly arises in one of three ways:

- documents which came into being in contemplation of litigation, such as letters between a client and their solicitor
- letters of advice passing between lawyers, client and experts; and
- documents which are subject to parliamentary privilege

In the environmental area, reports prepared following an investigation into a polluting incident often give rise to debate on discovery. It is often open to question whether a consultant's report, for example, is always written in the contemplation of litigation, where it was prepared immediately following an incident. In the majority of cases, a party would be able to claim privilege for consultants' and loss adjusters' reports unless it could clearly be shown that those reports were prepared prior to the contemplation of litigation. Where a consultant's report has been prepared prior to an incident occurring, for example as a general environmental audit or for obtaining insurance, then that report would almost certainly be disclosable.
In certain circumstances, it may be possible to apply for discovery in advance of litigation (under Order 24, Rule 7A of the RSC). In order to obtain documents under this Order, the party must identify the class or classes of documents sought and the reason for requiring them. It is not permissible for a potential plaintiff to request documents as part of a "fishing expedition", either prior to proceedings or as part of the normal discovery process.

Further, the regulatory bodies have wide ranging powers to call for relevant information (see 24).
24. FREEDOM OF ACCESS TO ENVIRONMENTAL INFORMATION

STUDY 1

USA

There is freedom of access to environmental information held by all levels of Government, subject only to relatively limited exceptions. Under the Federal Freedom of Information Act ("FOIA"), 5 USC 552, anyone may request and must be provided with a broad spectrum of information held by the Government, including final opinions and orders on the adjudication of cases, unpublished policy statements and interpretations, and administrative staff manuals and instructions to staff that affect a member of the public, 5 USC paragraph 552(a)(2). In addition, the Federal Government must publish certain information in the Federal Register, including but not limited to statements on formal or informal procedures, rules, and generally applicable policy statements and interpretations, 5 USC paragraph 552(a)(1). Nine categories of information are exempted from the FOIA requirements, among them: privileged and confidential business information; certain records and information compiled for law enforcement purposes; information explicitly exempted from disclosure by statute; information classified as secret by Executive Order; and "geological and geophysical information and data, including maps, concerning wells." 5 USC paragraph 552(b). Similar freedom of information provisions typically exist at the state and local level throughout the US. However, the Federal Government and most states are required to protect and withhold trade secrets and confidential business information. Indeed, criminal liability may be imposed on government employees who disclose trade secrets or certain other information pertaining to business practices, or to personal or business finances, without legal authorisation. See Trade Secrets Act, 18 USC paragraph 1905.

In addition to FOIA and its state analogs, several federal and state "right-to-know" statutes require public reporting of the use and emission of toxic chemicals. CERCLA requires public disclosure of site studies and public involvement in the remedy selection process.

DENMARK

Directive 90/313/EC on freedom of access to environmental information is implemented by the Act on Access to Environmental Data, 292/1994.

FINLAND

One of the primary functions of the new intermediate and regional level environmental authorities (the Finnish Environment Agency and the regional environmental agencies) is to produce and disseminate environmental information to the public and thus to increase environmental awareness.

Also, one of the objectives of the Act on Environmental Impact Assessment, 468/94 is to increase individuals' access to environmental information and the
right to participation. The authorities must inform the public in the area of all activities which fall within the scope of the Act and give them the right to be heard.

All interested parties have access to official documents. Results of, for example, emission monitoring and surveillance are public.

FRANCE

French law contains numerous provisions with respect to the freedom of access to environmental information.

Such provisions concern, in particular:

- the free access to administrative documents;
- the relationships between public authorities and the public;
- the information of the public concerning waste (Article 3.1 of Law 75/633 of 15th July 1975); and
- impact assessments and public enquiries.

GERMANY

The Environmental Information Law (the law implementing Directive 90/313/EC of the European Commission of 7th June 1990 regarding free access to information about the environment) has been in force since 16th July 1994.

In addition, under the UmweltHG, a person who is injured by an environmental effect has a right to information and inspection of documents against the proprietor of the plant, who presumably caused the damage, and against the authorities (paragraph 8 onwards of UmweltHG).

ITALY

A general right of the citizen to the information regarding the environment is specifically provided for in Article 14 of Law 349/1986 which states that "Each citizen has the right of access to the information regarding the status of the environment available at the offices of the public administration and is entitled to obtain copies". This provision may be coupled with the general rule and procedure on "transparency" and "access" to public/administrative proceedings, under Law 241 of 7 August 1990, under which private parties are entitled to obtain information and documentation as to the progress of any and all administrative procedures (the responsible officers of which must be named) and to participate even before a decision is taken, without prejudice to the right of subsequent recourse to administrative courts if there should be violations of their legitimate interest.

THE NETHERLANDS
Freedom of access to environmental information exists if this information resides with public authorities. The information can then be requested by any interested party.

**SPAIN**

The Spanish Government is at present preparing a national law implementing EU Directive 90/313/EC, that is expected to be enacted soon.

Since Spain has not implemented this Directive, the Directive should theoretically be directly applicable vis-à-vis the Spanish administration.

Article 105b of the Spanish Constitution states that the law will regulate the citizens' access to public records and administrative registries, except when it effects national security and/or defence, criminal investigations, and private privacy.

On the basis of this Article, Law 30/1992 sets out (Article 37.1) the citizens' right to have access to public records and registries.

So far, there has not been much experience in this field, as far as environmental questions are concerned. In the past, it appears that authorities have not been as co-operative as they could have been expected to be, for example, an environmental association asked the Ministry of Defence for information concerning the shooting training base of Anchuras in the Spanish Province of Ciudad Real, since it seemed that it might have a negative environmental impact. The Ministry of Defence denied any access to such information, until the "Audiencia Nacional" obliged the Ministry to grant access.

It is expected that the problems arising from the lack of specific rules on access to environmental information will be solved once the law implementing Directive 90/313/EC is enacted.

Along with the citizens' access to environmental information, there exists the right of the public authorities to have access to environmental information concerning companies. In this regard, companies are obliged in certain cases to provide the authorities with any environmentally related information that they may hold.

Certain Laws make this obligatory as well, such as Law 20/1986 on Toxic and Hazardous Waste, the autonomous law of Madrid 10/1991 on environmental protection, and the autonomous law of Cataluña 6/1993 on waste.

**SWEDEN**

Anyone in Sweden has a right of access to the documented information in the various public offices whether the office is municipal or governmental. This right stems from constitutional law. All such documents, whether on paper or some other medium, shall be open to the public whether produced or received by the authorities. A register of documents must be kept purely for purposes of public
consultation. There are of course exceptions to this. Besides national security etc., exceptions mostly concern the privacy of people or protection of business secrecy. There is now debate over whether further exceptions will in future be required now that Sweden is part of the EU. There is as yet no public register on contaminated land but there is an on-going discussion on this subject.

UK

The Environmental Information Regulations 1992 (SI 1992 3240) implement the EC Directive on Freedom of Access to Information on the Environment (90/313/EEC). These Regulations provide that "relevant persons" must supply environmental information in their possession to any person who requests it, subject to a number of exemptions, including information which effects national security or which is commercially confidential. The definition of "relevant persons" includes Ministers of the Crown, Government departments, local authorities and certain categories of bodies with public administration functions or public responsibilities in relation to the environment. There is some debate as to whether this definition encompasses privatised previously state-owned companies, for example the water sewerage companies and British Gas. Such companies are not expressly covered by the Regulations; however, in a recent High Court employment case, South West Water Services Limited was held to be "an emanation of the state" (Griffin and Others -v- South West Water Services Limited August 1994).

Pressure groups have filed complaints with the European Commission regarding the UK's implementation of Directive 90/313/EC.

In addition to these requirements governing access to information held by "public" authorities, much environmental legislation provides for the maintenance of public registers of information. HMIP, NRA, River Purification Authorities (Scotland), water companies, The Health and Safety Executive and local authorities are all required to maintain public registers containing details of licences, consents, authorisations, applications, variations, offences, convictions, correspondence etc. relating to the regulatory systems over which they have control. Examples are registers containing information on Integrated Pollution Control, authorisations under the Environmental Protection Act 1990 (HMIP), discharge consents or abstraction licences under the Water Resources Act 1991 (WRA), trade effluent discharge consents under the Planning (Hazardous Substances) Act 1990 (local authorities). Specific details of the information to be included in the registers is given in the relevant legislation. In many cases, exemptions relating to information which is commercially confidential or in the interests of national security exist.

Information on releases from processes subject to Integrated Pollution Control under Part I of the Environmental Protection Act 1990 is contained in the Chemical Release Inventory produced by HMIP. Emissions data is organised by substance type, company industrial sector and local authority area and details of actual and authorised discharge limits provided for each substance.
Under the Government's Citizens Charter policy programme, access to official information has been extended under the "Open Government" initiative. Each Government department is required to produce a code of practice on access to government information and details of information available to the public. Under the Local Government (Access to Information) Act 1985, the public has access to local authority meetings and the agenda, minutes and reports of meetings.
25. **APPLICABLE LIMITATION PERIODS**

**STUDY 1**

**USA**

CERCLA establishes a number of different limitation periods for different types of actions, many of which are still subject to dispute as to their application in particular cases. See generally CERCLA paragraph 113(g)(2) 42 USC paragraph 9613(g)(2). Separate statutes of limitations ranging from three to six years apply to claims for recovery of removal (short-term response) and remedial (long-term response) action costs from PRPs. In general, claims against PRPs for costs of removal must be brought within three years of completion of the removal action, while claims for remedial action costs must be brought within six years of the start of on-site construction of the remedial action. Three-year limitations periods apply to actions for contribution, actions based on subrogation rights, and actions to recover indemnification payments. Certain exceptions to the limitations periods apply to minors and certain incompetents making claims. The statute of limitations for recovery of costs from the Superfund is six years from the date of completion of all response action, with exceptions for minors and incompetent claimants, CERCLA paragraph 112(d)(1), 42 USC paragraph 9612(d)(1). For a fuller discussion of statutes of limitations on response cost recovery actions, ss S. Cooke The Law of Hazardous Waste paragraph 14.01[8][c].

CERCLA paragraph 113(g)(1) establishes a three-year statute of limitations for natural resource damage claims. The date from which this period runs varies according to the circumstances: for sites on the federal list of priority sites for clean-up (the National Priorities List) (the "NPL") (40 C.F.R. Part 300 Appendix B), the period runs from the completion of the remedial action. For other natural resource damages, the period runs from the later of "the date of discovery of the loss and its connection with the release" and the promulgation date for the natural resource damage assessment regulations. The latter date has been the subject of much discussion, as the regulations at 43 C.F.R. Part 11 have been promulgated, challenged and revised in various years ranging from 1986 to 1994. See generally S. Cooke, The Law of Hazardous Waste paragraph 14.01[10][c][v]. Most recently, a California district court ruled that the applicable date is August 1, 1986, the date that the "Type B Assessment" portion of the regulations were promulgated. United States -v- Montrose Chemical Corp. of California CV 90-3122 AAH (C.D. Cal. Mar. 30, 1995).

CERCLA also establishes a uniform federal "discovery N/E" for the commencement of state statute of limitations periods for personal injury or property damage claims relating to hazardous substance, pollutant or contaminant releases. CERCLA paragraph 308(a)(1), 42 USC paragraph 9658(a)(1). Under CERCLA paragraph 309(a), if the applicable state statutory period runs from an earlier date than the "federally required commencement date," then the later date governs. This date is defined, with several exceptions for minor and incompetent claimants, as "the date the plaintiff knew (or reasonably should have known) that the personal injury or property damages...were caused or contributed to by the
hazardous substance or pollutant or contaminant concerned". CERCLA paragraph 308(b)(3), 42 USC paragraph 9658 (b)(3).

Finally, each state had its own statutes of limitations for various types of state environmental claims, including claims under the various state "Superfund" statutes. Each state also generally has separate statutes of limitation for common law tort claims (for example, negligence, nuisance, trespass). In many states, a three year limitation period is usually applied, generally running from the date when the plaintiffs knew or should have known of the injury and the identity of the party likely to have caused it. This "discovery rule" generally applies to environmental harms, like groundwater contamination injuries, that are "inherently unknowable". Conversely, traditional limitation periods for knowable torts run from the date the defendant causes the injury. For a discussion of statutes of limitation and statutes of repose for tort claims, see S. Cooke, The Law of Hazardous Waste paragraph 17.05[4].

DENMARK

The Act on the Statute of Limitation of 1908 established a limitation period of five years from the day when the claimant obtained or ought to have obtained knowledge of the damage for compensation based on civil liability (Section 1(5)). The same rule is included in the Act on Compensation for Environmental Damage 225/1994 (Section 6(1)).

The normal five year limitation period, is subject to an absolute ("longstop") limitation period of twenty years, based on the old Danish law from the sixteenth century. However, in cases of personal injury the "absolute" is rather relative and the limitation period can be suspended as in the Aalborg Portland case, (UfR.1989.1108) concerning workers exposed to asbestos. Suspension is not applicable to environmental damage, as stressed by the Supreme Court in the second Cheminova-case, (UfR.1992.575H.)

With regard to liability based on the new Act on Compensation for Environmental Damage, 225/1994 Section 6(2) there is a thirty year limitation in accordance with the European Council Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment from 1993, Article 17 (the "Lugano Convention").

It is currently being disputed whether the limitation period for administrative liability is to follow the same rules as civil liability. Part of this question is actually disputed in an ongoing case between Danish municipalities and counties as the plaintiff and the Environmental Protection Agency as the defendant concerning who should pay for the restoration of the old gasworks-sites.

FINLAND

The Environmental Damage Compensation Act, 737/1994 sets no time-limits. Accordingly, the rules in the Tort Act 412/74 will be applied which provides that damages shall be claimed within ten years from the occurrence of the harmful
event in cases where there is no shorter statutory time limit. However, if the
damage is caused by a criminal offence and there is a longer time for prosecuting,
the same time-limit shall also apply to bringing civil claims. There are special
rules on limitation for nuclear damage and oil pollution damage.

FRANCE

Article 2270-1 of the Civil Code provides that, for all noncontractual civil liability
actions, the statute of limitation is ten years from the date of occurrence of the
damage or the date of its aggravation.

In the context of a "constitution de partie civile" (see 3), the limitation periods
which are applicable for the civil actions before criminal courts are modelled on
the ones provided for the prosecution of criminal offences, that is, ten years for a
crime, three years for an offence and one year for a misdemeanour. (Articles 7, 8
and 9 of the Code stating the rules of criminal procedure ("Code de procédure
pénale).

The limitation period is four years for actions against the administration, but for
administrative sanctions taken against the operator or the owner, no limitation
period is specified. In such cases, the thirty years' general limitation period
provided for in the Civil Code is applicable.

