

European Commission, Brussels



**SERVICES TO SUPPORT MEMBER STATES' ENFORCEMENT ACTIONS AND INSPECTIONS
CONCERNING THE APPLICATION OF EU WASTE LEGISLATION**

07030/2010/576173/SER/C2

GUIDANCE
on permitting and inspection of
waste management operations

Final Version

19 January 2012

BiPRO

Beratungsgesellschaft für integrierte Problemlösungen

In cooperation with



Content

1. Orientation.....	7
1.1. Background and objectives	8
1.2. Structure and use of the guidance	9
2. Legal Requirements	10
2.1. Legal requirements – EU legislation.....	11
2.2. Obligations of the Member States	13
2.2.1. Waste Framework Directive.....	14
2.2.2. Landfill Directive and WAC Decision	19
2.2.3. RoHS Directive.....	22
2.2.4. WEEE Directive	23
2.2.5. RMCEI	24
3. Waste Management Operations	25
3.1. Waste management operations covered by the Directives.....	26
3.2. Information on current existence of waste operations.....	27
3.3. Summary.....	31
4. Permitting and Registration	33
4.1. Permit /Registration system	34
4.2. Stages for permitting	37
4.2.1. Application for a permit	38
4.2.2. Assessment by competent authority	50
4.2.3. Issue of permit.....	58
4.2.4. Follow-up.....	60
4.2.5. Training, cooperation, guidance	63
5. Inspection and Monitoring.....	66
5.1. Inspection and monitoring	67
5.2. The inspection cycle.....	69

5.2.1. Strategic Planning	71
5.2.2. Execution Framework.....	79
5.2.3. Realisation of Inspections	83
5.2.4. Monitoring/Follow-up	86
5.2.5. Training and Networking	90
6. WEEE and RoHS Enforcement.....	92
6.1. RoHS enforcement.....	93
6.1.1. Awareness and information of stakeholders	94
6.1.2. Risk assessment of EEE equipment	96
6.1.3. Controls and testing of equipment	97
6.2. WEEE Enforcement	100
6.2.1. Awareness and information for stakeholders.....	101
6.2.2. WEEE inspections planning, realisation and follow up	104
6.2.3. Support of self-control activities and networks managed by the industry.....	108
7. Annex: Summary table on relevant information	110

List of tables

Table 3.2-1:	Overview of waste treatment facilities according to [EUROSTAT 2010].....	27
Table 3.2-2:	Overview of waste treatment facilities according to [PRTR 2010].....	28
Table 3.2-3:	Overview of waste treatment facilities according to [IPPC 2006].....	28
Table 3.2-4:	Overview of waste facilities in EU 15, 1999 [EEA 2001]	30
Table 4.2-1:	Overview of information on applied authorisation categories	39
Table 4.2-2:	Overview of authorisation categories applied to waste operations	41
Table 4.2-3:	Overview of authorities responsible for issuing permits	43
Table 4.2-4:	Overview of aspects covered in registration/permit documents	45
Table 4.2-5:	Overview of information provided to the public.....	56
Table 4.2-6:	Best Practice Examples for issuing permits/registration.....	59
Table 4.2-7:	Best Practice Examples for monitoring/follow-up	62
Table 4.2-8:	Overview of information on training/guidance and support	63
Table 4.2-9:	Best Practice Examples for training/guidance/networking.....	65
Table 5.2-1:	Best Practice Examples for strategic planning of inspections	78
Table 5.2-2:	Best Practice Examples for execution framework.....	83
Table 5.2-3:	Inspection frequencies applied in EU Member States	85
Table 5.2-4:	Best Practice Examples for realisation of inspections.....	85
Table 5.2-5:	Best Practice Examples for monitoring/follow-up	89
Table 5.2-6:	Overview of information on training/guidance and support	90
Table 5.2-7:	Best Practice Examples for training/guidance/networking.....	91

List of figures

Figure 3.3-1:	Overview of waste management operations	32
Figure 4.2-1:	Steps for permitting procedures [inspired by: Ministry of Environment Hesse_2010] ...	37
Figure 5.2-1:	Environmental Inspection Cycle [inspired by: IMPEL DtRT II 2008]	70
Figure 6.1-1:	RoHS compliance labels as in use in the UK in 2007	98

List of acronyms

CLP Regulation	Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 (OJ L 353, 31.12.2008, p. 1)
EC Directive on Urban Waste Water Treatment	Council Directive 91/271/EEC of 21 May 1991 concerning urban waste-water treatment (OJ L 135, 30.5.1991, p. 40)
IPPC Directive	Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control (Codified version) (OJ L 24, 29.1.2008, p. 8) IPPC Directive will be replaced by the Industrial Emissions Directive (IED)
Landfill Directive	Council Directive 1999/31 of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p. 1)
PCB Directive	Council Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT) (OJ L 243, 24.9.1996, p. 31)
REACH Regulation	Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (OJ L 396, 30.12.2006, p. 1)
Recommendation providing for minimum criteria for environmental inspections (RMCEI)	RECOMMENDATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 4 April 2001 providing for minimum criteria for environmental inspections in the Member States (2001/331/EC)
RoHS Directive	Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (OJ L 37, 13.2.2003, p. 19) to be replaced by Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (OJ L 174, 1.7.2011, p. 88)
Seveso II Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
WAC Decision	Council Decision 2003/33/EC of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 and Annex II to Directive 1999/31/EC (OJ L 11, 16.1.2003, p. 27)
Waste Incineration	Directive 2000/76/EC of the European Parliament and of the Council of 4

Directive	December 2000 on the incineration of waste (OJ L 332, 28.12.2000, p. 91)
Waste Shipment Regulation (WSR)	Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste (OJ L 190, 12.7.2006, p. 1)
WEEE Directive	Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE) (OJ L 37, 13.2.2003, p. 24)
WFD	Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3)
BREF	Best Available Techniques Reference Document
CE	Conformité Européenne
CJEU	Court of Justice of the European Union
EEA	European Environment Agency
EEE	Electrical and Electronic Equipment
EMAS	Community Eco-Management and Audit Scheme
EPA	Environmental Protection Agency
EPR	Extended Producer Responsibilities
E-PRTR	European Pollutant Release and Transfer Register
EWC	European Waste Code
IMPEL	European Union Network for the Implementation and Enforcement of Environmental Law
IT	Information technology
LA	Local Authorities
MS	Member States
NGO	Non-Governmental Organisations
OECD	Organisation for Economic Co-operation and Development
PBBs	polybrominated biphenyls
PBDEs	polybrominated diphenyl ethers
PCB	polychlorinated biphenyls
TAC	Technical Adaptation Committee
WEEE	Waste electrical and electronic equipment
XRF	X-ray fluorescence

1. Orientation

1.1. Background and objectives

Proper implementation, application and enforcement of EU waste legislation are key priorities of EU environmental legislation. It is the obligation of the EU Commission to ensure and oversee the proper application of EU legislation according to the Treaty of the European Union.

Enforcement of legislation is the corner stone to make legislation efficient. It is one of the essential elements in the policy cycle, and is often situated in the implementation and the monitoring phases. The success rate of enforcement helps to assess if legislation is efficient or needs amending.

The European Commission (DG ENV) therefore initiated a study regarding permitting and inspection practices related to waste legislation in EU Member States. The overall aim of the study is to support and improve in particular the implementation of the following EU waste legislation:

- Waste Framework Directive (2008/98/EC)
- Landfill Directive (1999/31/EC) together with WAC Decision (2003/33/EC)
- RoHS Directive (2002/95/EC to be replaced by 2011/65/EU)
- WEEE Directive (2002/96/EC to be replaced in short notice)

The specific study objectives are to prepare guidance documents and a manual for permitting (including classification issues) and inspections (including monitoring) of waste management operations.

This [guidance document](#) addresses in particular the competent authorities involved in permitting and inspections. The document is divided into different sections/chapters, especially distinguishing between the level of permitting (see chapter 4) and the level of inspections (see chapter 5). The guidance document is accompanied by a manual.

The purpose of the [manual](#) is to accompany the guidance document with providing information on a more practical level. The key element of the manual is the provision of 20 best practice examples, elaborated on the basis of existing permitting and inspection practice applied within the EU Member States. Further tools were elaborated to enhance the process of permitting and inspection, i.e. permitting and inspection checklists, Frequently Asked Questions, overview table for legal obligation, letter to advice to announce inspections.

The guidance document provides practical advice to improve permitting and inspection of waste management operations covered by the following EU legislation:

- Waste Framework Directive
- Landfill Directive and WAC Decision
- WEEE and RoHS Directives

The *accompanying manual* is available at:
<http://ec.europa.eu/environment/waste/framework/index.htm>

1.2. Structure and use of the guidance

The guidance document is prepared as an easy to follow guidance, including the following chapters:

Legal requirements (Chapter 2):

The section outlines the **legal requirements (chapter 2.1)** for permitting, classification, inspection and monitoring, based on the relevant EU waste legislation (i.e. WFD, Landfill Directive and WAC Decision, RoHS and WEEE Directives) and describes the **legal obligations of the Member States (chapter 2.2)**.

Waste management operations (Chapter 3):

Chapter 3 includes **information on the waste management operations** covered by the EU Directives and information on available statistics on these operations. The accompanying manual is developed as a summary on categorization of the waste management operations covered within this guidance.

Permitting and registration (Chapter 4):

Within this chapter the guidance on the permitting/registration procedure of waste management operations is provided, introducing a four **steps procedure**. Additional information about the current **implementation practice** within EU Member States is provided, elaborating on the different steps of permitting/registration.

Monitoring and inspection (Chapter 5):

Chapter 5 provides guidance on monitoring and inspection of waste management operations introducing the concept of the **inspection cycle** and elaborating on how to apply the steps within inspections/monitoring procedures for waste management operations. Information on how EU Member States are **implementing inspection procedures** is also provided.

WEEE and RoHS enforcement (Chapter 6):

This chapter provides guidance concentrating on **WEEE and RoHS enforcement** and implementation of WEEE and RoHS requirements in EU Member States.

Annex (Chapter 7):

The annex includes a summary table of relevant information and further studies regarding inspection and permitting.

Structure of the guidance

Chapter 1

Orientation

Chapter 2

Legal requirements

Chapter 3

Waste management operations

Chapter 4

Permitting and registration

Chapter 5

Monitoring and inspection

Chapter 6

WEEE and RoHS enforcement

Chapter 7

Annex

2. Legal Requirements

2.1. Legal requirements – EU legislation

This chapter outlines the legal requirements for permitting, classification inspection and monitoring, based on the relevant EU waste legislation, concerning the following documents:

- Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives (OJ L 312, 22.11.2008, p. 3), referred to as **Waste Framework Directive** or **WFD**;
 - Council Directive 1999/31 of 26 April 1999 on the landfill of waste (OJ L 182, 16.7.1999, p. 1), last amended by Regulation (EC) No 1137/2008 of the European Parliament and of the Council of 22 October 2008 (OJ L 311, 21.11.2008, p. 1), referred to as **Landfill Directive**;
 - The Landfill Directive is complemented by the Council Decision 2003/33/EC of 19 December 2002 establishing criteria and procedures for the acceptance of waste at landfills pursuant to Article 16 of and Annex II to Directive 1999/31/EC (OJ L 11, 16.1.2003, p. 27), referred to as **Waste Acceptance Criteria Decision** or **WAC Decision**;
- Some waste treatment operations are subject to the scope of Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control (OJ L 24, 29.1.2008, p. 8) (the IPPC Directive); note that **IPPC Directive** is to be replaced and repealed by Directive 2010/75/EU of 24 November 2010 on industrial emissions (integrated pollution prevention and control) (OJ L 334, 17.12.2010, p. 17) by 7.1.2014;
- Directive 2002/95/EC of the European Parliament and of the Council of 27 January 2003 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (OJ L 37, 13.2.2003, p. 19), last amended by 2010/571/EU: Commission Decision of 24 September 2010 (OJ L 251, 25.09.2010 P. 28), **RoHS Directive**.

The RoHS Directive has been recast and on 1 July 2011 published as Directive 2011/65/EU. The new RoHS Directive has to be implemented by the Member States by 3 January 2013. The new RoHS includes, amongst others, further applications (medical devices, monitoring and control instruments) and the necessity to apply CE marking to the products. However banned substances and tolerance levels stay the same.

Reference in this guidance is made to Directive 2002/95/EC as the new Directive has to be implemented not before January 2013. Where relevant, reference will be made to the differences between the actual and the new Directive.

Legal requirements for permitting, classification inspection and monitoring are based on the following EU waste legislation:

- Waste Framework Directive
- Landfill Directive and WAC Decision
- WEEE and RoHS Directives

As some treatment operations fall under the IPPC Directive, those requirements are also considered.

For inspections also RMCEI is of importance.

Abbreviations

IPPC: Integrated Pollution Prevention and Control

RoHS: Restriction of Hazardous Substances

RMCEI: Recommendation for Minimum Criteria for Environmental Inspection

WFD: Waste Framework Directive

WAC: Waste Acceptance Criteria

WEEE: Waste Electrical and Electronic Equipment

- Directive 2002/96/EC of the European Parliament and of the Council of 27 January 2003 on waste electrical and electronic equipment (WEEE) (OJ L 37, 13.2.2003, p. 24), last amended by Directive 2008/112/EC of the European Parliament and of the Council of 16 December 2008 (OJ L 345, 23.12.2008, p. 68), referred to as **WEEE Directive**

Note that in December 2008, the Commission submitted proposals to recast the WEEE and RoHS Directives and these proposals are currently subject to co-decision procedures. The recast procedure for the RoHS Directive is in a developed stage and the recasts version is expected to be published soon. The Parliament voted in first reading on 3 February 2011, the Council reached Political Agreement on 14 March 2011. Negotiations for an agreement are expected to take place in the second half of this year 2011. After publication, an implementation time-span of presumably 18 months after publication in the Official Journal may be offered to the Member States. Due to this chronology, the recast version cannot yet be taken as basis for developing the guidance and manual.

- Recommendation of the European Parliament and of the Council of 4 April 2001 providing for minimum criteria for environmental inspections in the Member States (OJ L 118, 27.4.2001), referred to as **RMCEI**, and the following Communication from the Commission of 14 November 2007 (COM 2007/707).

Note: The legal section describes the requirements on the EU level based on the relevant EU legislation. However, the implementation on the national level (national legislation) is the key element when implementing the guidance and the accompanying manual by national permitting/inspections authorities.

Legal requirements for permitting, classification inspection and monitoring are based on the following EU waste legislation:

- Waste Framework Directive
- Landfill Directive and WAC Decision
- WEEE and RoHS Directives

As some treatment operations fall under the IPPC Directive, those requirements are also considered.

For inspections also RMCEI is of importance.

Abbreviations

IPPC: Integrated Pollution Prevention and Control

RoHS: Restriction of Hazardous Substances

RMCEI: Recommendation for Minimum Criteria for Environmental Inspection

WFD: Waste Framework Directive

WAC: Waste Acceptance Criteria

WEEE: Waste Electrical and Electronic Equipment

2.2. Obligations of the Member States

General obligations

Generally, Member States are obliged to take the measures necessary to ensure that the Directive is fully effective, in accordance with the objective which it pursues. This obligation exists even if not mentioned in the Directive itself explicitly, following Article 4(3) of the Treaty on the European Union as amended by the Treaty of Lisbon (Ex-Article 10 EC Treaty).

The exact impacts of the obligations – and possible challenges – arising for the Member States from the different Directives have to be described in the context of the content of the Directives. Thus, for each Directive in the following paragraph the following steps are taken:

- Background and objectives of the Directives are outlined to indicate the framework which defines conditions and benchmarks for permitting and inspections;
- The provisions of the relevant Directives explicitly related to permitting, classification, inspections and monitoring are identified.