GERMANY

According to paragraph 17 UmweltHG, the applicable limitation periods for
claims under the UmweltHG are the same as those which are applicable under
paragraphs 823 BGB and the subsequent provisions under paragraph 852 BGB the
limitation period expires within three years from the time when the injured party is
aware of the damage and of the person responsible for it, but at the latest, however,
within thirty years of the act which caused the damage. The three year time limit,
therefore, only begins when the injured party has ascertained the person
responsible for the emissions. The same limitation periods are applicable in
respect of liability under paragraph 22 WHG.

Claims under paragraph 906 BGB expire after thirty years. The liability under
paragraph 906 BGB is a liability under civil law and not administrative law.

For the administrative law liability there is no limitation period. As long as
someone is an interferer (Störer) within the meaning the administrative law
statutes, the authorities can demand from him the removal of the interference.

ITALY

Article 2947 of the Civil Code provides that the applicable limitation period for
the right to recover damages arising from unlawful act/omission is five years from
the date on which the act took place. If the act/omission is considered by the law
to be a criminal offence, then a longer limitation period is provided for and this
period then also applies to the civil action.
As regards the limitation period of the right to recover damages consequent to environmental violations, the five-year term provided for unlawful acts pursuant to Article 2947 of the Civil Code, applies. The term runs from the date on which the damage occurs, if the damage is patent. Where damage is latent or hidden, the term starts to run from the date when the damage becomes evident.

However, it has to be noted that environmental violations are generally considered as "permanent" breaches, at least for so long as the polluting activity is continued. Consequently, according to the principles and precedents relating to permanent violations, the running of limitation periods starts from the moment in which the activity is ceased. This could be of particular importance if the (polluted) site is sold to third parties performing different activities.

Finally, mention should be made of the fact that some authors consider that the state's rights to recover damages consequent to environmental violations is not subject to the limitation period, based upon the fundamental nature of the said right.

THE NETHERLANDS

In general, claims are time-barred under Dutch law five years after both damage and person liable are known to the injured party with a long stop limitation of twenty years after the event. A special provision on the extinguishing of claims for environmental damage has been introduced into the Civil Code (Article 310, sub 2, Book 3). This provision stipulates that claims for environmental damage are time-barred five years after both damage and person liable are known to the injured party with a maximum of thirty years from when the damage occurred. As an interim measure, the five year period will not expire before 1 January 1997. This measure was introduced because of the large number of claims the State has as a result of soil clean-up action taken by it over the last ten to fifteen years. If damage was caused as a result of a continuous process, the five year period starts running from the end of this process.

SPAIN

Under Article 1968 of the Civil Code, the applicable limitation period under tort is one year from the date on which the plaintiff has knowledge of the damage. The law is silent on whether the knowledge of the damage must be implied or actual. However, on the basis of applicable general principles, the limitation period will start when the victim knew, or should have known (on the basis of the diligence that might be required of him) of the damage.

As to contractual damage, the generally applicable limitation period is fifteen years, (Article 1964 of the Civil Code) but this can vary in specific cases. For example, if contamination on a site which has been sold is considered to be a hidden defect, the applicable limitation period would only be six months (Article 1490 of the Civil Code).
As a general rule, Article 1969 of the Civil Code states that limitation periods shall start from the date on which the corresponding action could have been exercised.

Case law has distinguished two different situations when considering continuous pollution:

- damages appear in a successive manner as a consequence of a single act: in this case the limitation period starts (decisions of January 12, 1906, February 12, 1924, July 8, 1947 and June 25, 1966) from the date on which the event which produced the damage occurred. In other cases, time runs from the time of knowledge of the damage;

- damages appear in a successive manner (cumulatively) as a consequence of a series of successive damaging actions (or omissions) or as a consequence of a permanent action (or omission). In this case (if each occurrence of damage is not material by itself), the limitation period should start from the moment in which the victim knows of the last damage (this seems to be the position of the Supreme Court decision of May 24, 1993). However, if each occurrence of damage is material, the limitation period should start when the damage in question comes into the knowledge of the victim (which seems to be the position in the Supreme Court decision of December 12, 1980).

**SWEDEN**

Under the Environment Protection Act 1969 and according to some rulings from the Licensing Board there is no limitation period. However, this has recently been questioned in a recent case where a landowner has brought a decision from the Licensing Board to the Supreme Administrative Court and is arguing that the Act of Limitation, SFS 1981:130 is applicable in respect of clean-up measures. If this is upheld, the limitation period will be ten years from the day of the action that caused the disturbance. If it is an ongoing action, (for instance, a leaking landfill) the limitation period may not start until the pit has stopped leaking.

Under the Environmental Civil Liability Act 1986, action against the defendant must be taken not more than ten years after the day of the action that caused the disturbance. According to general principles of limitation it is not necessary to take legal action. A written reminder to the "defendant" is enough. Even if the limitation period has run out, it is possible for a private person to be compensated by the Environment Civil Liability Damage Fund.

**UK**

The limitation periods are as follows:

- in contract, six years from the date of breach of contract;
- in negligence, six years from the date the cause of action accrued. In normal cases, the cause of action will accrue at the date of breach of duty of care. However, Section 14(A) of the Limitation Act 1980 (enacted by the Latent Damage Act 1986) provides that, in cases where the damage is latent, the limitation period will be six years from the date of discovery of the damage. This provision is subject to a longstop of fifteen years;

- in nuisance, the limitation period is six years from the date of the nuisance;

- in personal injury actions, the limitation period is three years from the date of injury.

There are two important points to note in the environmental sphere:

Section 14(A) of the Limitation Act 1980 means that, where contamination does not become evident for a number of years, a claim may still fall within the limitation period. Similarly, it may only be possible to identify damage when standards are updated. Thus, for example, water which was previously considered to be within acceptable standards may be found to be contaminated when those standards alter. The date of discovery of damage would then be the date when the water was found to be below acceptable standards, rather than the date of contamination. The limitation period would start to run from the date of discovery, subject to a fifteen year longstop.

This means that, in reality, arguments as to foreseeability at the time of the breach are likely to be more significant in this area. Whilst a claim may be within the limitation period because the damage was only discovered later, the defendant may still be able to claim that the damage was not foreseeable at the time the water was actually contaminated. This is the situation that occurred in Cambridge Water Company -v- The Eastern Counties Leather [1994] A.C. 264.

In nuisance actions, where a nuisance is continuing and/or ongoing, the limitation period will not, in the majority of circumstances, start to run. In other words, in nuisance actions the limitation period usually only starts to run once the nuisance has stopped. For example, if a nuisance takes place over a period of four years to February 1994 and then ceases, the limitation period will start to run from February 1994 and will not expire until February 2000.

For the purposes of limitation the rule in Rylands -v- Fletcher (1868) LR 3 HL 330 should be treated as a nuisance case.

It is also important to note that the limitation provisions provide a defence to proceedings only, and are not an automatic bar to commencing proceedings. The burden of proof is therefore on the defendant to establish that a claim is statute barred.
26. PREVENTATIVE MEASURES (INJUNCTIONS) AND EXPEDITED LEGAL PROCEDURES

STUDY 1

USA

General principles of state tort law (nuisance) allow injunctions to be sought to prevent the continuance and order the correction of harmful activities involving hazardous substances, noise or other environmental intrusions, which unreasonably interfere with public resources or the use and enjoyment of another's property. See S. Cooke, Law of Hazardous Waste, Ch. 17. Injunctions can also be sought in statutory citizen suits.

Under CERCLA a "good Samaritan" could voluntarily perform clean-up of a problem requiring immediate action (for example, a chemical spill for which he is not liable) and then seek to recover his costs either from the liable party or via a claim against the Fund under paragraph 112, 42 USC paragraph 9612. Also, a private plaintiff could bring a "citizen suit" seeking emergency injunctive relief, under the relevant environmental statute against the polluter or the government. Under CERCLA paragraph 106, EPA may bring a suit for an injunction to prevent further environmental damage being caused by a release or threatened release of hazardous substances 42 USC paragraph 9606(a). It may also issue an administrative order to oblige parties to conduct necessary clean-up operations of such activities.

DENMARK

Expedited legal procedures are governed by the Procedural Act for making seizure and possession of property and injunctions.

The Foredretten issues injunctions based on private nuisance with a right to appeal to one of the high courts. Injunctions can be used against any private party and against a public authority when they are acting jura gestione. Injunctions are not permitted against a public body acting as an authority. In this respect the plaintiff, is entitled to apply for a suspension of a decision by an authority (as stated in the Supreme Court decision in Gyprop -v- Competitive Council, (UfR.1994.823H) extending the application of ECJ ruling in Factortame C213/89 to Danish Law). The scope of this ruling was expanded for environmental cases in Greenpeace -v- Minister of Traffic (UfR.1995.634H).

Authorities are obliged to take preventative measures in emergencies under Section 70(1) of the Environmental Protection Act 358/1991, on behalf of the responsible party. The responsible party is obliged to immediately notify the supervising authority. When necessary, authorities can enforce injunctive relief by administrative means without a prior decree by the court.

FINLAND
Expedited, simplified legal procedures are available for civil law claims that are not disputed (Legal Proceedings Act, 1952/91, Chapter 5), and for actions concerning certain interim precautionary measures, such as seizure of the defendant's property or an injunction to stop the polluting activity. Administrative courts can also apply expedited legal procedures in such cases.

FRANCE

Expedited legal proceedings are available by way of a motion for summary judgment ("procédure de référé") in cases where urgency is demonstrated and provisional or preventive measures are required. Expedited legal proceedings are also available before administrative jurisdictions, by way of a motion for summary judgment before the administrative Tribunal; for example:

- to appoint an expert in urgent cases, or
- to safeguard evidence.

The administrative judge can make an emergency report or can suspend the execution of an administrative decision or judgment.

The law enables authorised activities to bring an action in the name of the victim of the environmental damage. This action is analogous to a class action, it is distinguished by the requirement of a written summons for each represented individual.

However, in the majority of cases, a civil action is not used for preventing environmental damage but to afford remedies to persons which have suffered damage.

GERMANY

In general, expedited legal procedures are only available in relation to claims compelling another person to cease further environmental damage with the intention of avoiding additional damage. No expedited procedures are available in relation to the restoration of damage already in existence because it is a rule of German law that an expedited procedure cannot anticipate the final outcome in the main proceedings. If a plaintiff wants to restore property urgently he must do so at his own cost, and seek reimbursement in the main proceedings.

Paragraph 906 BGB covers a special aspect of the general claim for remedies and injunctions under paragraph 1004 BGB to bring an action for cessation of emissions which are causing damage to property.

Paragraph 1004 BGB states that:

(1) The owner of property is entitled to ask the interferer for removal of the interference, if his property suffers impairment and if further impairment is feared. The owner can seek such an injunction.
(2) This claim is excluded if the owner is obliged to "tolerate the impairment" but can be used if interference with health and life can be shown.

In order to avoid damage to the environment, an additional possibility for the (potentially) injured person is to ask the competent administrative bodies to take appropriate measures against the liable person. In principle, the administrative bodies are entitled to prohibit unlawful impairment to the environment. The requirements in order to take the necessary measures are set out in the relevant statutes (statutes on policing, water and waste). The administrative bodies may impose an appropriate order. The liable person is normally entitled to lodge a protest against this order, which suspends the effect of the order. In practice, this means that the order does not have to be obeyed until a final decision has been reached regarding the protest. Due to the fact that a final decision can take several years, the administrative bodies are entitled to direct that the protest does not have the effect of suspending the order, if the immediate enforcement of the order is in the interest of the public or in the predominant interest of a person concerned (paragraph 80, sub-Section 2, No. 4 Rules of the Administrative Courts (Verwaltungsgerichtsordnung (VWGO)). However, even this direction (that the protest shall not have the effect of suspending the order) can be appealed by the liable person before the administrative courts. In general, such expedited proceedings will take about half a year (sometimes faster, in exceptional cases, where special dangers are threatening, they might just take a few days).

In principle, it is at the competent administrative body's discretion as to whether it wants to take appropriate measures against the liable person. The injured person however can demand these measures from the administrative body if the emissions are infringing his legal rights (and do not only contravene rules which have been set up solely in the interest of the public). In case the administrative body refuses to take measures against the liable person, the injured person may require the administrative body to take appropriate measures by way of an administrative court proceeding. This again may be a lengthy process. Therefore, if the administrative body refuses to take appropriate measures, it is advisable to proceed directly against the liable person by way of civil proceedings.

The following differences should be noted in relation to expedited procedures under administrative law:

- if a private person seeks a particular action from an administrative body, he can ask for an interim order (paragraph 123 of the Administrative Court Order (Verwaltungsgerichtsordnung - VwGO)). Such interim orders are generally only successful in exceptional cases, as in principle the outcome of the main proceedings may not be anticipated. It is thus the case that to obtain an interim order, there must be a threat of danger to life, limb and health;

- on the other hand, if an administrative body requests from a private person a particular action or omission (for example refraining from
causing damaging emissions), the authority is in general authorised to order that those measures be undertaken by the private person. Protests made by the private person against this order have in principle a suspensive effect. In those matters which must be handled quickly in the public interest or in the overriding interest of a private participant, the authority may nevertheless order that the objection has no delaying effect. The order is then immediately to be carried out. Should the recipient of the order not be prepared to carry it out immediately, he must bring a claim before the administrative court on the grounds that his objection to the administrative body's order suspends the order. In particularly urgent cases, the administrative body may undertake directly the required measures itself.

ITALY

Summary or urgent procedures are available, for example, in the form of seizures or orders to stop determined activities; however, as yet, summary procedures are not frequently used in cases of environmental damage.

THE NETHERLANDS

Article 96 of Book 6 of the Civil Code stipulates that the reasonable cost of preventing or limiting damage, can be claimed as damages. Also, injunctive relief can be obtained through the civil courts in a special shortened procedure. In principle, the plaintiff can choose between the two, although it may be deemed unreasonable to claim the costs of preventative measures if the defendant has not been given a chance to carry out these measures himself.

Also a final judgment may be obtained by an expedited procedure, but is not often used in practice, since urgent cases usually seek injunctive relief.

To obtain injunctive relief through the special shortened procedure, the plaintiff will have to show that obtaining the relief is urgent. The judgment in these cases is not final. A normal procedure can be started at the same time, in which this provisional judgment can later be reversed. However, this is not usually done.

There is also a formal shortened procedure in administrative actions in urgent cases. The procedure provides for shorter time allowances for the filing of statements, or that some statements can be omitted.

An administrative injunctive relief procedure also exists, in which suspension of an administrative decision can be obtained until the final decision in the main procedure has been given.

SPAIN
A plaintiff may require provisional measures to avoid further damage, and may also ask for preventative measures to guarantee that the defendant will have assets to honour his potential liability.