Case law application

The Court of Justice of the European Union (CJEU) had several opportunities to clarify the extent of Member States' obligations with respect to the enforcement of European waste legislation:

In the case C-129/96 (Inter-Environnement Wallonie ASBL v Région wallonne), the CJEU stated with further references to prior case-law that

"[...] the obligation of a Member State to take all the measures necessary to achieve the result prescribed by a Directive is a binding obligation imposed by the third paragraph of Article 189 of the Treaty (...). That duty to take all appropriate measures, whether general or particular, is binding on all the authorities of Member States including, for matters within their jurisdiction, the courts"

In the case C-392/99 (Commission of the European Communities v Portuguese Republic) the Court held that if a Directive asked for periodical inspections, it was not enough that there was a possibility that any establishment could be inspected at any time.

In case C-494/01 (Ireland), the Court pointed out that

"Member States have the task of making sure that the permit system set up is actually applied and complied with, in particular by conducting appropriate checks for that purpose and ensuring that operations carried out without a permit are actually brought to an end and punished."

Obligations for permitting of waste management facilities and for inspection and monitoring

- Explicit obligations set in EU waste legislation

and

- General binding obligations to take all measures necessary to achieve the result prescribed by a Directive (EU Treaty)

Abbreviations

MS: Member State

CJEU: The Court of Justice of the European Union

2.2.1. Waste Framework Directive

Scope and background

The WFD represents the cornerstone of the EU waste management legislation, containing the scope of EU waste management legislation, setting strategic aims and basic principles, introducing definitions as well as obligations for MS. The Directive contains explicit obligations for permitting of waste management facilities and for inspection and monitoring which are generally applicable in the entire area of waste management, unless

- excluded from the scope (Article 2(1) and (2) WFD) or
- more precisely regulated by specific legal documents (see particularly Article 2(4) WFD).

Permitting

Although not explicitly defined, the term “permit” is used in Chapter IV “Permits and registrations” of the WFD. The Chapter deals with the issuing of permits, undertakings and operations subject to permit requirements, and substantial conditions for permits as well as with registrations for certain undertakings.

Who is subject to permitting under the WFD?

Article 23(1) WFD defines that

“any establishment or undertaking intending to carry out waste treatment”

is subject to permit obligations; waste treatment being defined in Article 3(14) WFD as “recovery or disposal operations, including preparation prior to recovery or disposal”. Member States may exempt waste recovery establishments or undertakings and waste disposal establishments or undertakings in case of own non-hazardous waste at the place of production (Article 24 WFD). In that case, general rules have to be laid down by that Member State (Article 25(1) and (2) WFD). Information about the application of general rules within the MS is included in chapter 4.2.1.

According to Article 26 WFD, the following are subject to registration by Member States:

- professional collectors,
- transporters,
- dealers/brokers,
- waste management facilities exempted from permit requirements.

WFD contains:

- Scope of EU waste management legislation
- Strategic aims
- Basic principles
- Main definitions
- Main obligations

Permitting – who needs it?

- Establishment or undertaking carrying out waste treatment
- MS may exempt waste recovery operation and disposal of non-hazardous waste at place of production

Registration – who needs it?

- Professional collectors
- Transporters
- Dealers /brokers
- Facilities exempted from permit obligations

Reference

- Art. 23 – 26 WFD

What has to be considered when taking a permit decision?

When preparing a decision on whether a certain treatment operation should be permitted or not the following requirements of the WFD should be considered:

■ Article 4 WFD: The waste hierarchy in the following order:

- prevention;
- preparing for re-use;
- recycling;
- other recovery, e.g. energy recovery; and
- disposal

defines a priority order of what constitutes the best overall environmental option in waste legislation and policy. Prevention of waste, i.e. reducing the quantity, adverse impacts and hazardousness of waste, is the main priority, followed by preparing for re-use and recycling. The hierarchy has to be taken into account when granting permits. Departure from the waste hierarchy is possible for specific waste streams, when justified by life-cycle thinking on the overall impacts of the generation and management of such waste (Article 4(2) WFD).

■ Article 10 WFD: Member States shall take the necessary measures to ensure that waste undergoes recovery operations and - where necessary to facilitate or improve recovery - waste shall be collected separately if technically, environmentally and economically practicable and shall not be mixed with other waste or other material with different properties. It might also be considered in the permit whether recovery installations fulfil the end of waste criteria set at EU or Member State level.

■ Article 11 WFD: EU Member States shall take measures to promote re-use of products and preparing for re-use activities as well as take measures to promote high quality recycling, shall set up separate collections of waste where technically, environmentally and economically practicable and appropriate to meet the necessary quality standards for the relevant recycling sectors.

■ Article 16 WFD: Member States shall take measures to establish an integrated and adequate network of waste disposal and waste recovery installations and shall cooperate where necessary with other MS.

Note: Besides the listed EU requirements, national legal requirements and national/regional policy have to be taken into account when making a decision on the permitting of a certain waste management operation, e.g. certain policy on bio-waste or recycling management may facilitate the rejection of issuing permits for treatment options which are not in line with

Waste Framework Directive

Permit decision:

- Shall consider the waste hierarchy
- Shall facilitate recovery operations and separate collection
- Shall promote preparing for re-use
- Shall support integrated and adequate network of installations

Reference

- Art. 4, 11, 10, 16 WFD

this national policy.

What procedural and substantial requirements are set by the WFD for permits?

The following procedural requirements for permits are set by the WFD:

- Article 23(2) WFD: Permits may be granted for a specific period and may be renewable;

The following substantial requirements are set by the WFD:

- Article 23(1) (a) to (f), lists a number of parameters which are necessary part of each permit in the sense of Article 23 ("minimum content")
 - the types and quantities of waste that may be treated;
 - for each type of operation permitted, the technical and any other requirements relevant to the site concerned;
 - the safety and precautionary measures to be taken;
 - the method to be used for each type of operation;
 - such monitoring and control operations as may be necessary;
 - such closure and after-care provisions as may be necessary.
- Article 23(3) clarifies that the MS authority shall refuse to issue the permit if the intended method of treatment is unacceptable from the point of view of environmental protection, in particular when the method is not in accordance with Article 13;
- Article 23(4) lays down minimum requirements for incineration/co-incineration facilities (*"It shall be a condition of any permit covering incineration or co-incineration with energy recovery that the recovery of energy take place with a high level of energy efficiency"*);
- Article 23(5) WFD: Permits under waste management regime may be combined with any permit produced pursuant to other national or Community legislation in order to form a single permit, provided that the applicable requirements are complied with, where such a format obviates the unnecessary duplication of information and the repetition of work by the operator or the competent authority.
- Article 27 clarifies that the adoption of minimum standards for treatment activities which require a permit is possible at EU level by comitology procedure when there is evidence that a benefit in terms of the protection of human health and the environment would be gained from such minimum standards.

Waste Framework Directive

Procedural Requirements:

- Art. 23(2) and 23(5)

Substantial Requirements:

- Art. 23(3), Art. 23(4) and Art. 27

Reference

- Art. 23 and 27 WFD

Classification issues

Classification issues are understood by the WFD both with respect to the

classification of a treatment operation as disposal or recovery (see recital 19) and with respect to the classification of waste.

Whereas the distinction of an operation is mainly to be made alongside the definitions of “recovery” and “disposal” in Article 3(15) and (19) WFD, the central provision for classification of waste is Article 7 which refers to the European Waste List laid down in Decision 2000/532/EC.

Inspection and monitoring

Although not explicitly defined in any of the Directives, the term “inspection” / and “monitoring” with regard to obligations for authorities is used in Article 34(1) to (3) WFD, setting requirements for inspections.

Following this provision:

- establishments or undertakings which carry out waste treatment operations (note again the definition of Article 3(14) WFD)
- establishments or undertakings which collect or transport waste on a professional basis,
- brokers and dealers, and
- establishments or undertakings which produce hazardous waste

shall be subject to appropriate periodic inspections by the competent authorities.

Article 34(2) WFD stipulates that inspections concerning collection and transport operations shall cover the origin, nature, quantity and destination of the waste collected and transported. According to Article 34(3) WFD, Member States may take account of registrations obtained during the Community Eco-Management and Audit Scheme (EMAS), in particular regarding the frequency and intensity of inspections.