There is a right for the plaintiff to obtain provisional injunctive relief as a matter of urgency before a case has been fully considered. The ordinary provisional measure is an embargo (an attachment of goods of the debtor, under Article 1397 onwards of the LEC). Other *ad hoc* provisional measures, the nature of which will depend on the specific case in question, may be imposed according to Article 1428 of the LEC.

It is important to note that the other special rules may allow specific provisional measures but there are none in the area of civil environmental liability (although it is reasonable to anticipate that civil courts could rely on various administrative environmental rules such as those contained in Article 59 of Royal Decree 833/1988 on Toxic and Hazardous Waste, which allow the authorities to shutdown machinery or close premises where an offence has been committed, in order to secure the protection of human health or the environment).

**SWEDEN**

It is possible for a party in civil law to seek an injunction under the Civil Liability Act 1972 or under case law (common law).

Further, the Environment Protection Act 1969 focuses on prevention of damage: a risk of pollution is enough to justify an injunction. A plaintiff can thus seek an injunction and use expedited procedures to stop a polluting operation under the Environment Protection Act 1969 (which is probably the easiest route). It is not, however, possible to obtain an injunction in civil or administrative law if the activity is carried out in accordance with licensing requirements.

If the compensation required does not exceed 18,000 SEK, a general expedited procedure is available which reduces the need for evidence and procedural requirements and uses one judge instead of three in order to reduce costs and accelerate the proceedings.

If necessary any competent board can at short notice given during working hours decide on an immediate injunction.

**UK**

Parties to an action in tort (with the exception of negligence) can apply for an injunction. An injunction might be prohibitive (requiring the defendant to stop a given cause of action) or mandatory (requiring the defendant to take positive action). An injunction is also available in an action brought by the Attorney General, or by a local authority, in public nuisance.

It is also possible to seek a *quia timet* injunction to restrain infringement of a right permanently. The applicant must show they have a right that has been infringed.
and that material infringement is threatened. If infringement has not yet occurred an injunction may be granted if the applicant can show a strong probability that the right will be violated and that the relevant act is calculated to do so.

The injunction is sought through an interlocutory application even before proceedings have been initiated. In an extreme situation this may be done ex parte (that is, without representations from the other party) and at any time. It is usual for the plaintiff to give an undertaking for damages to cover the event that judgment ultimately goes against him. It should be noted that a public body taking action to protect the public from harm does not have to give such an undertaking.

Injunctions may cover the following circumstances:

- to prevent pollution from occurring;
- to prevent continuing, ongoing pollution;
- to prevent a continuing nuisance, such as noise;
- to compel a polluting party to comply with existing statutory requirements.

The American Cyanamid Case [1975] A.C. 396 lays down guidelines for the basic requirements the plaintiff must establish in order to get an interim injunction (prohibitory injunctions only not mandatory). These are based on the proposition that there will be a trial on the merits of the case at a later stage, but in practice this rarely occurs. Some of the requirements are that the plaintiff must show that he is likely to obtain a permanent injunction at the later trial or that damages would not be an appropriate remedy for either party. The case itself involves another requirement, the balance of convenience. The decision of the court at the interim hearing, for or against the injunction, will inevitably lead to some disadvantage to one of the parties. The extent of this disadvantage is a significant or decisive factor in determining the balance of convenience. In Roussel-Uclef -v- G.D. Searle & Co [1977] FSR 125, the wider public interest was considered the decisive factor. The last requirement that a plaintiff must show is whether a special case or factors are to be considered. For example, actions against a public authority. A public authority should not be restrained by an injunction from exercising its statutory powers unless the plaintiff can show a real prospect of getting a permanent injunction at trial.

In a Court of Appeal case decided in 1988, City of London Corporation -v- Bovis Construction Limited [1992] 3 All ER 697, it was held that an interlocutory injunction could be granted in civil proceedings against the offender and that the essential foundation for the exercise of the court's inherent discretion to grant an injunction was whether it could be inferred that the defendant's unlawful operations would continue unless and until effectively restrained by the law, and that nothing short of an injunction would be effective to restrain those operations. In that case, a construction company was subject to a notice restricting its operations, which were causing noise outside the boundaries of a building site, to specified hours, in order to avoid the creation of a noise nuisance at night and at weekends. Criminal proceedings for breach of the notice had been started but repeatedly adjourned and, meanwhile, the company continued to breach the time
restrictions on the operations. The effect of the injunction granted following the Court of Appeal decision was that any further breach would be a contempt of court, and, therefore, punishable at the discretion of the court; further, that any director or other person in the company giving instructions which would involve breach of the injunction would himself be in contempt of the court.

Where a plaintiff feels that there is no defence to its claim, he may make an application for a summary judgment. In the High Court this is under Order 14 and in the County Court under Order 9. Evidence is by way of affidavit and the plaintiff must establish that the defendant has no defence.
27. FRIVOLOUS AND VEXATIOUS CLAIMS

STUDY 1

USA

The US courts have inherent authority to dismiss or sanction frivolous lawsuits. The main authority for doing so is Federal Rule of Civil Procedure 11, which requires a good faith legal and factual basis for each allegation in a complaint and pleadings that are filed in a federal court. Most states have similar rules. Rule 11 authorises judges to impose sanctions including awards of attorneys' fees and costs against defending parties, or dismissal of the case. Also, federal and state statutes authorise the imposition of personal sanctions on attorneys who bring frivolous claims. Damages can be sought as well in a common law action for abuse of process.

DENMARK

According to Section 150 of the Procedural Act, it is the responsibility of the judge to prevent any "vexatious" or "frivolous" actions prolonging the case. To prevent frivolous actions the judge can appoint time-limits for the presentation of further documentation and/or allegations and decide the date for the final court hearing. If a plaintiff finds the other party is unnecessarily prolonging the case, the plaintiff may claim for court order to appoint deadline or appoint time for court hearing.

FINLAND

It can be an offence under the Legal Proceedings Act 1952/91 Chapter 29 to bring a vexatious or frivolous action and it may affect the rules regarding the payment of legal costs. As a rule, the losing party must carry the legal costs of the winning party. However, if a party has taken action in court which was not necessary, that party will have to carry the legal costs of the other party. Also if one party has during the trial caused unnecessary costs to the other party, he has to carry those costs.

FRANCE

Under Article 32-1 of the Code of Civil Procedure "anyone who acts before a court in a dilatory or abusive way may be fined from 100 to 10,000 FF without prejudice to any damages which may be claimed by the defendant". This would include vexatious and frivolous actions.

GERMANY

There are no special mechanisms to deal with this problem. The amount of actions related to environmental damage are very limited and so as a result, vexatious or frivolous actions will also be limited.

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ITALY

Article 96 of the Code on Civil Procedure provides that if the party "has commenced or claimed in an action with wilful misconduct or gross negligence" the judge, may upon request of the counterparty, condemn him to pay the expenses and the damages.

THE NETHERLANDS

There is no specific mechanism for Courts to deal with "vexatious" or "frivolous" actions. Vexatious judicial seizures of assets can be lifted at short notice on request of the person subject to the seizure.

SPAIN

Within the civil field, courts may impose on one of the parties, the costs of the proceedings if the party has litigated recklessly. The other party would, of course, have the choice to initiate another action if he considers that he has suffered damage for the reckless behaviour of the other party.

The same answer applies to administrative proceedings (please refer to 23).

SWEDEN

It can be an offence according to the Code of Procedure. However, of more practical use is the general rule that the losing party has to pay the winning party his legal costs as bringing frivolous claims will lead to likely failure and payment of costs by the plaintiff.

UK

An applicant for judicial review must first apply for leave to seek the review under the RSC Order 53 Rule 3(1). The application will contain outline details on the relevant law, the facts of the matter, the decision for which judicial review is requested and the facts relied upon by the applicant. On this basis the judge will decide without a hearing usually whether to grant judicial review and eliminate at an early stage any applications other than those he thinks are fit for further consideration.

For civil actions the relevant rules of the Court in which the action is proceeding will govern how they are dealt with. For civil proceedings in the High Court, Order 18, Rule 19 of the RSC allows the Court, at any stage of the proceedings, to strike out any pleading or the endorsement of any writ on the ground that it is scandalous, frivolous or vexatious. This is requested by application at any stage of the proceedings, specifying what part or whole of the pleading is being attacked and on what grounds.
The County Court has similar powers governed by Order 13 Rule 5 of the County Court Rules 1981. Again, this can be applied for at any stage in the proceedings but preferably at the earliest opportunity.
USA

CERCLA does not require parties who handle hazardous substances to obtain compulsory insurance cover. Other federal environmental statutes, most notably the Resource Conservation and Recovery Act ("RCRA"), do require various financial assurance guarantees from parties operating hazardous waste treatment, storage and disposal facilities, with respect to the costs of corrective action, facility closure, etc. See RCRA paragraph 3004 (a)(6), 42 USC paragraph 6924 (a)(6); and 40 C.F.R. paragraph 264.142. See generally S. Cooke, the Law of Hazardous Waste paragraph 5.04[8]. Such financial responsibility requirements may be satisfied through insurance, guarantees, surety, bonds, letters of credit, or qualification as a self-insurer. 42 USC paragraph 6924(t)(l).

Similar insurance and financial assurance requirements for hazardous waste management operations exist under state hazardous waste statutes and regulations (particularly since states are often delegated responsibility for implementing the RCRA program). When private parties agree to perform a hazardous waste site investigation or clean-up under a consent order or consent decree with EPA, EPA generally requires various financial assurance provisions to be included to ensure that the performing parties have adequate funds to do the work.

DENMARK

In the preparation of the new Act of Compensation for Environmental Damage, 225/1994 it was considered whether insurance should be compulsory. Due to the lack of experience on calculating the risk, (and partly also because of the lack of agreement on what "restoration of the environment" meant) Parliament chose not to make insurance compulsory under the new regime.

In other special liability regimes insurance is compulsory. For example, under the Road Traffic Act, the Act of the Sea, 205/1995 and the Act on Compensation for Nuclear Damage third party insurance is compulsory.

Insurance protection for landfills is compulsory when the site is privately owned (Environmental Protection Act, 225/1994 Section 50). Landfills owned by public authorities do not require insurance for future clean-up costs. This is expected to change when the proposal for a "landfill Directive" on waste is finally adopted by the European Council.

FINLAND

At present, insurance is compulsory only for operators of nuclear installations (Nuclear Liability Act, 484/72 23-28), for owners of ships carrying more than 2000 tons of oil (Act on Liability for Oil Pollution from Ships, 401/80), and for
owners of motor vehicles (Traffic Insurance Act, 279/59). The shipowners and operators of nuclear installations may alternatively give a financial security.

The Ministry of the Environment is preparing a proposal for a complementary scheme for compensating environmental damage. The proposal also introduces as one possibility an act on compulsory liability insurance for environmental damage. The insurance alternative would mean that an operator engaged in activities causing a risk of environmental damage would have to carry insurance that would cover his liability in accordance with the Environmental Damage Compensation Act, 737/1994. However, according to the proposal a compulsory environmental insurance is not a feasible alternative at the moment. For that reason a secondary scheme for compensating environmental damage has been introduced as the main alternative (Report of an ad hoc Environmental Economics Committee; Ministry of the Environment, 3/1993).

A later proposal from another Committee published in late 1995 suggests a system combining elements of compulsory insurance and a fund. The compulsory insurance would provide compensation where the polluter is insolvent or cannot be found. Listed installations would be required to carry the insurance. Participating insurance companies would have to collectively make payment where the polluter is unknown or, in some cases, insolvent. The insurance companies would only have to participate for a certain number of years. See also 12.

FRANCE

There is no obligation to obtain insurance cover. However, there are some cases of compulsory financial guarantees under Law 76/663 on listed sites to cover, in particular, the clean-up costs (activities submitted to such an obligation are quarries, storage of waste activities, and "Seveso" sites). These financial guarantees are based on the Decree of June 9, 1994 (see 3) and are the object of serious discussions as to their entry into force (industry requires a delay after December 1995) and as to their amount. These financial guarantees may be in the form of an insurance policy or a bank guarantee. Apart from this and the financial guarantee for transboundary movement of waste in accordance with Regulation 259/93 there is no existing or proposed compulsory insurance in this context.

GERMANY

Insurance is compulsory for the proprietors of plants mentioned in Appendix 2 to the UmweltHG. The same is applicable to genetic engineering plants (paragraph 36 of the Law on Genetic Engineering). Apart from that, insurance is not compulsory.

Details of compulsory insurance under the UmweltHG will be contained in a regulation to be passed by the Federal Republic of Germany, the date when this regulation will be passed is not as yet known and cannot as yet be predicted. Therefore, details of compulsory insurance pursuant to paragraph 19 UmweltHG are not as yet established.
ITALY

Even though the standard policy developed by an Insurance Consortium (based on a "claims made" principle, extending to non-sudden damage and not permitting insurers' termination) is more protective than the average internationally available terms, insurance coverage or financial security for environmental damage is neither compulsory nor particularly common in Italy. This may be explained partly by the lack of comprehensive legislation on environmental damage and its remediation, partly by the relatively high cost for policies of that kind (although protective), and partly by the resistance of insurance companies, who are concerned by the possible size of awards of damages based on a judge's evaluation. It is expected however that a compulsory insurance system will be adopted soon, in compliance with both the principles as set out in the Lugano Convention (Article 12) and in the Single European Act (Article 130).

THE NETHERLANDS

The law does not contain a general provision regarding compulsory liability insurance. However, the Environmental Control Act 1979 (as amended) and the Soil Protection Act 1994 provide that liability insurance for damage caused by activities that can cause deleterious environmental effects can be made compulsory. As a result insurance or other financial security is compulsory since 1 March 1993 for persons (both individuals and companies) who store liquid substances in underground tanks. Underground tanks owned by individuals existing at 1 March 1993 have to be insured not later than 1 March 1996. The cover has to be 500,000 Dutch Guilders per tank. In case of more than 10 tanks 5,000,000 Dutch Guilders is sufficient. A special liability insurance policy is available, but only a few policies have been taken out so far. The operator of a landfill, existing or closed after 1 March 1995, can only be forced to have financial security in respect of aftercare. Compulsory insurance for an operator's liability is not (yet) in force, as discussions with financial institutions and industry are still taking place. Two or three operators however already have a liability insurance.

There are plans to create compulsory insurance for operators of facilities that have severe effects on the environment and for transporters of hazardous substances by road.

As a result of international conventions, compulsory insurance for liability exists for:

- owners or ships carrying oil in bulk
- operators of a nuclear installation
- operators of a nuclear ship

As a result of Dutch legislation and/or licensing practice, compulsory insurance for liability exists for:

- the operator of the Pernis-Antwerp Pipeline

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- the operator of a petrol station.