Overlaps with other Directives

It is important to note that a number of waste management facilities may be subject to additional permit and inspection requirements pursuant to:

- Specific waste legislation (e.g. Landfill Directive, see below; a specific case are controls under the Waste Shipment Regulation (WSR) following the MS obligations as of Article 50 WSR which is identical to the obligation of the WFD as concerns controls of waste treatment facilities);
- Other environmental legislation such as IPPC Directive, which specifies permitting and inspection/monitoring obligations and that e.g. emission and air control laws.

On the one hand, experiences made in those other fields can provide useful input when elaborating best practice examples, on the other hand,

*Waste Framework
Directive*

questions of co-operation of concerned authorities are raised.

2.2.2. Landfill Directive and WAC Decision

Scope and background

The Landfill Directive is intended to prevent or reduce the adverse effects of the landfill of waste on the environment. It applies to all landfills, defined as waste disposal sites for the deposit of waste onto or into land. The Directive defines the different categories of waste (municipal waste, hazardous waste, non-hazardous waste and inert waste); accordingly, landfills are divided into three classes:

- landfills for hazardous waste;
- landfills for non-hazardous waste;
- landfills for inert waste.

A standard waste acceptance procedure is laid down so as to minimize risks arising from the operation of landfills:

- a number of wastes must not be accepted at landfills;
- waste must be treated before being landfilled;
- hazardous waste within the meaning of the Landfill Directive must be assigned to a hazardous waste landfill;
- landfills for non-hazardous waste must be used for municipal waste and for non-hazardous waste;
- landfill sites for inert waste must be used only for inert waste.

Annex II to the Landfill Directive and the WAC Decision provide for detailed further acceptance criteria, including limit values for a number of parameters.

Permitting

Landfills are defined in the Landfill Directive as

“a waste disposal site for the deposit of the waste onto or into land (i.e. underground), including:

- internal waste disposal sites (i.e. landfill where a producer of waste is carrying out its own waste disposal at the place of production), and
- a permanent site (i.e. more than one year) which is used for temporary storage of waste, but excluding:
 - facilities where waste is unloaded in order to permit its preparation for further transport for recovery, treatment or disposal elsewhere, and
 - storage of waste prior to recovery or treatment for a period less

Landfill Directive and WAC Decision

The Landfill Directive contains:

- *Division into three classes of landfills*
- *Standard waste acceptance procedures*
- *Definition of landfills*

Reference

- *Landfill Directive*

than three years as a general rule, or

- storage of waste prior to disposal for a period less than one year.”

Installations fulfilling this definition usually are subject to permit obligations under the WFD, and, since landfilling is a disposal operation, might only be exempted from permit requirements in case of own non-hazardous waste at the place of production (Article 24 WFD). The Landfill Directive provides for detailed procedural and substantial requirements as regards

- application for a permit (Article 7 Landfill Directive);
- conditions of the permit (Article 8 Landfill Directive);
- content of the permit (Article 9 Landfill Directive).

If meeting the requirements of Annex I, point 5.4 of IPPC Directive (“receiving more than 10 tonnes per day or with a total capacity exceeding 25,000 tonnes, excluding landfills of inert waste”), landfills are subject to permits under the IPPC Directive. Article 7 Landfill Directive contains requirements for the application to a permit. The conditions of the permit are stipulated in Article 8 Landfill Directive:

- a. the competent authority does not issue a landfill permit unless it is satisfied that:
 - i. the landfill project complies with all the relevant requirements of this Directive, including the Annexes, where applicable;
 - ii. the management of the landfill site will be in the hands of a natural person who is technically competent to manage the site; professional and technical development and training of landfill operators and staff are provided;
 - iii. the landfill shall be operated in such a manner that the necessary measures are taken to prevent accidents and limit their consequences;
 - iv. adequate provisions, by way of a financial security or any other equivalent, on the basis of modalities to be decided by Member States, has been or will be made by the applicant prior to the commencement of disposal operations to ensure that the obligations (including after-care provisions) arising under the permit issued under the provisions of this Directive are discharged and that the closure procedures required by the Landfill Directive are followed. This security or its equivalent shall be kept as long as required by maintenance and after-care operation of the site. Member States may declare, at their own option, that this point does not apply to landfills for inert waste (note that MS may decide according to Article 3(4) Landfill Directive that this

Landfill Directive and WAC Decision

Permit for:

- All landfills
- IPPC permit, if > 10 t/day or 25,000 t capacity (not for inert landfill)

Requirement set for:

- Permit application
- Permit conditions
- Permit content

Reference

- Art. 7 – 9 Landfill Directive

requirement is not to be applied for landfills for non-hazardous or inert waste not exceeding a defined size);

- b. the landfill project is in line with the relevant waste management plan or other plans referred to in WFD.

Article 9 of Landfill Directive sets out additional requirements for the content of the permit:

- (a) the class of the landfill;
- (b) the list of defined types and the total quantity of waste which are authorised to be deposited in the landfill;
- (c) requirements for the landfill preparations, landfilling operations and monitoring and control procedures, including contingency plans, as well as provisional requirements for the closure and after-care operations;
- (d) the obligation on the applicant to report at least annually to the competent authority on the types and quantities of waste disposed of and on the results of the monitoring programme as required of the Landfill Directive.

Classification issues

Within the Landfill Directive, “classifying” is understood with respect to the classes of landfill as introduced by Article 4; further, the Annex emphasizes the importance of waste classification (which goes beyond the requirements of the WFD and the European Waste List since the Landfill Directive recognises e.g. the category of “inert waste” which is not defined by the WFD).

Inspection and monitoring

The term “inspection” / “inspections” and “monitoring” with regard to obligations for authorities is used in the Landfill Directive, which obliges authorities for on-site inspections namely before start of the operation (Article 8 Landfill Directive) and finally before closure (Article 13(b) Landfill Directive).

With regard to the operator monitoring provisions are in particular laid down in Article 11 Landfill Directive describing the waste acceptance procedures at a landfill including the checking of documents, visual inspection of waste, keeping a register etc. in order to be in line with the permitted waste types, quantities and limit values.

Article 12 including the provisions of the control and monitoring procedures in the operational phase as specified in Annex III and notify the competent authority of any significant adverse environmental effects. In any case the operator has to report to the competent authority at least once a year (or more frequent as determined in the permit) the outcome of the monitoring programme and the results of laboratory analysis.

Landfill Directive and WAC

Content of permit:

- Landfill class
- Types and quantity of waste to be accepted
- Requirements for preparation, operation, monitoring and control
- Obligation on annually report

Inspection and monitoring:

On-site inspections of landfill required from start of operation to after closure

Self monitoring and self control required by operator

Reference

- Art. 8 – 13
Landfill Directive

2.2.3. RoHS Directive

Scope and background

The RoHS Directive aims to approximate the laws of the Member States as regards the prohibition of the use of certain hazardous substances in domestically produced or imported electrical and electronic equipment (EEE), approximating national legislation across Member States to ensure the free movement of goods. By this, the Directive aims at contributing to the protection of human health and the environmentally sound recovery and disposal of waste electrical and electronic equipment (WEEE). The hazardous substances which presence in products and in production processes shall be minimised are (currently) lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs), while tolerance levels and certain uses specified in the Annex to the RoHS Directive are allowed (annex II for tolerance levels, III and IV for exempted applications in the new Directive).

Permitting and classification issues

Permitting and classification issues are not subject of the RoHS Directive.

Inspection and monitoring / overlaps with other Directives

The RoHS Directive contains in its Article 8 the provision explicitly and specifically relating to Member States' obligations for determining penalties applicable to breaches of the national provisions adopted pursuant to this Directive. The penalties thus provided for shall be effective, proportionate and dissuasive. No specific obligations relate to inspection and monitoring. However, in this context, it should be emphasized that in contrast to the other documents investigated in the framework of this project, the obligations as of RoHS Directive do in the first place not concern waste treatment facilities, waste holders or waste producers, but the manufacturers of EEE. Inspections and monitoring of RoHS Directive may be executed with respect to WEEE, but might also occur related either to production facilities or with respect to EEE before it becomes waste. By this, the enforcement of the RoHS Directive is closely related to the enforcement of the REACH Regulation or specific substance-related regulation, such as the POPs Regulation. In the new RoHS Directive, Article 16 introduces the concept of presumption of conformity for EEE being tested on introduction and bearing the CE mark ("Conformité Européenne"). Article 18 requests Member States to carry out market surveillance in accordance with the Regulation (EC) No 765/2008 on setting out the requirements for accreditation and market surveillance relating to the marketing of products. Article 23 imposes (as in the actual Article 8) Member States to lay down the rules to penalise infringements that have to be effective, proportionate and dissuasive.