**SPAIN**

Insurance is only compulsory under certain administrative laws, such as the Basic Law on Toxic and Hazardous Waste (Article 8.2) and the Law on Nuclear Energy (Article 55 onwards).

In these cases the insurance must cover any civil liability of the insured party derived from its activity; the scope of the policy may be determined by law (for example, nuclear activities) or by the authority that grants the corresponding authorisations (for example, waste management activities).

The practice of insuring against civil environmental liability is rather scarce. The general guidelines are that:

- there always exists a cap;
- only sudden, accidental, unforeseen, unexpected damages are covered (excluding pollution caused in a continuous slow or repeated manner); and
- the insurance does not cover damage caused in breach of applicable law or caused in bad faith.

**SWEDEN**

Activities which are required to be licensed under the Environmental Protection Act 1969 have to contribute to a compulsory insurance fund run by a group of insurance companies in accordance with the Ordinance of 1 July 1989 (Environment Civil Liability Damage Fund). However, only private persons can be paid out of this fund and there is no such financial security requirement under the Environmental Civil Liability Act 1986. The progress of claims under this fund has been slow. Over fifty claims are pending although, as yet, only one has been paid out on.

Otherwise no activity (except a nuclear activity) has to carry insurance.

There has been some discussion within the government on a compulsory insurance system to cover clean-up costs of old pits and quarries. There has, however, not yet been any firm proposal on the matter.

**UK**

It is not generally compulsory to insure against potential environmental liabilities to third parties in respect of own site pollution or public liability. Employer's liability insurance is compulsory.

In relation to oil pollution the Prevention of Oil Pollution Act 1971 introduced compulsory insurance for oil pollution damage. The 1971 Act was extended by a 1986 Act of the same name to cover discharges from vessels.
Under the Nuclear Installations Act 1965 Sections 16 and 19 as amended by the Energy Act 1983 Section 27(4) and (5) a requirement is imposed on a licensee of a nuclear installation to make provision (whether by insurance or some other means) for the payment of compensation under the Act. Insurance or other provision is required up to the required amount which is £140 million per occurrence.

**STUDY 2**

**AUSTRIA**

Insurance is not compulsory, but see 4.

**BELGIUM**

Insurance is not compulsory as a general rule. There is, however, a trend in this direction: provisions of VLAREM (Flemish regulation on permitting polluting activities, 1993) and the Flemish Decree of 1995 on contaminated land do require financial guarantees.

**GREECE**

Insurance coverage for environmental liability damage is obligatory only in relation to transport of oil by sea. This obligation arises from the 1969 Brussels International Convention and Section 1971 Brussels Convention. Both of these treaties have been signed and ratified by Greece (Laws 314/76 and 1638/86 respectively).

**ICELAND**

There is no general compulsory insurance cover for environmental damage. In certain areas that may cause environmental damage, such as cars, aircraft and ships, there is compulsory liability insurance which also covers environmental damage. This insurance covers, more or less, all environmental damage that owners of equipment may become liable for. Compulsory fire insurance on houses under Act No. 48/1994, covers clean-up costs but the cost of cleaning up toxic waste in the ground or the environment is excluded.

**IRELAND**

Insurance is not compulsory in Ireland.

**LUXEMBOURG**

The Ministry of the Environment, acting within the scope of the Law of 9 May 1990 concerning hazardous establishments, grants its authorisations conditional on the operator obtaining insurance covering damage to third parties and fire risks (covering clean-up costs for damage caused to the environment).
As a result of this, most pollution risk is covered by insurance.

**NORWAY**

The Pollution Control Act and the Petroleum Act do not include any particular requirements concerning insurance, however, the authorities may stipulate that security is given for compensation of possible liability. The extent of the security will reflect the operation's ability to cause pollution and the possible consequences of a pollution event.

According to the Ministry of the Environment, the authorities require such security with regard to activities concerning the disposal of special waste. Beyond this, whether or not security is required is decided individually.

The Maritime Act requires that any owners of Norwegian vessels and foreign vessels approaching Norwegian harbours, capable of carrying more than 2000 metric tonnes of oil in the cargo holds, must be insured or financially covered for oil spills. Furthermore, the insurance must be approved by the authorities and a certificate issued as confirmation. However, the liability is limited to 14 million SDR (Special Drawing Rights) or 133 SDR for each ton of vessel.

**PORTUGAL**

Article 43 of the Basic Law on the Environment stipulates that the operator of an activity involving considerable risk to the environment must undertake to insure against the risk of civil liability. The activities that involve risks deemed "considerable" will be listed in a regulation which is still to be enacted.

There are specific rules on insurance for civil liability in relation to damage caused by ionising radiation and the transport of dangerous waste.

**SWITZERLAND**

Insurance is compulsory, for example, under the Federal Act on Liability for Nuclear Power. The operator must take out insurance of at least CHF 300 million per plant, plus CHF 30 million to compensate for interest and procedural cost. The insurance cover for the transit transport of nuclear material must be at least CHF 50 million plus 5 million for interest etc..

Additional insurance cover is provided for damages up to CHF 1 billion plus 100 million for interest etc. by the Swiss state (in addition to the private injury cover as mentioned before).

The (proposed) Water Protection Act will empower the government to require compulsory liability insurance for certain plants with above-average environmental risk and the legislature plans to introduce a requirement for general insurance for environmental damage caused by certain high-risk companies, see 4.
29. THE AVAILABILITY OF INSURANCE/FINANCIAL COVER

STUDY 1

USA

With respect to insurer liability, CERCLA does not directly address this issue. Rather defendants to CERCLA actions have brought collateral actions against their insurers to recover their CERCLA liabilities and defence costs under prior general liability insurance contracts. These cases are decided under state contract law and often involve a range of issues including: whether the pollution was expected or intended by the insured; whether a claim for recovery of clean-up costs is for covered "damages" or equitable relief; whether environmental contamination constitutes covered "property damage"; whether the release of contamination was "sudden and accidental" and thus covered under an exception to the "pollution exclusion"; and whether the claim was for damage to property owned by the insured and thus excluded. See generally S. Cooke, Law of Hazardous Waste, Chapter 19. The status of the law for these and other environmental insurance coverage issues varies widely among the fifty states.

The availability of insurance coverage for environmental damage is therefore a complex question that varies significantly among the states and among various types of insurance contracts. In appropriate circumstances, coverage for environmental damage may be available under either first party or third party insurance contracts, although coverage for environmental damage under first party property insurance policies is relatively rare (both because the situation that caused the pollution is not generally a "covered peril" and because of various exclusions).

Coverage is usually sought under two types of third party liability policies: comprehensive general liability ("CGL") policies and environmental impairment liability ("EIL") policies. In general, CGL policies have been written on an "occurrence" (that is, property damage) basis and respond to historical contamination giving rise to current claims, provided that the "occurrence" took place during the policy period. By contrast, EIL policies, which have been much more limited in their availability, are typically written in "claims made" form, such that to be covered the claim must be brought within the policy period, irrespective of when the continuation or resulting damage occurred. See generally S. Cooke, Law of Hazardous Waste; Chapter 19.

Historic environmental damage may be covered under a CGL policy to the extent that the insured can show that the "damage" to the environment giving rise to the claim occurred within the policy period, and to the extent that none of the exclusions to coverage (for example, the "pollution exclusion") apply. The "trigger" of coverage (for example, the event or events which constitute the "occurrence" giving rise to a duty to defend and indemnify the insured under a given policy) is defined various ways among the states, and generalisations are difficult.
With respect to current environmental damage (that is, ongoing pollution), coverage is generally more difficult to obtain. Since the mid-1980's, most CGL policies have had an "absolute" pollution exclusion, although coverage may still be found to exist in exceptional cases. Under an EIL policy, if a claim is made by a governmental agency or a third party regarding current pollution that is within the scope of the policy, coverage for current environmental damage may be available. Such coverage is generally limited to "off site" damage rather than damage to the property of the insured.

The legal distinction between "gradual" and "sudden and accidental" environmental damage is at the heart of much of the current US environmental insurance coverage litigation under CGL policies. Most CGL policies written since the early 1970's contain a "pollution exclusion" clause which generally excludes coverage for property damage caused by discharges of environmental pollution unless the discharge was "sudden and accidental". These terms are not defined in the standard CGL forms, and have given rise to extensive litigation in which the results differ significantly among the states.

Under one theory, "sudden and accidental" has been interpreted to mean that the discharge was unexpected and unintended from the perspective of the insured. At the other extreme, "sudden and accidental" has been interpreted to mean that the entire discharge of contaminants was instantaneous or abrupt. There are several intermediate interpretations as well. Due to the controversy, this "limited pollution exclusion" was generally replaced by the "absolute" pollution exclusion in the mid to late 1980's. However, under CGL policies issued prior to the early 1970's, there is no pollution exclusion and no distinction made between gradual and sudden contamination (except that a number of courts have barred coverage for "intentional" pollution that was deemed expected and intended by the insured). Thus, coverage for incidents arising under pre-1970 CGL policies is much more likely.

Given the high cost of environmental clean-up and the high transaction costs of environmental insurance coverage litigation, it has become difficult and costly to obtain insurance coverage in the US for any type of environmental pollution or contamination (historical or otherwise). Similarly, it is costly for environmental consultants and other professionals to obtain professional liability (errors and omissions) coverage that includes environmental risks. Recently, however, the availability of such coverage in various forms has been increasing as the insurance industry is gaining sophistication in assessing and pricing such risks.

**DENMARK**

Insurance cover is available for specified polluting events in respect of the damage caused by the pollution, and the cost of clean-up, investigations and restoration. Examples are compulsory fire insurance, under which the clean-up of hazardous substances after a fire is covered, and "all risk" insurance, which covers clean-up. Since 1989 most policies have contained the pollution exclusion, except where the damage has occurred "suddenly and unexpectedly". The term "suddenly and unexpected" has been the subject of litigation. It is interpreted in a way that does
not encompass spills or leaks from tanks containing hazardous substances or mineral oil (see UIR.1986.256).

During the preparatory work on the Act on Compensation for Environmental Damage in 1992 SKAFOR a body representing the insurance industry, reached an agreement on a pool to cover environmental damage. The terms as well as the parties' comments are published. However, the pool has not been a success, possibly because the conditions made it very difficult to be covered. One of the conditions in dispute is that "illegal pollution" is not covered. The debate centres on whether any pollution is legal.

Municipalities and counties are required to take preventive measures in cases of accidental pollution or in cases of any threat to health or to major natural resources caused by pollution. Insurance cover for this has been developed by and is available from only one insurance company, Kommunernes Gensidige Forsikringsselskab, the municipalities mutual insurance company. This insurance cover was developed from a 1982 case in which there was a major leak of 13,000 litres of perchlorethylene from a tank owned by an industrial concern (Holm and Smith) in the small municipality of Rosenholm. Clean-up costs exceeded 2.5 million DKr. The small community almost went bankrupt before the state and the county took over and financed the measures.

The insurance covers neither restoration of flora and fauna nor incidents arising as a result of the regulatory authority not discharging its duty to control, monitor and to prevent damage. Furthermore, it does not cover measures required to prevent pollution from old waste tips (historical pollution) or sources covered by the Waste Deposit Act, 420/1990. This unusual insurance does not include damage caused by ships, offshore installations, pipelines or plants owned by the state or municipalities or counties. Neither the pool nor other insurance contracts on the market cover damage to the unowned environment. Necessary preventive measures are covered and consequently so are part of clean-up costs. However, restoring the environment is out of the scope of insurance offered in the market.

FINLAND

Environmental damage both historic and current, may be covered under third party or first party insurance. However, in cases of historic pollution the extent of cover provided by the insurance may be limited.

A recent decision of the Espoo District Court on 20 September 1993 (S 92/1713) highlights some of the questions relating to the extent of cover provided by insurance. On 3 October 1991, an oil spill was discovered during repair works on the claimant's premises. The oil had polluted the ground and was situated under the claimant's building. Later (in the summer of 1992) it was discovered that the probable cause of the oil spill was negligence by a service company's employee in 1982. Following the request by the regulatory authorities of the City of Espoo the claimant cleaned up the spill. The work took over four months and the costs exceeded FIM 2.5 million. The claimant sought reimbursement of these costs from his insurer in accordance with Sections 52 and 53 of the Insurance Contract...
Act, 543/1994 arguing that they were salvage costs. The insurer opposed the claim arguing that the event insured against (third party liability) was not imminently threatening. The Court decided in favour of the claimant. The insurer has appealed to the Court of Appeal.

At present, general liability insurance policies restrict environmental cover to sudden and accidental pollution. A few leading insurers offer special environmental impairment liability policies (EIL) to cover gradual pollution, but so far there has been little activity in that market.

The secondary scheme proposed by an ad hoc Environmental Economics Committee would compensate damage caused by:

- contamination of water, air, or land
- noise, vibration, radiation, light, heat or smell
- other comparable nuisance.

The secondary compensation scheme would also compensate reasonable costs incurred by authorities for measures undertaken to prevent or mitigate pollution damage. In addition, reasonable costs for restoration and for assessing the damage would be compensated. Compensation would be paid from the secondary scheme where the Environmental Damage Compensation Act, 737/1994 or other legislation does not provide for compensation or full compensation, for example, in case of unknown or insolvent polluters.

The proposal expresses the opinion that introducing a charge related to permit systems involves several problems, both in principle and in relation to enforcement and control.

The Insurance Contract Act, 543/1994 has recently been modified and the new Act entered into force on 1 July 1995. The law sets up basic principles for voluntary first party insurance and life insurance. This Act is of supplementary relevance here but in relation to environmental damage it provides for special insurance contracts as well as special clauses.

**FRANCE**

Until January 1994, pollution or environmental risk was covered by the operator's general civil liability insurance policy. Growing awareness of the dangers and costs entailed in clean-ups and more generally of historic pollution, as well as the evolution of the laws and regulations, has led to the refusal by the co-insurers to cover environmental risks. Consequently, a great number of insurance companies decided to exclude this risk from civil liability policies.

Consequently companies are now faced with an increasingly difficult market and turn to the pool of insurers and co-insurers named Assurpol. Policies offered by Assurpol cover damage to the environment, the concept of damage being broadly defined to include:
- emissions, dispersions, discharges of any and all liquid, solid or gaseous substances in the ground, the water or the atmosphere;
- the production of odours, noises, vibrations, radiations or temperature alterations exceeding the customary requirements of good neighbourly terms.

The pollution may be accidental or not and gradual pollution is covered, although historic pollution is not. In order to be able to claim under the insurance, the first verifiable finding of the damage must arise during the term of the policy and the damage must have started during this same period. Coverage is up to FF.200 million per incident.

The main exclusions from the scope of this insurance policy are:

- non-compliance with regulations;
- lack of maintenance;
- civil liability after delivery;
- development risks which are risks which could not have been known in the state of scientific knowledge at the time the damage occurred.

Prior to issuing such insurance, Assurpol audits the site in order to determine whether or not the site is insurable. Not all sites are accepted and Assurpol's technicians may impose some improvements prior to accepting the company as a client.

Further, since the modification of the 1976 law on listed sites, by the law of 13 July 1992, and of the 1977 Decree, also on listed sites, by the Decree of 9 June 1994, both insurers and bankers have been paying increasing attention to what may become a potential market. The law sets out the principle of financial guarantees for three specific types of sites:

- waste storage sites;
- quarries; and
- so-called Seveso sites.

These financial guarantees must satisfy the public authorities that in case of insolvency or bankruptcy of a company, the site will be monitored and cleaned up.

The legal form of the financial guarantee is left to the discretion of the company. It can be, inter alia, a written undertaking delivered by a bank or an insurance company.

**GERMANY**

According to German third party insurance law, the guiding principle is that the damage causing event is decisive. The decisive moment is when the action causing the damage takes place. When the damage manifests itself is irrelevant.
Therefore, as a rule, insurance is not available for environmental damage that was caused in the past. In relation to damage that has been caused in the present, the timing of the damage causing event and the timing of the insurance cover coming into place are relevant. No clear rules exist in the case of environmental damage which occurs gradually. In law, the event which causes the damage occurs at the time the causation starts (theory of "the first drop"), so that no insurance cover exists if when the causation begins no insurance is in place. In practice, however, insurance cover is granted in proportion to the time that it was in place (for example: if oil seeps out of a plant over a period of 5 years and insurance cover was in place for 2 of those years, 40% of the damage caused is covered by the insurance).

No insurance cover exists in respect of sudden and unexpected damage, if no insurance cover was in place at the time of causation.

Damage to personal property is in general excluded from insurance cover. However, on the payment of an additional premium, even such damage is covered.

Insurance companies offer insurance which, in addition to the usual employer's liability insurance, provides insurance against the liability risks pursuant to the UmweltHG according to a so-called "environmental liability model" (Umwelthaftpflicht-Modell), which was developed by the association of third party liability insurances, third party accident insurances, motor insurances and legal expenses insurances (HUK-Verband). According to this model, the company is insured against liability for personal damage and damage to property, which has been caused by environmental effects to soil, air or water. This differs from the usual conditions for third party liability insurance.

ITALY

Since 1979, the Italian insurance market has organised a pool to cover pollution risks. This allows a total underwriting capacity of 27 billion Lire per loss and an annual aggregate combining property damage and bodily injury.

The pool has set conditions and premiums that have been discussed and agreed by the Confindustria, which represents the Association of Industrial firms.

This system has allowed the Italian market to considerably reduce its dependency on the worldwide reinsurance market, thereby giving it greater freedom of action and allowing insurance premiums to be kept in Italy.

The collected premiums have been:

- 5 billion lire in 1985;
- 7 billion lire in 1986;
- 8 billion lire in 1987; and
- 9 billion lire (estimated for 1988).
Before quoting a risk, the pool arranges an inspection, the results of which are taken into account in determining the insurance premium. The inspection is normally followed by recommendations for the improvement of the security standards of the plant. Each insurance company regulates its own inspection fees.

The policy coverage refers to damage to the environment by pollution (which was involuntary and caused damage to a third party). Such damage is defined in the policy itself as damage to water, air or soil contamination, jointly or severally, caused by any substances which were sent forth, dispersed, released or in any way whatsoever discharged by the insured party's plant.

The policy is based on the system of "claims made": the insurance coverage extends in fact to claims made for the first time during the period of validity of the policy. In the event that more than one claim (deriving from the same polluting source) is made, the date on which the first claim was made shall be considered as the date on which all the claims are made, even though the subsequent claims were made after the expiry of the policy.

The main characteristics of the "Pollution Policy" are:

- the extension of the coverage to gradual or continuous pollution (non-sudden) damages;
- the policy is valid for all damage on condition that it occurred on the Italian national territory;
- the possibility of reimbursement of salvage expenses incurred in preventing losses and of damages deriving from interruption or suspension of the plant activity;
- the policy cannot be terminated by the Insurer once a loss has occurred, but will cease at its natural expiry (no automatic renewal is provided for);
- the companies in the pool have the option to revert to the pool, the risk of transport of dangerous goods (which falls obligatorily under the general automobile civil liability insurance risk) when such transport is performed by vehicles;
- in agreement with the Federation of Chemical Industries, a system of prompt intervention has been arranged in the case of road accidents involving dangerous substances.

The policy coverage is usually for a 12 month term without the possibility of automatic renewal.

The right of an employee to have a preliminarily assessment made of the existence of a specific environmental risk has been recognised (S.C. Apr. 27, 1982, No. 2606) for the purposes of enabling the taking of insurance against 'professional illness', should the competent Agency (INAIL) refuse to cover it.

**THE NETHERLANDS**
A new environmental liability insurance has been available since 1985 ("MAS-polis"). It is offered by insurance companies in the Environmental Liability Insurance Cooperation Association (Milieu Aansprakelijkheidsverzekering - Samenwerkingsverband "MAS"). This insurance covers claims for damage to persons or property (including surface water pollution and diminished economic value of the goods of others) caused directly from the insured location, if these claims are received during the time for which cover was provided (a so-called claims made-policy). Liability for historic environmental damage is excluded. The condition that damage was caused directly from the location insured, means liability for transportation of hazardous substances or for wrongly disposing of waste materials, does not fall under the insurance cover. Nuisance damage, ecological damage and clean-up costs of the insured are not covered (unless to prevent damage to others). Damage caused by acts or omissions in breach of regulations with permission of the management is also excluded. In most cases, before insurance can be obtained a preliminary investigation into soil pollution must be conducted at the cost of the person to be insured. Any pollution present at the time of insurance will be excluded from cover.

The standard maximum cover provided is DFL 5 million per claim per year. Under certain circumstances this can be (theoretically) raised to DFL 15 million. A claim includes damages, legal interest and costs. The insurance ends not only by termination by one of the parties, but also as soon as the activities on the insured location ceases. An extra year of insurance can be obtained after termination, for any claims relating to the term of the insurance which has just ended.

For smaller companies (turnover of less than one million guilders and/or less than 50 employees) which are not involved in agricultural or hazardous industrial activities, a lenient standard procedure for acceptance exists. Small companies paying less than two thousand guilders a year for their normal liability insurance, can get additional MAS-insurance for an extra 35 guilders per year (for example shops, cinemas, public houses, etc.). For more hazardous activities (gold- and silversmiths, cleaning companies) cover up to DFL 5 million can be obtained for DFL 0,75 per thousand guilders to be covered, making the maximum premium per year DFL 37.150,00. A special policy exists for insuring underground (oil) tanks.

For larger companies, the insurance offered will often not be sufficient to cover the risks involved. The possibilities to obtain extra environmental liability insurance outside MAS are very limited.

The new environmental liability insurance ("MAS-polis") does not cover historic environmental damage. It does however cover gradual and sudden/accidental environmental damage. Current environmental damage is covered, but the claim has to be made within the term of the contract. The special liability insurance policy for underground tanks is very similar to the MAS-polis, except that clean-up costs of the insured are covered. Operators of waste incinerators cannot get cover for gradual environmental damage. Cover for this is also not fully available for operators of nuclear installations: the cover amounts to 1 or 2 million Dutch Guilders. Therefore, a complementary policy is given by the State.
This complementary policy also covers damage excluded by the Dutch pool for insurance of nuclear risks such as damage for gradual radiation as a consequence of normal use of the installation, damage occurring during tests directed by the insured contrary to governmental prescriptions, etc. Plaintiffs claiming against the operator of a nuclear installation will be referred to the State, which will publicise how to make claims in the official Gazette. The state will be subrogated in the rights of the operator. The complementary insurance provided by the State covers all damage except damage caused by war and damage as a consequence of variation in and interruption of the electrical current from a nuclear installation.

**SPAIN**

With regard to third parties, there is no fund that specifically provides insurance cover for environmental civil liability. With regard to first parties, insurance cover for environmental damage is limited to (as a general rule) sudden and accidental damage only.

The recently created environmental pool is studying the possibility of creating new policies, but for the time being there is no definite outcome.

**SWEDEN**

Most businesses carry a "company" insurance covering amongst other risks, liability for environmental damage as long as it is sudden and not foreseeable. This covers environmental damage to some extent including clean-up costs under the Environment Protection Act 1969 if damage has been caused to neighbouring property. Property insurance will also cover environmental damage to some extent. Both these insurances are standard insurances.

Both the company and property insurances cover environmental (tort) liability if the damage is caused by a temporary fault or by a sudden and unpredictable defect of a building or installation. Company and property insurances are very common and not very expensive. It is also possible to buy a special insurance which covers liability under the Environmental Civil Liability Act 1986. However this insurance does not include damage which is known or should have been known when the insurance was bought. In addition it does not include claims which are covered by property insurance or clean-up costs which are not related to liability under the Environmental Civil Liability Act 1986.

Only individuals can receive compensation from the compulsory Environment Civil Liability Damage Fund. Operators of all licensed activities must pay into this fund. Compensation will be available to an individual if: that individual is unable to bring a claim for compensation because the 10 year limitation period is passed, the defendant cannot pay, or there is no defendant available to sue. So far the fund has considered a few cases but as yet has not made any payments.

**UK**
Before April 1991, it was commonly believed that the majority of public liability policies would cover environmental liabilities, which were not specifically excluded from public liability policies. Public liability policies are written on an "occurrence" basis. This means that the insurance policy will cover the insured for all liabilities that occur during the policy period. The trigger date will be the occurrence rather than the discovery of damage or any other subsequent date.

Thus, technically, standard public liability policies remain open indefinitely. If pollution occurred in 1974 but was not discovered and/or a claim was not brought against the polluter until 1984, the relevant insurance policy will be that in existence in 1974, when the damage occurred.

In respect of historic pollution, therefore, this means that a company will often have to go back through its records to discover the relevant insurance policy in operation at the time the contamination occurred.

The majority of companies in the UK do not have specialist environmental impairment liability policies. Thus they are still reliant on their public liability policies.

In April 1991, the Association of British Insurers recommended that its members include the following exclusion in all public liability policies:

"This policy excludes all liability in respect of pollution or contamination other than that caused by a sudden identifiable, unintended and unexpected incident which takes place in its entirety at a specific time and place during the period of insurance".

This means that public liability policies will not respond unless the incident is "sudden and unintended". In other words, so called "gradual" pollution is excluded from standard public liability policies, and many companies will find themselves without cover for certain environmental liabilities.

Insurance policies are now more likely to be written on a "claims made" rather than an "occurrence" basis - that is, cover is given for claims made during the year of insurance irrespective of when the liability (damage) occurred.

The following questions have arisen and will continue to arise as a result of the exclusion:

- what is the distinction between a "sudden and unintended" incident and a "gradual" incident? This point has been argued at length in the USA over the last ten years, but still remains unresolved.

- would the gradual seepage of chemicals into the soil and hence into an aquifer, as occurred in Cambridge Water Company -v- Eastern Counties Leather [1994] A.C. 264, constitute a gradual incident or a series of sudden and unintended incidents (with each spillage)?
- where a water pipe has leaked over a period of time and, with the build-up of pressure and finally causes the system to burst, would this be a gradual event or a sudden and unintended event?

- what is the correct trigger date where an incident has occurred? For example, prior to 1991, where a gradual incident causing pollution took place over a number of years, which insurance policy is relevant? Alternatively, where there has been a series of sudden and unintended incidents, which policy should respond?

- to what extent can clean-up for past damage be distinguished from future damage?

The phrase "sudden and accidental" comes from the USA policy exclusion; the UK equivalent is "sudden and unintended".

At present, sudden and unintended incidents will be covered under standard public liability policies (see above). It has been predicted for some time that such incidents will be excluded from public liability policies on the recommendation by the Association of British Insurers, but to date no such action has been taken.

Thus most companies will be covered for sudden and unintended liabilities under their public liability policy, which would probably include, for example, the incidents at Chernobyl or Bhopal.

In addition to public liability policies some Environmental Impairment Liability policies are available. The basic environmental impairment liability policy is designed to provide cover against claims by third parties in respect of gradual pollution. These policies tend to have a low appeal with industry due to three main criticisms:

- the policies are site specific;

- an environmental audit is required (therefore substantially adding to the expense);

- limits of coverage tend to be low (up to £10m) although sometimes higher cover may be available.

Importantly clean-up costs of a company's own site are not covered although specialist insurers may provide such cover. Policies are written on a claims made basis.

STUDY 2

AUSTRIA
Insurance is available and taken out primarily in respect of current and certain accidental environmental damage. However, historical environmental damage and gradual environmental damage can also be insured. There is some dispute connected with the proposals for compulsory insurance in the Environmental Liability Bill (see 4) as to whether gradual and historical environmental damage should be covered by this insurance.

BELGIUM

The situation regarding insurance cover and/or financial security is weak in Belgium. Clauses concerning pollution can be included in the civil liability insurance policies but the damages are only covered if they result from an accident. First party insurance is not available yet. The total cover for damage to the environment is only one hundred million Belgian Francs at the current time, which is not sufficient.

Damage which has already occurred is not insurable. Future damage to third parties due to activities having taken place in the past shall either be excluded or covered on the basis of a thorough soil investigations but for very limited amounts.

Current environmental damage is covered if it is sudden and accidental and neither intended nor predictable. Gradual environmental damage is not covered

GREECE

Insurance coverage for environmental liability arising from the transport of oil is determined by Laws 314/76 and 1638/86. Where insurance is not obligatory the contracting parties will agree to the extent of the coverage.

ICELAND

Standard clauses on liability insurance, issued by Icelandic insurance companies for companies and individuals exclude cover for gradual environmental damage but include cover for sudden and accidental environmental damage. If Icelandic companies wish to purchase cover for gradual environmental damage they must purchase such cover from foreign insurance companies.

IRELAND

Both current and historical environmental damage cover is only generally available for previously undiscovered damage. First party cover would be restricted to clean-up.

Gradual environmental damage cover is available from a limited market. AIG for example provide various products designed to meet what they see as market needs. The products provide a great degree of flexibility which allow underwriters and clients to craft a comprehensive programme. Risks can be written on either a risk transfer or risk funding basis. First party cover is restrictive.
Sudden and accidental environmental damage cover for third party claims is readily available subject to normal underwriting criteria. First party cover is restrictive.

**LUXEMBOURG**

Non-compulsory insurance can be taken out in Luxembourg. However, the practice is to include provision for pollution insurance in general liability contracts. Such specific provisions are discussed on case by case basis. There is no "standard" product for liability that may arise as a result of pollution caused to the environment. However, appropriate insurance products are currently being studied by the insurance companies.