RoHS Directive

Permit:

Not subject, as Directive addresses products (not processes)

Inspection and monitoring:

- *Not explicitly specified*
- *Enforcement closely related to enforcement of REACH and POPs Regulation*

Abbreviations:

EEE: Electrical and Electronic Equipment

POP: Persistent Organic Pollutant

REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals

2.2.4. WEEE Directive

Scope and background

The WEEE Directive aims to prevent WEEE, and where this is not possible to recycle and recover it to reduce its disposal and to reduce the negative environmental impacts of WEEE through proper treatment of collected WEEE. It requires Member States to ensure that collection and treatment schemes are set up and set minimum collection targets to increase separate collection and also makes producers responsible for the financing of the WEEE management. The Directive thus aims at enhancing efficient collection, treatment and “design for recycling”.

Permitting

Additional WEEE requirements are set for those waste treatment establishments for which permits are necessary under WFD and which are treating WEEE, namely Article 6(4) WEEE Directive, which requires that all permits have to consider the necessary elements to comply with WEEE requirements (e.g. the removal of all fluids and selective treatment in accordance with Annex II, technical requirements set out in Annex III, and ensure recovery according to Article 7).

Inspection and monitoring

In Article 16 of the WEEE Directive, it is generally emphasised that Member States are obliged to undertake inspections and monitoring in the field covered by the scope of the Directive, a provision which is supported by Recital 23 of the Directive, referring to Recommendation 2001/331/EC of the European Parliament and of the Council providing for minimum criteria for environmental inspections in the Member States (see Chapter 4.5).

Further, Article 6(2) WEEE Directive provides that for derogations from permit requirements under Article 24(b) WFD, specified inspections in the respective recovery facilities are a precondition. In this regard the competent authority shall carry out an inspection before the registration verifying:

- the type and quantities of waste to be treated;
- the general technical requirements to be complied with;
- the safety precautions to be taken.

The inspection shall be carried out at least once a year and the results shall be communicated by the Member States to the Commission.

WEEE Directive

Permit:

Including necessary elements to comply with WEEE Directive

Inspection and monitoring:

- *On-site inspections of WEEE treatment facilities*
- *Considering minimum standards on inspections*
- *Inspections for facilities exempted for registration at least once a year*

Reference

- *Art. 6 and 16 WEEE Directive*

Further reading

- *The manual includes a synoptic table in Chapter 4, providing an overview of the legal requirements*

2.2.5. RMCEI

Scope and background

The Recommendation 2001/331/EC providing for minimum criteria for environmental inspections (RMCEI) was established to strengthen compliance with, and to contribute to a more consistent implementation and enforcement of Community environmental law in all MS. The RMCEI was adopted by the European Parliament and the Council in 2001.

The RMCEI establishes general guidelines for environmental inspections of installations and other enterprises and facilities whose air emissions, water discharge or waste disposal or recovery activities are subject to authorisation, permit or licensing requirements under Community law ('controlled installations'), without prejudice to specific inspection provisions in existing Community legislation. The minimum criteria concern:

- the establishment of plans for environmental inspections,
- the performance of inspections,
- the reporting on inspections, and
- the investigation serious accidents, incidents and occurrences of non-compliance.

Obligations of Member States

Environmental inspection tasks should be carried out in the MS, according to minimum criteria to be applied in organising, carrying out, following up and publicising of the results of such tasks, thereby strengthening compliance with, and contributing to a more consistent implementation and enforcement of Community environmental law in all MS.

Implementation in the Member States

MS have to report to the Council and the European Commission on the implementation of the RMCEI, on the details of environmental inspection mechanisms and on their experience. Based on those MS reports and further contributions from i.e. IMPEL and EEA the Commission presented an implementation report to the European Parliament and the Council (COM 2007/707), summarising the information available and including information on operation and effectiveness of RMCEI. The report concluded that some MS have already achieved a high level of implementation of the RMCEI and that, although very few countries appear to fully apply the Recommendation, it seems to have had a positive impact on the inspection system in most countries inducing reform in their inspection systems as a response to the Recommendation.

RMCEI

Recommendation 2001/331/EC providing for minimum criteria for environmental inspections (RMCEI) establishes general guidelines on how to plan, perform, report and investigate on environmental inspections of installations, enterprises and facilities.

Reference

- [2001/331/EC]
"Recommendation of the European Parliament and of the Council of 4 April 2001 providing for minimum criteria for environmental inspections in the Member States"

- Communication from the Commission of 14/11/2007 on the review of Recommendation 2001/331/EC [COM (2007) 707 final]
Annex to [COM 2007/707]
"Report on the implementation of Recommendation 2001/331/EC providing for minimum criteria for environmental inspections"

3. Waste Management Operations

3.1. Waste management operations covered by the Directives

The guidance documents on permitting and inspections and the accompanying manual should in particular focus on the most relevant waste management operations. Therefore, this chapter aims at identifying the most relevant facilities and sites in the light of their relevance related to the Directives in focus of the study (WFD, Landfill, RoHS and WEEE Directives), and if possible, in relation to their current existence in the EU.

The following paragraphs document the waste operations covered by the Directives and analyses available data regarding the existence of waste facilities and sites. The chapter closes with an overview on the waste management operations addressed by this guidance.

Article 3 WFD defines the principle terms of waste management. According to this definition waste management means the “collection, transport, recovery and disposal of waste”. Further, Article 4 WFD introduces the waste hierarchy promoting waste prevention, followed by preparing for re-use, recycling, other recovery (e.g. energy recovery) and disposal. Thus, the complete set of waste management operations is covered by the WFD, including:

- gathering of waste or separated waste streams, including preliminary sorting and storage (collection, separate collection)
- checking, cleaning and repairing (preparing for re-use)
- preparation prior to recovery or disposal operation
- reprocessing of waste into products/materials or substances (recycling)
- incineration with energy recovery, backfilling and other recovery not defined as recycling (other recovery)
- incineration and landfilling (disposal).

Annex I and II to the WFD set out a non-exhaustive list of recovery and disposal operations (R and D codes).

The Landfill Directive and the WAC Decision set the conditions for landfills, defined as “waste disposal sites for the deposit of the waste onto or into land (i.e. underground)” inducing internal sites and permanent sites used for temporary storage). The Landfill Directive divides landfills for inert, non-hazardous and hazardous waste.

The RoHS and WEEE Directives address electrical and electronic equipment containing hazardous substances; the RoHS Directive on site of production and in the distribution chain (use of hazardous substances in such equipment, and putting it on the market) and the WEEE Directive on site of waste of such equipment including all waste operations like collection,

Waste management operations covered by RoHS and WEEE

Electrical and Electronic Equipment containing hazardous substances:

- on site of production and in the distribution chain (RoHS)
- site of waste including all waste operations (WEEE)

References

EUROSTAT 2010:
Waste treatment facilities at country level, 2004, 2006
available at:
http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/data/waste_management/waste_treatment

PRTR 2010: The Pollutant and Transfer Register
available at:
<http://prtr.ec.europa.eu/>

IPPC 2006: Reference Document on Best Available Techniques for the Waste Treatments Industries. August 2006,
available at:
ftp://ftp.jrc.es/pub/eippcb/doc/wt_bref_0806.pdf

EEA 2001: Waste management facilities. Technical report 65, prepared by the European Topic Centre of Waste, available at:
<http://scp.eionet.europa.eu/publications/tech65>

preparing for re-use and treatment of WEEE including facilities for depollution, disassembly, shredding, recovery and preparation for disposal.