**NORWAY**

Insurance policies concerning pollution caused by onshore operations usually only cover "sudden and accidental pollution" and only in respect of liability to third parties. Furthermore, the insurance does not cover permitted pollution under any circumstances. Some insurance policies cover gradual pollution in return for high premium rates. P & I (Protection & Indemnity) insurance policies concerning oil spills and pollution at sea exclude historic, current and gradual environmental damage.

The standard insurance policies for onshore operations compensate pollution damage up to NOK 5 million. However, the larger companies usually obtain insurance policies which are individually adapted to the company's type of activity and which provide cover in excess of NOK 5 million. The P & I insurance policies provide cover of US $ 500 million per casualty.

The hull insurance policies for vessels at sea do not usually cover pollution damage. However, Norwegian insurance companies have nevertheless been instrumental in preventing such accidents by inspecting the vessel's condition before issuing any hull insurance.

**PORTUGAL**

It is possible to insure against current environmental damage, provided it is a sudden and accidental risk. Gradual environmental damage is not insurable. The level or type of cover will depend on the insurance market and the level of premiums paid.

**SWITZERLAND**

A private owner or operator can insure any risk, but property loss is explicitly not covered.

- historic environmental damage is mostly excluded from private insurance or insured at prohibitive cost;
- current environmental damage, which is not already detectable is not insurable except in cases of special strict liability (for example, nuclear power);
- gradual environmental damage can be insured, if a causal link can be proved; and
- sudden and accidental environmental damage is covered.

Furthermore, insurance is available to cover the cost of preventative measures implemented by the state.

The following examples of third party liability insurances give an example of coverages in Switzerland:

- Mandatory motor-car insurance covers environmental damage up to CHF 3 Million (e.g. in case of an accident involving a truck carrying fuel or explosives).

- Environmental damage resulting from industrial factories can carry an enormous damage potential. The availability of insurance often depends on the availability of reinsurance facilities. There is a tendency to provide improved coverage due to increasing competition between insurance companies.

- Policies for operational/employer liability insurance in Switzerland generally include compensation for damage to individuals or tangible assets caused through adverse effects to air, water and soil.

- Routinely excluded from coverage are adverse impacts to the environment resulting from the normal operating of a factory (Allmählichkeitsschaden), only if the factory operates within the legal limits (emission standards) and according to their latest knowledge of science and engineering.

- Operational/employers liability insurance basically cover general economic damage (damage to unowned environment such as water, air, biotopes etc.) but the proof of a damage is generally difficult or impossible.

- Besides the coverage limits mentioned above there are no legal limits (minimum or maximum) of damages.
30. THE ATTITUDES OF LENDERS, INVESTORS AND FINANCIAL INSTITUTIONS

STUDY 1

USA

In general, the uncertainty surrounding the scope of lender and shareholder liability (see 9) under CERCLA has made such institutions exceptionally wary when considering lending to or investing in potentially contaminated property or to companies with significant liability risks under CERCLA. As a result, extensive environmental reviews and contract negotiations to identify and transfer as much of the environmental risk as possible onto the borrower or seller through broad indemnities, compliance guarantees, etc are necessary. In addition, it has become much more difficult for owners of certain types of property (such as gasoline stations or old industrial properties) to obtain financing for improvements. Largely due to environmental liability concerns, corporations and their lenders have been reluctant to redevelop old industrial "brownfields" sites, which has helped to fuel the development of more pristine, rural "greenfields" sites.

Concerns over the impact of these liability risks on the American economy have prompted EPA's rule on lender liability, emerging state "voluntary clean-up" incentive programs, as well as potential expansion of defences to lender liability during Superfund reauthorisation. Particular attention is being given to expanding the defences for both "innocent" owners of contaminated property, and future buyers of contaminated sites. Such a future buyer defence would be linked to a variety of due diligence obligations and would be designed to increase the redevelopment of old industrial sites (particularly in urban areas). In fact, some developers are now viewing such "brownfield" sites as a good market opportunity for acquiring "dirty sites" in commercial and industrial areas at a large discount to the actual costs which would be incurred in cleaning them up. In general, the US real estate market is slowly becoming more sophisticated at assessing and addressing the risks associated with contaminated land.

DENMARK

Environmental considerations and the uncertainty of future clean-up costs for environmental damage are reflected in the market, influencing investors as well as lenders. One reason is simply the risk of losing money through payment of damages, another is that their public image needs to be maintained.

This position is taken by many pension funds controlled by trade unions mostly for political reasons, but because of the economic power of these pension funds, this political position influences the market to some extent.

Lenders' uncertainty also reflects the fact that over the past four to five years, various decisions of the regulatory authorities have been overruled by the courts creating a lack of certainty for the financial institutions.
Before the Rockwool-case it was assumed by local authorities and the Environmental Protection Agency, that landowners were responsible for clean-up costs. Since this position was overruled by the Supreme Court there have been unpublished proposals for strict liability for landowners -frequently published with anonymous sources in the press. Furthermore, various practice from local authorities left many lenders confused. The major variations in clean-up standards imposed by local authorities, have in particular been a source of confusion for lenders and investors.

FINLAND

Financial institutions in Finland do not seem concerned about the possibility of loss or liability arising from environmental pollution. The possibility of direct liability does exist but it will probably take a court decision to heighten the awareness of financial institutions to the risk.

FRANCE

It is mainly the insurance industry which has concentrated on environmental risks. However, since the requirement for specific sites to be subject to financial guarantees (see 28) both insurers and bankers have gained interest.

Currently, discussions focus on the availability in the French market of such financial guarantees.

GERMANY

Lenders, investors and financial institutions are in practice careless at the moment. They are often quite unaware of the risks involved in projects they finance. They are most aware, however, of environmental risks in relation to the purchase of property, especially those previously put to an industrial use. They are not purchased without tests being carried out beforehand searching for existing underground pollution. Lenders (banks) in particular are pressing for such tests prior to the purchase. Such care is not as yet being taken in the purchase of businesses and companies although the levels of care are increasing.

A potential direct liability of lenders, investors and financial institutions does not so far seem to have been discussed.

ITALY

In carrying out general lending business banks do not appear either aware or concerned with environmental issues. Where financial institutions such as merchant banks are involved in corporate transactions awareness and care in relation to environmental issues is much greater.

THE NETHERLANDS
The financial institutions are reluctant to accept environmental risks and all parts of a company will be scrutinised before financial security is given.

Lender liability has only been an issue in cases in which a bank giving a mortgage finds out if its security consists of a polluted property (see 9). If the bank were to repossess such a property, it could acquire owners liabilities under the Soil Protection Act 1994. Sometimes, the property is sold to the State for 1 guilder in these cases. The State can then clean-up and sell the clean property at its full value, thereby recovering (some of) its costs. This does mean a financial setback for the bank involved, but prevents the bank from acquiring owner's liabilities upon repossession of the polluted property.

**SPAIN**

As the general concern over environmental questions increases, lenders, investors and financial institutions are paying more attention to environmental issues. This is shown in the due diligence activities, drafting of clauses in agreements (loans, acquisitions) and in the general questions asked regularly by these institutions to legal experts.

It is foreseeable that this attitude will strengthen as the enforcement of environmental regulations increases.

Potential liability of lenders, investors and financial institutions will only exist as far as an act (or omission) by them is the cause of certain environmental damage, which can be proved (for example, the case where a lender essentially determines the activity of a borrower who manages toxic and hazardous waste, for instance by being on its board of directors). However, this is a theoretical opinion, which has no support in practice, (see 9).

Audits are not required, but, no doubt, are a proof of the diligence of a person, and thus may be useful to avoid liabilities or, alternatively, to be a basis for claiming liabilities from the other party.

**SWEDEN**

Banks and financial institutions do not seem to be very concerned about the risk that a borrower may have to pay damages under civil liability. There seems so far to have been few cases in Sweden regarding civil environmental liability which have influenced the banks. There is a growing concern about the risk of the financial impact of clean-up costs for a polluting activity under Environment Protection Act 1969, but there is no "lender responsibility". The lender can, if not engaged in the day to day business, only lose the money that has been borrowed. There is no case in which a lender has been held responsible. It should not be any risk for the lender just to appoint a member of the board. However, it must be noted that if the lender puts such conditions on the company's activity that it can be said that the lender more or less runs the company, there is conceivably a risk.

**UK**

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In general (and not unexpectedly) lenders, investors etc. have resisted any increase in the level of environmental liability. See, for example, the Report of the Financial Sector Working Group on the EC Green Paper on Remediing Environmental Damage. In particular, lenders are concerned that, where they may be found to be potentially liable, the application of joint and several liability will mean that a plaintiff can pursue a claim against them, as "deep pockets".

Lenders, investors etc have shown an increasing concern over environmental issues and an increasing willingness to apply pressure on companies to clean-up contaminated land and/or to minimise the risks wherever possible. On the purchase of land, lenders are all too aware of the *caveat emptor* rule and have therefore shown an increasing tendency to seek assurances and environmental investigations regarding potential pollution risks prior to lending money. Furthermore, under the contaminated land provision of the Environmental Protection Act 1990 lenders may be viewed as having knowingly permitted contamination and therefore being potential targets for remediation notices.

Investors are generally more aware of environmental issues, and certain financial institutions offer "green investments". Many of the larger companies show an increasing tendency to produce a separate Environmental Statement along with annual reports and/or incorporate an Environmental Statement within the annual report.

However, in reality the overall impact of these measures on industry is limited. General statements of good intentions relating to the environment have not always translated themselves into the day-to-day practice of companies. This is particularly so where a company operates from a number of sites, each of which has its own environmental hazards. Maintaining standards across every site has often proved difficult.

**STUDY 2**

**AUSTRIA**

Lenders, investors and financial institutions currently appear unconcerned about environmental liabilities of their borrowers.

**BELGIUM**

No liability can be channelled to lenders and investors at present. They nevertheless adopt a cautious attitude, being aware of the developments taking place in surrounding countries.

**GREECE**

There are no provisions for eventual liability of a financial institution that has loaned money to an individual or company that causes pollution. Accordingly lenders and financial institutions are not at all worried about environmental
matters. Environmental issues are not raised in loan agreements and it is very unlikely that environmental audits will be required to be carried out before a loan is granted.

**ICELAND**

Due to the fact that discussions and problems on environmental damage are not at the forefront of issues in Iceland, lenders, investors and financial institutions have paid little attention to problems that may arise in this area. Generally, they do not require the debtor to purchase special insurance cover for environmental damage, nor do they purchase such insurance if they take over the assets of a company.

**IRELAND**

Lenders and those in the financial services sector are generally well briefed in relation to environmental liabilities to which they may be exposing themselves. Many are aware of the experiences of banks and insurance companies in the US who have suffered under the Superfund/CERCLA regime.

Pre-lending environmental audits and lengthy worded environmental warranties are now becoming popular in commercial property transactions, particularly those in relation to large scale development.

It is recognised by most of the banking, investment and financial services sectors that notwithstanding the absence of an integrated approach to assessment of liability for environmental damage, risks do exist and to ignore those risks is to do so at their peril.

**LUXEMBOURG**

Lenders, investors and financial institutions are not liable for environmental damage. Therefore, currently there appears to be no anxiety on the part of bankers/financiers in relation to environmental liabilities, neither in relation to their own liability nor the problem of depreciation of property secured by a loan nor the effect of the environmental problems on the viability of the borrower. Certainly certain loan agreements do not carry provisions to address environmental liabilities nor are environmental audits required to be carried out before a loan is made.

**NORWAY**

Lenders and financial institutions do not appear to be greatly concerned about the risk of loss from pollution damage to assets they invest in or liability.

**PORTUGAL**

Generally, lenders, investors and financial institutions are not liable for the acts performed by the owner or occupier mainly because they have no involvement with the act. Only if the lender, investor or financial institution is found to be the
guilty party or the strict liability of Article 41 of the Basic Law on the Environment applies, will they be liable. Currently, they appear to be little concerned about environmental liabilities.

SWITZERLAND

Lenders (commercial banks) have become very conscious with respect to environmental liability issues. The large Swiss banks have set up internal environmental auditing departments with considerable expertise. The same applies, but to a lesser extent, to private investors and financial institutions (such as pension funds etc.).
APPENDIX I

[Note: In the original report the contents of Appendix I were photocopied. They are, therefore, not reproduced in this electronic version.]

Lists:

i. Swedish Environmental Protection Ordinance SFS 1989:364 and appendix listing operations.

ii. Nomenclature to French Law 76/663 on classified installations.

iii. German Umwelthaftungsgesetz and Annex 1 listing plants covered.

iv. The German Klärschlammverordnung.

v. Excerpt from the “Dutch List” standards for clean-up used in Germany.


vii. Annex to Danish Act on Compensation for Environmental Damage 225/1994 listing major and hazardous plants covered.
i. **Swedish Environmental Protection Ordinance SFS 1989:364 and appendix listing operations**
ii. Nomenclature to French Law 76/663 on classified installations.
iii. German Umwelthaftungsgesetz and Annex 1 listing plants covered.
iv. The German Klärschlammverordnung.
v. Excerpt from the “Dutch List” standards for clean-up used in Germany.
vii. Annex to Danish Act on Compensation for Environmental Damage 225/1994 listing major and hazardous plants covered.
APPENDIX II

Curricula Vitae of the Contributors to the Study.
UK

McKenna & Co is one of the leading United Kingdom and international law firms. Based in the City of London, it has offices in Almaty, Brussels, Budapest, Moscow, Prague, Tashkent, Warsaw, Hong Kong and Beijing, and is associated with established law firms in Germany, Denmark, Sweden, Australia and Japan. Its practice is principally directed to industrial and commercial corporate clients, financial institutions and governments.

Pamela Castle is a Partner and Head of the Environmental Law Group, which is a specialised group within the firm monitoring the development of environmental and health and safety legislation on a global basis with a particular emphasis on the United Kingdom, the European Union and Eastern Europe. She holds an honours degree in chemistry and before qualifying as a solicitor worked for a number of years in both the petrochemical and pharmaceutical industries. She has been responsible for advising numerous United Kingdom and multi-national industrial clients on all aspects of pollution control legislation in both contentious and non-contentious matters, particularly in relation to waste disposal and contaminated land. Other areas of work include property transactions and development, mergers and acquisitions, banking and insurance matters and environmental litigation.

Professional positions held are, amongst others, Council member of the United Kingdom Environmental Law Association, member of the National Radiological Protection Board, a member of the Board of Trustees for the World Wide Fund for Nature (UK) and member of the Environment Committee of the Law Society.

She has written numerous articles and frequently speaks on environmental issues.
USA

**Bradford S Gentry** is a senior research scholar at the Yale Center for Environmental Law and Policy in New Haven, Connecticut. His research concentrates upon how environmental requirements, commercial pressures and market opportunities affect the international operations of private companies. In addition, he has served as an expert for several multilateral and national governmental organizations. These efforts build upon his prior and continuing work on transactions, legislative reviews and other projects in the United States, Canada, the United Kingdom, the Netherlands, Germany, France, Italy, Spain, Belgium, Ireland, Portugal, Hungary, the Czech Republic, Poland, the Former Soviet Union, Turkey, Norway, Sweden, Mexico, Argentina, Colombia, Brazil, Chile, China, Thailand, Indonesia, Australia, India and other countries. He is a frequent author and speaker on environmental issues, including acting as the principal author of *Global Environmental Issues and International Business* (Bureau of National Affairs) and a co-author of *The Law of Hazardous Waste* (Matthew Bender). Between 1990 and 1995 he was a lecturer in Comparative Environmental Law at the University of London. Mr Gentry received his B.A. in Biology from Swarthmore College in 1977, after which he spent a year with the U.S. Congressional Office of Technology Assessment. He graduated, *magna cum laude*, from Harvard Law School in 1981.

**Christopher P Davis** is a partner in the Environmental Law Department at Goodwin, Procter & Hoar in Boston, Massachusetts, where he concentrates his practice in hazardous waste regulation, litigation and settlements under CERCLA, RCRA, Chapter 21E and other federal and state environmental statutes. He has represented potentially responsible parties at numerous federal and state Superfund sites in Massachusetts and throughout the North East. He served as trial counsel in the nation's first governmental and private Superfund trials, *U.S. v. Ottati & Goss* and *Dedham Water Co. v. Cumberland Farms*. Mr Davis is a member of the Council of the Boston Bar Association, served as chairman of the BBA's Hazardous Waste Committee, and is member of the Solid and Hazardous Waste Committee of the ABA's Natural Resources and Environment Section. He is a member of the Massachusetts Waste Site Cleanup Advisory Committee. Mr Davis is a co-author and editor of the four-volume treatise entitled *The Law of Hazardous Waste*, published by Matthew Bender & Co. Mr Davis graduated from Harvard Law School.
where he was an editor of the Harvard Law Review, and from Dartmouth College, where he majored in engineering sciences. Mr Davis has spoken frequently at environmental conferences and seminars, and has published a number of articles on environmental law issues. He was assisted in this study by Dorothy W Bisbee.

Denmark

Peter Pagh-Rasmussen, born March 1953, graduated with a Master of Law from the University of Copenhagen in 1990. He worked for Qvist, Dahl & Partners from 1990 to 1992, where he specialised in environmental and EC market and competition law advising both Danish and international business clients. He has since held numerous academic positions and is currently Senior Lecturer at the University of Copenhagen. Mr Pagh has made a comprehensive study of Environmental Law in a number of countries and is highly experienced in comparative legal analysis. He has written numerous publications and has spoken at seminars in Belgium, Greece, Philippines, Hungary and Germany.

Finland

Professor Peter Wetterstein, born June 1947, studied at the University of Turku (LL.M. 1970, LL.Lic 1974, Dr. Iur. 1980). He is presently Professor of Civil Law with Jurisprudence at Åbo Akadmi University. He worked for the law firm, Papolands Rättstjänst Ab (1972 - 1975) and as an Assistant Judge in 1974. Professor Wetterstein has held numerous academic positions including a Fulbright Research Scholarship to the University of Michigan Law School. He also conducts arbitrations and gives expert opinions and counselling on a regular basis to Government committees, Parliamentary committees and Law firms. Professor Wetterstein is the author of numerous academic publications (including 9 books) in the fields of maritime and transport law, commercial law, the law of torts, insurance law, environmental law and conflict of laws. Professor Wetterstein was assisted in this study by LLM Satu Suikkari and Lic.Pol.Sc. Björn Sandvik.

France

(51998936.01)
Caroline London (born 1954, France) is a dual citizen, French-American. She completed her legal studies at the Faculté de Droit of Nancy University, France, with a D.E.A. in European Community law and the diploma of Nancy European Centre. After an internship at the Legal Department of the European Parliament as a Robert Schumann Fellow, she joined a major Wall Street law firm in their New York office before being transferred to their Paris office where she worked until 1988. She joined Jean-Pierre Brizay's firm in late 1988 and in 1990 they formed a partnership together. Her activities are oriented towards EC law; environmental law has become her main field of expertise. She has published numerous articles on EC and Environmental Law and directed and co-authored a publication on waste. She has also published a book, The Environment and Company Strategy - Ten Key Concepts. She was in charge of a report to the French Environment Minister, Michel Barnier, on the implementation of the EMAS Regulation in France. She is in charge of the Environmental Law programme of INSA's Mastère in Environmental Management in Lyon and is a lecturer in Environmental Law at the Ecole Supérieure de Commerce de Paris in the Mastère de Juriste d'affaires Internationales. She is President of the "Institut pour une Politique Européene de l'Environnement in France and Director of the LAMY Environnement Publications. She is bilingual in French and English. She was assisted in this study by Valérie Thiré.

Germany

Dr Dirk Rodewoldt, born March 1956, studied at the Universities of Göttingen and Geneva and graduated as a doctor of law from the University of Kiel. After qualification, he became an associate of the Anwaltsbüro of Dr Klausing, Hannover, before joining Sigle Loose Schmidt-Diemitz & Partner where he became a partner in 1990. Dr Rodewoldt has specialised in constitutional and administrative law and planning and environmental law. He now advises local authority contractors on the environmental aspects of land development as well as advising on other environmental issues. Currently, Dr Rodewoldt is also Chairman of the Baden-Württemberg branch of the German Lawyers Association Working Group on Administrative Law.

Italy

(51998936.01)
Agostino Migone de Amicis, born May 1951, was admitted to the Bar of Milan in 1977 and of Italy in 1983. A partner of the firm, Pavia e Ansaldo, since 1986, he started to work actively in the environmental field in 1988 and has been a member of the European Environmental Lawyers' network since 1990. He has mainly acted as advisor to companies on the environmental aspects of their activities and relations with public authorities (including, particularly, problems of discharge, emissions and waste treatment/recycling). His other main areas of practice are commercial and corporate law, private international and EU law and pharmaceutical law. He was assisted in preparing the study by Giuseppe A Dell'Acqua, Monica Zocca, Elena Felici and Mirja Cartla d'Asero.

Netherlands

Elisabeth C M Schippers, born 1958, qualified as a lawyer in 1983 and became a partner of the firm Pels Rijcken & Droogleever Fortuijn in 1991. She specialises in civil and administrative aspects of environmental law. She is a member of the Environmental Law Society, the Administrative Law Society and the Society of Environmental Lawyers, and in 1995, she became a Deputy Judge to the Court of Arnhem.

Spain

Carlos de Miguel Perales is a Doctor in Law at the Madrid Universidad Pontificia Comillas - ICADE (1993) and has a Degree in Business Administration at the Madrid Universidad Pontificia Comillas as above - ICADE (1988). He has practised at the firm, Uría and Menéndez since 1988 and is a lecturer of Civil Law at the Madrid Universidad Pontificia Comillas. He has specialised in environmental, commercial and civil law, and in the acquisition and sale of companies. He has published a book "Civil Liability for Environmental Damage" as well as various articles on environmental law in Spanish and foreign specialised magazines. He is a member of the European Environmental Law Association and has cooperated in the preparation of the comments to the "Green Paper on Remediying Environmental Damage" drafted by the EU Commission. He has lectured at various environmental seminars and conferences.
Sweden

Magnus Pfannenstill, born 1942, has been an Attorney at Law since 1982, dealing principally with commercial and environmental matters. He was head of the Environmental Department of a Swedish law firm, Lagerlög and Leman, where he was a partner. Since September 1994 he has been a sole practitioner. Prior to becoming an Attorney, he served as an in-house Counsel for Gothenburg Municipality where he dealt with questions regarding, among other things, liability for environmental damages. He has written articles on civil and environmental law questions in Swedish legal and financial papers. He regularly lectures at both the Law and Economic Faculties of Lund University on environmental law and other subjects. He also works as an arbitrator mainly concerning compulsory purchases from minority shareholders in public companies.
STUDY 2

Civil Liability Study : Contributors

Austria


Belgium

conservation de la nature, les instruments économiques; Chargé d'enseignement aux Facultés universitaires St-Louis, responsable du Diplôme d'étude spécialisé en droit de l'environnement (1995).

Among his publications are:

- *Vos droits en matière d'environnement, d'urbanisme et de nature en Région wallonne*, 2ème éd., Esp.-Envt./I.E.W./CEDRE, 448 p, with S.Van Pamael;

**Greece**

**Annastassia Mallerou**, D.C. Markatos - T.P. Lamnides, Athens


**Iceland**

**Jóhannes Sigurdsson**, born Reykjavik April 2, 1960, admitted to the Bar 1989 and admitted to practice before the Supreme Court of Iceland 1994; legal education, Law Faculty of the University of Iceland (can. jur. 1986), post graduate studies in Corporate

_Ireland_

**Stuart Margetson** is a solicitor and a litigation Partner in Matheson Ormsby Prentice and is Head of the Environment Law Unit. He has been a contributor to Conferences and Seminars run by, among others, the Federation of Irish Chemical Industries, the Irish Quality Association, the Society of Chartered Surveyors in Ireland and the Institute of Engineers on matters of environmental law. He is the Chief Editor and Co-Author of "A Guide for Business and Industry to Environmental Law in Ireland" jointly published by the Environmental Law Unit of Matheson Ormsby Prentice and the Industrial Development Authority of Ireland. He was the co-author of a Report on the Impact of Planning Licensing and Environmental Issues on Industrial Development commissioned by the Industrial Policy Review Group (the "Culliton Committee") set up by the Irish Government. He has participated in a European Study Contract Liability Systems for Remedying Environmental Damage in the European Union commissioned by the European Commission. He is a member of the editorial board of the Irish Planning & Environmental Law Journal. He is a member of the Irish Business and Employers Confederation Environmental Policy Committee, the United Kingdom Environmental Law Association and a council member of the Irish Environmental Law Association.

_Luxembourg_

**Paul Mousel** born Luxembourg 1953, Certificat d'Etudes Juridiques et Economiques, University Center of Luxembourg, 1973; Licence en Droit, Free University of Brussels, 1976; Licence en Droit Economique, Free University of Brussels, 1977. Admitted in Luxembourg, 1978; Member of the Luxembourg Bar Association, 1978; Admitted in

Norway

Wikborg Rein & Co is an international law firm based in Oslo and Bergen with offices in Kobe and London. The firm's business outlook reflects the international tradition within Norway, exemplified by its history as a shipping and trading nation. The firm's partners possess extensive international experience and are actively involved in advising Norwegian clients abroad and clients from outside Norway with business connections in Scandinavia. The firm has some fifty lawyers, of whom around half are partners. As well as environmental issues, the firm is active in company law, shipping, oil and gas, securities, finance, tax and insolvency.

Portugal

Henrique Dos Santos Pereira, born Lisbon, 1955, admitted to the bar, 1979, Portugal. Education: Law School of Portuguese Catholic University, Lisbon. Author of the
Portuguese chapters of the books: "Foreign Property & Your Client"; "Personal Injury Awards in E.C. Countries" (first and second editions); "Civil Procedures in E.C. Countries"; "Sports Law in Europe". Rapporteur on Portuguese law and jurisprudence to the "European Current Law" edited by Sweet & Maxwell. Particular Areas of Specialisation: Commercial Law, Labour Law, Real Estate and Environmental Law. In the area of Environmental Law, Henrique dos Santos Pereira is the author of the Portuguese chapters of the books "European Environmental Markets" and "Environmental Liabilities and Regulation in Europe" and assistant for environmental matters to several Portuguese and foreign companies. Languages: English and French.

**Switzerland**

**Dr. Urs L. Baumgartner, LL.M,** born 12 January, 1948. Studied law at the Universities of Zurich (lic. iur. 1973, Dr. iur. 1978) and Chicago (LL.M. 1979). Admitted to the bar of the canton of Zurich and most other Swiss Cantons. Partner of Lenz & Staehein Zurich/Geneva in charge of civil and public construction law, environmental law, acquisition of real estate by foreigners, immigration law etc. Doctoral Thesis on Standing to Sue in Administrative Proceedings and administrative court procedural rules, especially on environmental and construction law issues. Administrative law research in Chicago and was head of section with the federal office of justice (federal ministry of justice and police). Clerk to a cantonal administrative tribunal of last instance, in the chamber specialising in construction and environmental cases.
Sources of information used by the Contributors to Study 1.
USA

Most of the answers provided in this outline are based on the authors' practical experience in handling CERCLA cases and related environmental matters. The following are useful reference sources on these issues:


The National Contingency Plan ("NCP"), the EPA regulations implementing CERCLA, 40 C.F.R. Part 300.


Chemical Waste Litigation Reporter Outline of RCRA/CERCLA Enforcement Issues and Holdings (published semiannually).


Bureau of National Affairs Environment Reporter-Cases (weekly compilation of federal and some state environmental decisions)

Environmental Law Institute Environmental Law Reporter (monthly publication of environmental law decisions, along with news and analysis).

American Bar Association Section of Natural Resources, Energy and Environmental Law, The Year In Review (annual summary of legislative, administrative and case law developments in various areas of U.S. environmental law).
DENMARK

The following sources will be used: published and unpublished cases from court; information from the Environmental Protection Agency, from the Environmental Appeal Board and from the Ombudsman; preparatory documents associated with the various Acts concerning the environment or environmental liability; and legal journals published in Denmark. The insurance part is based on the published terms of environmental insurance supplemented by special terms regarding insurance of municipalities.

Regarding the issues in this study the Danish sources are almost exhaustive.

FINLAND

The following sources were used:

relevant legislation;

preparatory documents, such as Government Bills or Reports of the Legal Committee of the Parliament;

relevant international treaties which Finland has ratified;

court cases; and

literature.