In summary, the manual and guidance address in principle the waste management facilities and sites along the waste chain starting with collection and ending with a certain treatment operation, including in particular WEEE collection and treatment facilities and landfills.

3.2. Information on current existence of waste operations

The following information sources provide data on the existence of waste treatment facilities within the EU:

- EUROSTAT provides data on the number of waste treatment facilities for EU-27 Member States using five categories; data is available for 2004 and 2006 [EUROSTAT 2010];
- E-PRTR data on reporting of waste treatment facilities, using however a different categorisation not adding further information to the data mentioned [PRTR 2010];
- the BREF document for waste treatments industries [IPPC 2006] includes data for certain waste treatment options;
- an EEA report on waste management facilities contains information about facilities for the treatment of hazardous and non-hazardous wastes, including their type, location and capacity [EEA 2001].

EUROSTAT data on waste treatment facilities

According to EUROSTAT, over 70,000 waste treatment facilities existed in EU-27 (year 2006). Most of these installations were recycling facilities (more than 50,000) followed by landfill and incineration (both about 10,000). Only few facilities for land treatment and release into water existed.

All these and newer installations need to have a permit or registration and need to use measures or apply techniques to assure that their operations do not harm human health and the environment.

Table 3.2-1: Overview of waste treatment facilities according to [EUROSTAT 2010]

Incineration with energy recovery (R1)	Other incineration (D10)	Recycling (R2-11)	Landfilling (D1, D3-5, D12)	Land treatment release into water (D2, D6, D7)	Total
5,170	3,897	50,682	10,286	154	70,189

Note: latest data from 2006

Data from EUROSTAT, however, only gives a rough indication of relevance of the different waste treatment facilities as the level of differentiation is not very detailed.

EUROSTAT data

Providing information on number of:

- Incinerators
- Recycling facilities
- Landfill
- Land treatment

Further reading

EUROSTAT 2010:
Waste treatment facilities at country level, 2004, 2006

http://epp.eurostat.ec.europa.eu/portal/page/portal/waste/data/wastemanagement/waste_treatment

E-PRTR categories of waste treatment facilities

E-PRTR data is divided using different categorisation following the categories of IPPC / PRTR. According to this data, 4,286 facilities are registered as facilities for waste and waste water management. Table 3.2-2 includes the information retrieved from PRTR.

Table 3.2-2: Overview of waste treatment facilities according to [PRTR 2010]

Disposal or recovery of hazardous waste	Incineration of non-hazardous waste included in Directive 2000/76/EC	Disposal non-hazardous waste	Landfilling (excluding those closed before 16.07.2011)	Disposal or recycling of animal carcasses and animal waste	Total
1,824	368	578	1,384	132	4,286

Note: latest data from 2008

Again, data from PRTR also indicates only roughly the relevance of the different waste treatment facilities as the level of differentiation is not very detailed.

BREF document on waste treatments industries

The BREF document on waste treatment industries provides data for waste treatment installations further dividing recovery and disposal operation [IPPC 2006]. According to this data, 14,000 installations exist within the EU, of which physico-chemical installations, installations for waste transfer and biological treatment installations represent the majority of the waste treatment installations.

Table 3.2-3: Overview of waste treatment facilities according to [IPPC 2006]

Operations (more than 100 facilities)	Number of installations	Operations (less than 50 facilities)	Number of installations
Physico-chemical treatments	9,907	Re-refining of waste oil	35
Waste transfer	2,905	Activated carbon treatment	20
Biological treatments	615	Recovery of pollution abatement	20
Preparation and use of waste oil as fuel	274	Waste catalyst treatment	20
Waste fuel preparation	266	Waste acid/base treatment	13
Inorganic waste treatment (excluding metals)	126		
Waste solvent treatment	106		
Total			14,307

In addition, the BREF document highlights that more than 500 techniques are applied within the sector of waste treatment, prevention and management, of which about 300 are considered as common techniques, 130 are allocated to physico-chemical treatment and about 40 techniques each to biological treatment, to recovery of materials and to preparation of waste fuels [IPPC 2006].

E-PRTR data

Providing information on number of:

- Disposal/ Recovery of hazardous waste installations
- Incinerators of non-hazardous waste
- Disposal of non-hazardous waste
- Landfills
- Disposal / Recycling of animal carcasses

BREF documents

Providing information on number of:

- Physico-chemical
- Waste transfer
- Biological
- Waste oil
- Inorganic waste
- Waste solvent treatment

Further reading

The European Pollutant Release and Transfer Register

<http://prtr.ec.europa.eu/>

Reference Document on BAT for Waste Treatments Industries. August 2006

ftp://ftp.jrc.es/pub/eip_pcb/doc/wt_bref_0806.pdf

EEA report on waste management facilities

The report on waste management facilities by EEA [EEA 2001] also includes data on the existence of waste treatment facilities providing a further level of categorisation by adopting the R and D codes as defined in the WFD (see table 5-4). Latest available data is from 1999 covering EU-15 Member States.

According to the EEA data, the most relevant facilities (more than 100 facilities, marked in green) are:

- storage and repacking;
- physico-chemical and biological treatment;
- facilities for the recycling and reclamation of metal and metal compounds, of organic substances (e.g. composting), for oil-refining and other re-use of oil;
- landfilling and incineration (with/without energy recovery).

EEA report

Providing
information on
number of:

- Storage and repacking
- Physico-chemical treatment
- Recycling / Reclamation of metal and compounds, organic substances, oil-refining
- Landfilling / Incineration

Further reading

Waste management facilities. Technical report 65, prepared by the European Topic Centre of Waste

<http://scp.eionet.europa.eu/publications/tech65>

Table 3.2-4: Overview of waste facilities in EU 15, 1999 [EEA 2001]

Recovery operations	Number of installations	Disposal operations	Number of installations
R 1 Use principally as a fuel or other means to generate energy (*)	129	D 1 Deposit into or on to land (e.g. landfill, etc.)	186
R 2 Solvent reclamation/regeneration	94	D 2 Land treatment (e.g. biodegradation of liquid or sludgy discards in soils, etc.)	18
R 3 Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes) (**)	107	D 4 Surface impoundment (e.g. placement of liquid or sludgy discards into pits, ponds or lagoons, etc.)	5
R 4 Recycling/reclamation of metals and metal compounds	201	D 5 Specially engineered landfill (e.g. placement into lined discrete cells which are capped and isolated from one another and the environment, etc.)	91
R 5 Recycling/reclamation of other inorganic materials	91	D 8 Biological treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12	170
R 6 Regeneration of acids or bases	9	D 9 Physico-chemical treatment not specified elsewhere in this Annex which results in final compounds or mixtures which are discarded by means of any of the operations numbered D 1 to D 12 (e.g. evaporation, drying, calcination, etc.)	610
R 7 Recovery of components used for pollution abatement	6	D 10 Incineration on land	163
R 8 Recovery of components from catalysts	18	D 12 Permanent storage (e.g. emplacement of containers in a mine, etc.)	4
R 9 Oil re-refining or other re-uses of oil	105	D 13 Blending or mixing prior to submission to any of the operations numbered D 1 to D 12	44
R 10 Land treatment resulting in benefit to agriculture or ecological improvement	6	D 14 Repackaging prior to submission to any of the operations numbered D 1 to D 13	52
R 11 Use of waste obtained from any of the operations numbered R 1 to R 10	9	D 15 Storage pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection,	180
R 12 Exchange of waste for submission to any of the operations numbered R 1 to R 11	53		
R 13 Storage of waste pending any of the operations numbered R 1 to R 12 (excluding temporary storage, pending collection, on the site where the waste is produced)	119	More than 100 facilities More than 50, less than 100 facilities Less than 50 facilities	

3.3. Summary

The data available focuses more or less on waste treatment facilities providing numbers for the existence of such facilities applying different categories using a more or less rough categorisation of the facilities. According to this data, the most important facilities include:

- facilities for storage and transfer of waste;
- recovery/recycling facilities (in particular physico-chemical, biological treatment, recycling and reclamation of metals and organic substances, oil re-refining);
- incinerators;
- landfills.

As the BREF document indicates [IPPC 2006], there are many hundreds techniques applied within the waste treatment sector. It should not be the purpose of the manual/guidance for permitting and inspections to reflect the technical specifications of all those techniques. It is, however, possible to include such technical specifications whenever suitable as additional information (i.e. checklists for certain techniques). The guidance/manual should also include operations like collection, preparation for re-use and pre-treatment for which data on existence is not available, but operations are certainly of relevance.

The manual and guidance should therefore follow in principle the waste chain applying the general categorisation given in the WFD starting with the waste producer and ending with a certain treatment operation, including in particular WEEE collection and treatment facilities and landfills. As regards collection, especially the waste streams addressed within the WFD with specific targets should be included (glass, metal, paper, plastic, C&D waste, bio-waste). The following figure includes a proposal. Although not included in the figure, specifically for RoHS the pre-waste phases are important: the production of the material and its distribution phase (the putting on the market).

Summary

Most important facilities:

- storage and transfer of waste
- recovery/recycling
- incinerators
- landfills

Many hundreds techniques

Guidance/manual is in general following the waste chain

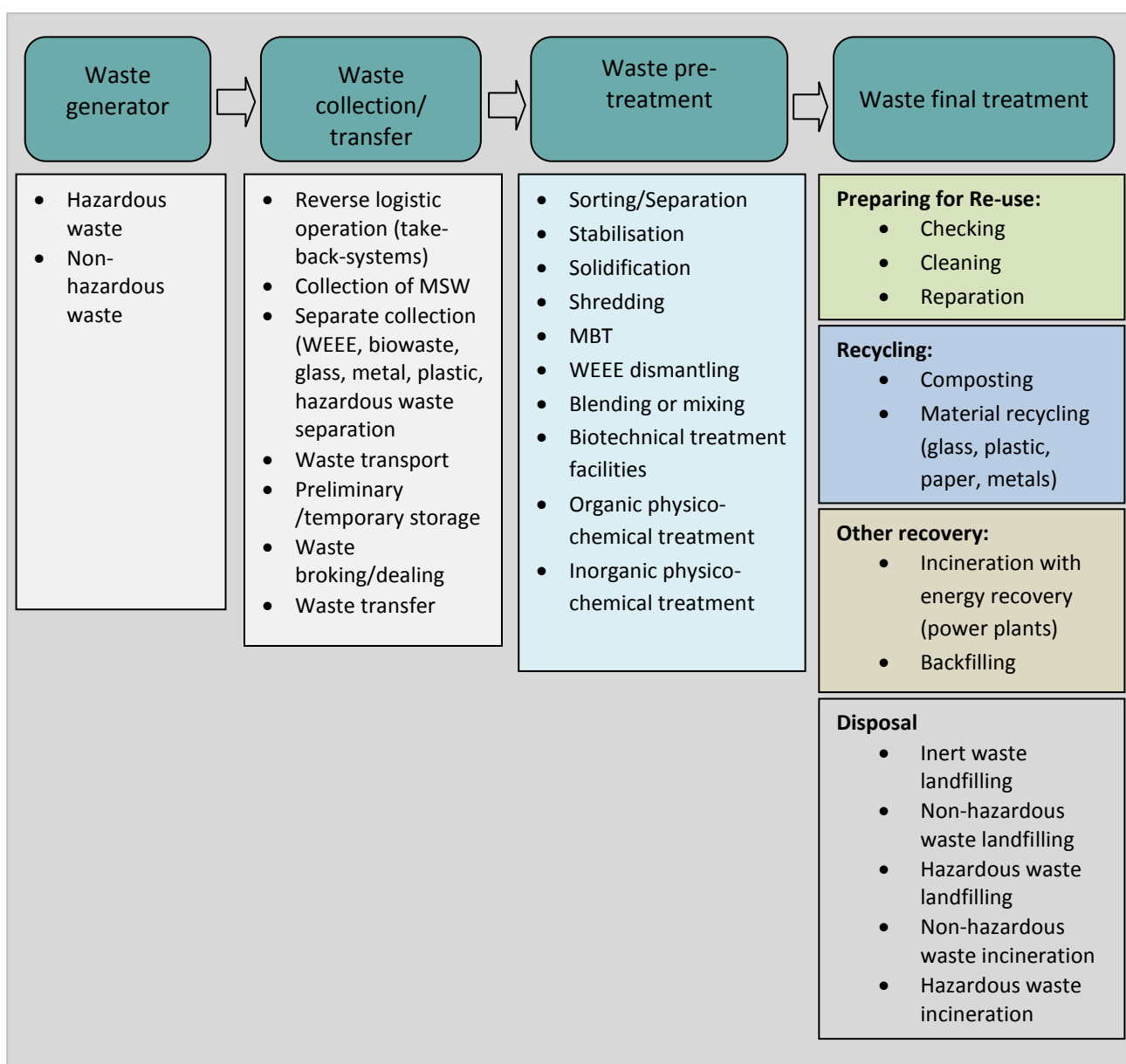


Figure 3.3-1: Overview of waste management operations

4. Permitting and Registration

4.1. Permit /Registration system

Waste treatment operations need to be authorised by either a permit or a registration and a good authorisation practice is crucial for a smooth implementation of EU waste legislation, as within the permit procedures major conditions for the operation of the waste management facilities are set.

EU legislation (WFD) distinguishes between:

- **Permits and**
- **Registrations**

Further differentiation on Member State level can be made to reflect the characteristics of the different waste management operations, i.e. other type of waste license according to national law.

Who needs to obtain a permit?

Permits are required for (Article 23(1) WFD):

“...any establishment or undertaking intending to carry out waste treatment”

Waste treatment is defined as “recovery or disposal operations, including preparation prior to recovery or disposal” (Article 3(14) WFD).

Member States however may exempt (Article 24 WFD):

- waste recovery establishments or undertakings and
- waste disposal establishments in case of own non-hazardous waste at the place of production

Where a Member State allows exemptions, it has to lay down, in respect of each activity for which exemptions are granted, general rules specifying the types and quantities of waste that may be covered by an exemption, and the method of treatment to be used (Article 25(1) and (2) WFD). Operators seeking permits should consult national rules in this respect.

Who needs to register?

According to Article 26 WFD, the following are subject to registration:

- professional collectors,
- transporters,
- dealers/brokers,
- waste management facilities exempted from permit requirements.

Competent national authorities should, where possible, facilitate the registration process and reduce administrative burden for establishments or undertakings that want to register. This can be done by using existing

Permit/Registration system

Types of authorisation:

- Permit
- Registration
- Other (according to MS Legislation)

Further reading
Procedural requirements for permitting are explained in the legal chapter 2.

records, such as information from commercial registers, to obtain the relevant information for the registration process. Therefore, it may be that in some cases no specific separate registration process is necessary where the information is already available from existing sources. Operators should contact their competent authorities to find out more about the procedure used in their Member State.

Note:

Waste treatment operations, like recovery and disposal operations including preparation prior to recovery, generally require a **PERMIT**.

Member States may **exempt certain recovery and disposal operations** from permit requirements.

The **exempted waste operations, as well as collectors, transporters, dealers and brokers** need a **REGISTRATION**.

To ensure a smooth implementation of permitting and registration requirements, two aspects have to be considered:

- Permit and registration management **practice**, as good permits/registrations are an essential element for compliance with EU legislation and are often a pre-condition for adequate and effective inspections;
- Permit and registration **content**, in particular the setting of clear and detailed criteria for waste management operations, taking into account technical, legal and practical aspects of the particular waste treatment facility.

The following chapter outlines an example of a good **permitting procedure** for waste management operations. It includes theoretical information describing the stages within the permitting procedures. However, emphasis is also given to the practical implementation of EU requirements on a Member State level and to the description of examples of good practice regarding the permitting steps.