Acts

Environmental Damage Compensation Act, 1994/737, entered into force on June 1, 1995

- Government Bill for an Act on Compensation of Environmental Damage (HE 165 - 1992 vp)


Tort Act, 412/74;

Adjoining Properties Act, 26/20;

Water Act, 264/61;
Act on Liability for Damage Caused by Rail Traffic, 8/1898;
Traffic Insurance Act, 279/59;
Act on Air Traffic, 139/23;
  - Government Bill for a new Act on Air Traffic (HE 294/1994 vp);
Nuclear Liability Act, 484/72;
Act on Liability for Oil Pollution from Ships, 401/80;
  - Draft Government Bill for the amendment of the Act on Liability for Oil Pollution from Ships;
Legal Proceedings Act, 1952/91;
Draft Government Bill for a Class Action Act, Report of a Working Group (Publication of Law-Drafting Department of the Ministry of Justice 1/1995);

**International treaties**

1969 Paris Convention on Third Party Liability in the Field of Nuclear Energy (FTS 20/1972),
  - 1964 Additional Protocol to the Convention (FTS 20/1072)
  - 1982 Protocol to Amend the Convention (FTS 1/1990);

1963 Convention Supplementary to the Paris Convention (FTS 4/1977)
  - 1982 Protocol to Amend the Convention (FTS 85/1991);

1971 Convention relating to Civil Liability in the Field of Maritime Carriage of Nuclear Material (FTS 62/1991);

1988 Joint Protocol relating to the Application of the Vienna Convention and the Paris Convention (FTS 98/1994);

  - 1992 Protocol to Amend the Convention (not in force);

  - 1976 Amendments
  - 1992 Protocol to Amend the Convention (not in force);
1993 Convention on Civil Liability for Damage Resulting from Activities Dangerous to the Environment
(signed on 21st June 1993, not in force);

1988 Lugano Convention on Jurisdiction and the Enforcement of Judgments in Civil and Commercial Matters (FTS 44/1993);

1958 New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards (FTS 7-8/1962);

Agreement between Finland, Iceland, Norway, Sweden and Denmark on recognition and enforcement of judgments in civil matters (FTS 55-56/1977);

Agreement between Finland and Austria on recognition and enforcement of judgments in civil matters (FTS 17/1988).

FRANCE

The sources that will be used for providing answers to this questionnaire will be statutes and their implementing regulations, civil case law when available and either criminal and/or administrative case law when solutions adopted by criminal or administrative courts are pertinent.

It should be noted that there is hardly any relevant civil case law on the clean-up of contaminated soils. Consequently most of our answers and comments in this respect will be based on administrative case law.

GERMANY

Adams, Michael Zur Aufgabe des Haftungsrechts im Umweltschutz, ZZP 1986, Heft 1, 129

Baumann, Peta Die Haftung für Umweltschäden aus zivilrecht. Sicht JuS 1989, 433

Breuer, Rüdiger Ausbau des Individualschutzes gegen Umweltbelastungen als Aufgabe des öffentlichen Rechts, DVB1. 1986, 849

Rechtprobleme der Altlasten, NvwZ 1987, 751

Deutsch, Erwin Umwelthaftung: Theorie und Grundsätze, JZ 1991, 1097

Diederichsen, Uwe/ Wagner Gerhard Das Umwelthaftungsgesetz zwischen gesetzgeberischer Intention und interpretatorischer Phantasie, VersR 1993, 641

Feldhaus, Gerhard Neuere Entwicklungen des Umweltrechts, DVB1. 1987, 25
Gaentzsch, Günter Ausbau des Individuumschutzes gegen Umweltbelastungen als Aufgabe des bürgerlichen und des öffentlichen Rechts, NVwZ 1986, 601
Herzig, Norbert Die Rückstellungsrelevanz des neuen Umwelthaftungsgesetzes, DB 1991, 53
v. Hippel, Eike Reform des Ausgleichs von Umweltschäden ZRP 1986, '233
Jost, Peter Betriebliche Umweltschutzmaßnahmen als Antwort auf den Entwurf zum neuen Umwelthaftungsgesetz, DB 1990, 2381
Ketteler, Gerd Grundzüge des neuen Umwelthaftungsgesetzes, AnwBl. 1992, 3
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Schwab, Michel 437
von Landmann, Robert/ Rohmer, Gustav Umweltrecht - Kommentar, Bd. II: Sonstiges Umweltrecht, München Stand Oktober 1994
Landsberg, Gerd Das neue Umwelthaftungsgesetz, DB 1990, 2205
Die Ursachenvermutung und die Auskunftsansprüche nach dem neuen Umwelthaftungsgesetz, DB 1991, 479
Landsberg, Gerd/ Lülling, Wilhelm Umwelthaftungsrecht, Köln 1991
Mayer, Kurt Das neue Umwelthaftungsgesetz, MDR 1991, Heft 9, 813
Meder, Albert Die Rechtspflicht zur Wiedergutmachung ökolog. Schäden, DVB1. 1988, 336
Modicus, Dieter Zivilrecht und Umweltschutz, JZ 1986, 778
Nägeli, Bernhard Die Produkt- und Umwelthaftung im Verhältnis von
Herstellen und Zulieferem, DB 1993, 2469

Paschke, Marian  Kommentar zum Umwelthaftungsgesetz, Berlin, Heidelberg, New York 1993

Poschen, Alfons  Das Deckungskonzept für die Versicherung der Haftpflicht wegen Schäden durch Umwelteinwirkung (Umwelthaftpflichtmodell), VersR 1993, 653

Reuter, Alexander  Das neue Gesetz über die Umwelthaftung, BB 1991, 145

Ritter, Ernest-Hasso  Umweltpolitik und Rechtsentwicklung, NVwZ 1987, 929


Salzwedel, Jürgen  Risiko im Umweltrecht - Zuständigkeit Verfahren und Maßstäbe der Bewertung, NVwZ 1987, 276

Schimikowski, Peter  Der praktische Fall im Umwelthaftungsrecht - zu OLG Köln VersR 93, 894, ZfS 1994, 193

Schmidt, Guido  Haftung für Umweltschäden, DÖV 1991, 878

Schmidt-Salzer, Joachim  Umweltpflicht und Umwelthaftpflichtversicherung, VersR 1991, 9

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Umwelthaftpflicht und Umwelthaftpflichtversicherung (VI.): Skizzen zur Deckungsvorsorge - Umwelthaftpflichtversicherung, VersR 1993, 1311

Kommentar zum Umwelthaftungsrecht, Heidelberg 1992

Steffen, Erich  Verschuldenshaftung und Gefährdungshaftung für Umweltschäden, NJW 1990, 1817

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Stüer, Bernhard  Die Entwicklung des öffentlichen Rechts, DVB1. 1986, 1140

Wagner, Gerhard  Die Aufgaben des Haftungsrechts - eine Untersuchung am Beispiel der Umwelthaftungsrechts Reform JZ 1991, 175

Umwelthaftung und Versicherung, VersR, 249

Die Zukunft der Umwelthaftpflichtvers., VersR, 261

Westermann, Harm-Peter  Umwelthaftung im Konzern, ZHR Bd. 155 (1991), 223

ITALY

The main sources will be civil legislation and environmental legislation. Court decisions will be mainly quoted in the rendering of the final answers (writers' opinions may be cited, mostly appearing as comments to case reports).

THE NETHERLANDS

Sources used are: statutes and conventions, case-law, governmental policy documents, leading literature and "hands on" knowledge.

SPAIN

Spanish applicable rules.

Case law: List of Supreme Court Decisions

9.4.1886; 23.6.13; 4.5.15; 20.1.16; 3.2.16; 5.2.16; 23.10.18; 10.11.24; 8.7.30; 14.2.44; 23.12.52; 25.3.54; 2.3.56; 18.6.56; 5.4.60; 23.5.60; 14.5.63; 30.10.63; 19.12.63; 14.3.68; 19.2.71; 26.20.71; 24.3.77; 7.1.78; 14.3.78; 18.4.78; 5.6.78; 28.6.79; 4.6.80; 12.12.80; 12.2.81; 17.3.81; 4.5.82; 14.7.82; 14.7.82; 27.10.82; 17.5.83; 27.10.83; 14.2.84; 18.5.84; 22.5.84; 14.11.84; 14.2.85; 15.2.85; 22.2.85; 15.3.85; 27.5.85; 9.7.85; 23.1.86; 31.1.86; 8.5.86; 15.6.87; 2.10.87; 3.12.87; 10.2.88; 29.4.88; 13.6.88; 23.9.88; 27.10.88; 16.1.89; 14.6.89 (Audiencia Provincial of Segovia); 27.10.90; 29.10.90 (Audiencia Provincial of Valencia); 5.12.90; 16.7.91; 2.10.91 (Audiencia Provincial of Valencia); 10.3.92; 18.3.92; 8.4.92; 28.4.92; 3.9.92; 10.11.92; 10.2.93 (Audiencia Provincial of Barcelona); 15.3.93; 24.5.93; 28.5.93 (Audiencia Provincial of Segovia); 9.11.93; 14.2.94.

(All decisions have been granted by the Supreme Court, except where otherwise expressly indicated.)

The following published studies:

(51998936.01)
1. Alonso Garcia
La participación de individuos en la toma de decisiones relatives al medio ambiente en España. Aspectos constitucionales, Revista Española de Derecho Administrativo, enero-marzo 1989. The question of legal standing is, within environmental civil liability, a difficult one due to the fact that only persons that have suffered real damage are entitled to claim judicial remedy. This, however, might change on the basis of Article 45 of the Spanish Constitution.

1. Alonso Pérez
La protección jurídica frente a inmisiones molestas y nocivas, Actualidad civil, no? 22, 1994. This review is of the different legal aspects of annoying and harmful emissions, such as its consideration under the Catalonian Law 13/1990 (which includes the concept of "non substantial prejudices"), the traditional means of defence against such emissions, the protection granted by the Spanish Constitution, and other means of defence (Articles 590 and 1908 of the Civil Code, inter alia).

1. De Angel Yagüez
La responsabilidad por los desastres ecológicos. Reflexiones de carácter general, Boletín del Ministerio de Justicia, nos. 1.601 y 1.602. Within this study the main characteristics of environmental disasters are explained (anonymous damages, which are mainly unavoidable, reducing the economic impact on each of the many victims and important economic consequences in the whole). The question of legal standing, as well as other requisites of environmental civil liability (such as causality, valuation, cases of joint and several liability and the repairing of the damage) are also considered.

1. Cabanillas Sanches
La responsabilidad civil por daños a personas o cosas a consecuencia de la alteración del medio ambiente y su aseguramiento, Revista Española de Seguros, Nº 55. This study makes a general review of environmental liability, focusing especially on its civil side and on its insurability. Professor Cabanillas emphasizes the idea of the need to create an insurance policy specialised in environmental aspects, as well as having technical experts to determine the risk to be insured.

1. Conde Pumpido
La responsabilidad civil por daños al medio ambiente, Revista de Derecho Ambiental, enero - Junio 1990. One of the instruments to protect the environment, from the civil law point of view, is the "negative action" ("acción negatoria"), by which a certain action (that causes damage to the environment) may be stopped. As to environmental civil liability, Mr Pumpido states that it is based on four main rules: (i) reversal of the burden of proof, (ii) usual or regulatory protection measures are not enough to avoid liability, (iii) consideration of evidence under the principle pro victima, and (iv) increase in the diligence that may be requested.
Moreno Trujillo  La protección jurídico-privada del medio ambiente y la responsabilidad por su deterioro, Barcelona, 1991; This is a review of environmental protection from the private law point of view. According to her opinion, the right to the environment is one aspect of the general duty of respect to a person, which may be exercised as a right to request the stoppage of any environmental disturbance. Also, according to her opinion, the concept of "abuse of right" is very useful to complement the protection of the environment from the private law perspective.

De Miguel Perales  La responsabilidad civil por daños al medio ambiente, Madrid 1994.

SWEDEN


Rulings from the Supreme Court (NJA)

Staffan Westerlund, Miljoskyddslagen, Goteborg 1990 (SW)

Ulf Bjallas and Thomas Rahmm, Mijoskyddslagen, Goteborg 1991 (BR)


UK

Legislation

Electricity Act 1989
Environment Act 1995
Environmental Protection Act 1990
Gas Act 1965
Latent Damage Act 1986
Limitation Act 1980
Local Government (Access to Information) Act 1985
Merchant Shipping (Oil Pollution) Act 1971
Merchant Shipping Act 1988
Merchant Shipping (Salvage and Pollution) Act 1994
Nuclear Installations Act 1965
Occupiers Liability Act 1957
Occupiers Liability Act 1984
Planning (Hazardous Substances) Act 1990
Prevention of Oil Pollution Act 1971
Prevention of Oil Pollution Act 1983
Supreme Court Act 1981
Town and Country Planning Act 1990

Air Quality Standards Regulations 1989 (SI 1989 No. 317)
Environmental Information Regulations 1991 (SI 1992 No. 3240)
Ozone Monitoring and Information Regulations 1994 (SI 1994 No. 440)
Surface Waters (River Ecosystem) (Classification) Regulations 1994 (SI 1994 No. 1057)

Rules of the Supreme Court
County Court Rules

Case Law

A.B. and Others -v- South West Water Services Limited [1993] CA 2 WLR 507
Ballard and Tomlinson -v- Tomlinson (1885) 29 CH.D 115
American Cyanamid -v- Ethicon [1975] (AC 396)
City of London Corporation -v- Bovis Construction Limited [1992] 3 All E.R. 697
Graham -v- Rechem International (June 1995) First Instance
Greenpeace -v- Albright and Wilson (October 1991)
Greenpeace -v- ICI (May 1994)
Griffith and Others -v- South West Water Services Limited (August 1994)
IRC -v- National Federation of Self Employed and Small Businesses Limited [1981] 2 All ER 93
NRA and The Anglers Co-operative Association -v- J E Clarke (April 1994)
Overseas Tankship (UK) Limited -v- Miller Steamship Company Property (The Wagon Mound) (No.2) [1967] 1 A.C. 617
Rickards -v- Lothian [1913] A.C. 263
R -v- HMIP and MAFF Ex parte Greenpeace [1994] 4 AUE.R.329
R -v- Secretary of State for Foreign Affairs Ex parte World Development Movement Limited [1995] 1 All ER 611
R -v- Secretary of State for Foreign and Commonwealth Affairs Ex parte Reece-Mogg [1994] 1 All ER 457
R -v- Pollution Inspectorate Ex parte Greenpeace No. 2 [1994] 2 All ER 349
R -v- Monopolies and Mergers Commission Ex parte Argyll Group Plc [1986] 2 All ER 257
Roussel-Uclef -v- G D Searle & Co [1977] FSR 125
Thomas -v- Moore [1918] 1KB55
Toomey -v- London, Brighton and South Coast Railway Company [1857] 3 C.B. (N.S.) 146
Cornman -v- Eastern Counties Railway Company [1859] 4 H.&N. 781
Welfare -v- London, Brighton and South Coast Railway Company [1869]
Cotton -v- Wood [1860] 8 C.B. (N.S.) 568
Donaheue -v- Stevenson [1932] A.C. 562
Remorquage à Helicé SA -v- Bennetts [1911]
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Fishmongers Company -v- East India Company [1752] Dick 163
R -v- Dovermoss Ltd (Times Law Reports 8.2.95)
Rylands -v- Fletcher (1868) LR 3 HL 330
For cases on "causing and knowingly permitting" see question 2.4.1.

**Publications**

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<tr>
<th>Labour Party</th>
<th>In trust for tomorrow</th>
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<td>United Kingdom Environmental Lawyers Association</td>
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