The required **content of permits** and **registration documents** are described only on a general level within this guidance; however, the accompanying manual includes **8 checklists** indicating what conditions to include in a permit, covering the following different types of waste management facilities:

1. Waste collection and transfer stations
2. Pre-treatment facilities
3. WEEE treatment facilities
4. Preparing for re-use facilities
5. Composting facilities

Permit/Registration system

Ensuring implementation through:

- *Permitting management practice*
- *Setting of content of permit / registration*

Further reading

8 checklists giving an indication on what to include in a permit are provided in chapter 3 of the practical manual

6. Material recovery facilities
7. Incinerators
8. Landfills

Those checklists include the most important aspects of a permit on:

- Technical requirements of facilities
- Acceptance, handling and storage of waste
- Operational aspects
- Emissions into the environment (air, water, etc.)

Permit/Registration system

Ensuring implementation through:

- Permitting management practice
- Setting of content of permit / registration

Further reading

8 checklists giving an indication on what to include in a permit are provided in chapter 3 of the practical manual

4.2. Stages for permitting

The permitting procedure is divided into different steps. Besides the operator applying for a permit, different authorities and further stakeholders are involved in the permitting procedure. The following steps can be distinguished:

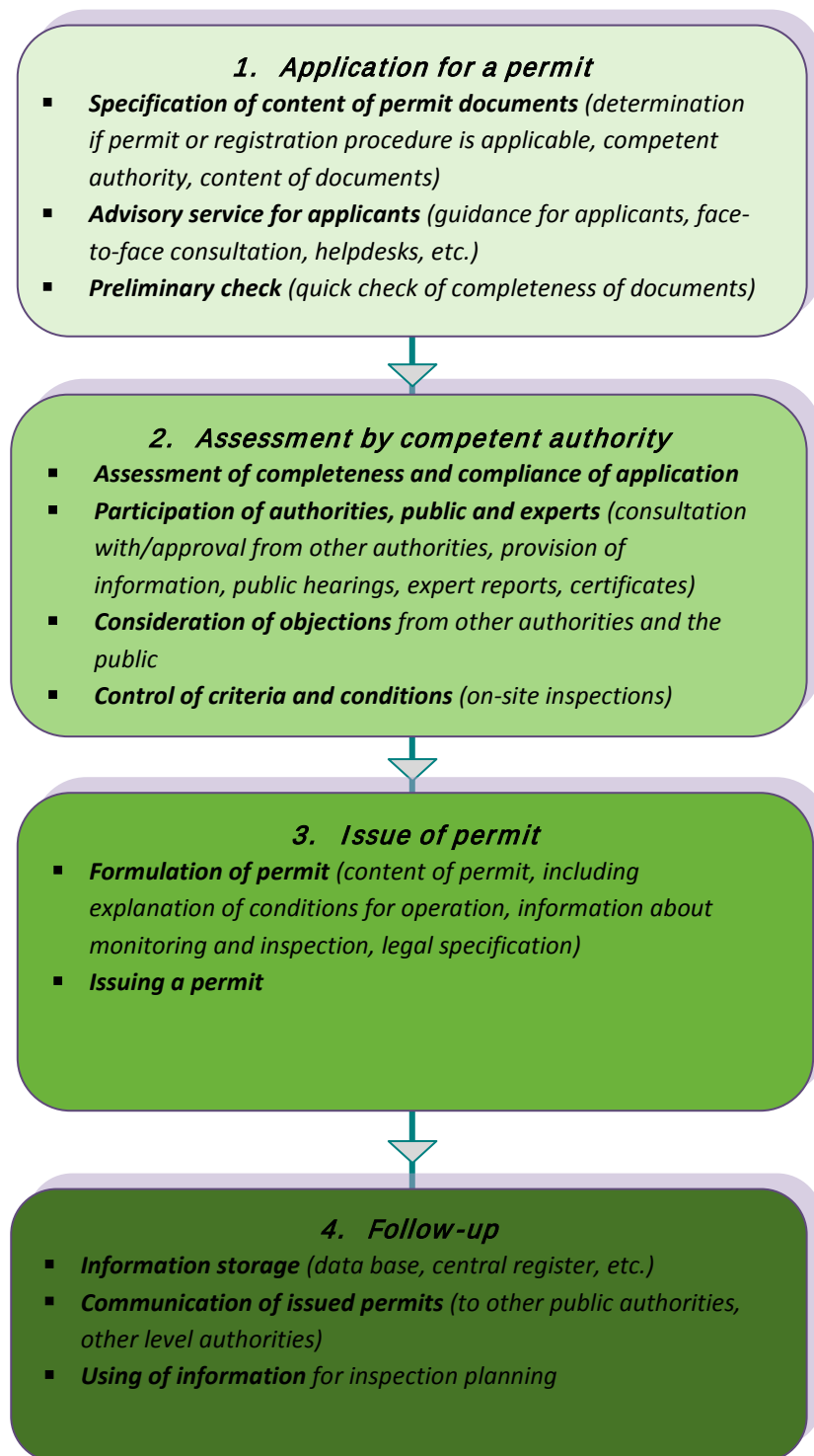


Figure 4.2-1: Steps for permitting procedures [inspired by: Ministry of Environment Hesse_2010]

Stages of permitting:

- Application
- Assessment
- Issue of permit
- Follow-up
- Training/
Guidance/
Networking

Reference:
Ministry of
Environment (2010)
"Guidance on
permitting
procedures",

[Durchführung von
Genehmigungs-
verfahren –
Verfahrenshandbuch
zum Vollzug de
BImSchG]

http://www3.hlug.de/service/dokumente/VerfahrensbuchG_April201

Within all the steps, administrative staff as well as operators and other stakeholders need to be informed about the provisions (which provisions?), thus requiring **training, cooperation and guidance** measures.

The following chapter provides details on the illustrated steps.

4.2.1. Application for a permit

Specification of content of authorisation documents

Within the first step of authorisation procedure, the operator/manager of the facility has to apply for a permit at the competent authority. The step includes:

1. The general **determination whether a permit is applicable** for the planned waste management operation
2. The **designation of the responsible authority**
3. The **setting of conditions** for the application

1. Determination whether a permit is applicable

In order to reflect the different potential of the waste management operations and their impact on human health and environment, usually different **categories** are applied to different operations. In consequence, more or less information can be requested from the facility operator/manager. The WFD distinguishes between (see also Chapter 2.2.1 on legal provisions of the WFD):

- permit, which is in general needed for all treatment facilities, i.e. recovery and disposal operations, including preparation for recovery and disposal (here a differentiation between IPPC and waste permit can be made), and
- registration, which is required for collectors/transporters, dealers/brokers and facilities exempted from permit requirements on the Member State level.

However, further differentiation on the national level can be made to reflect the characteristics of the different waste management operations, i.e. adoption of licenses (e.g. as a proof of permit procedures, or as a proof of sufficient knowledge of the operator) or further agreements with the operator according to the national law.

Therefore, when starting the application procedure, **the competent authority defines whether a registration or a permit applies for the planned waste installation**, formulates a list of necessary documents that need to be presented and information to be provided by the facility

Application for a permit

Specification of content:

- Determination of whether registration/permit applies
- Designation of responsible authority
- Setting of conditions

Possible authorisation systems:

- Permit
- Registration
- Other, according to national requirements (e.g. license)

operator/manager.

Member States' implementation in practice

Are different categories of authorisation systems (registration, permit, others) foreseen by the Member States?

The vast majority of the EU Member States apply a more or less sophisticated system to categorise waste management installations and apply **two or more different kinds of authorisation systems**..

22 Member State/Regional authorities answered to apply such a system, using two or more different classes of authorisation

Most of the Member States (or Member States' regions) apply **three different categories**, mostly dividing IPPC permits, permits according to waste law and registration (8 answers) or **two categories** as required by the WFD (5 answers). A minority applies four (3 answers) or even five different kinds of authorisation systems (1 answer (see details in Table 4.2-1).

Application for a permit

Member States apply:

- Registration
- Permit (simplified, full, environmental permit)
- others

Table 4.2-1: Overview of information on applied authorisation categories

MS	Description of authorisation categories
AT_VI	Applies four categories containing of permit for waste treatment plants (with simplification for modification of plants or for plants with a low capacity) and permit for waste collection and waste treatment (simplified for non-hazardous waste).
AT_VO	Applies two categories dividing first and further application of permission of a treatment plant. A basic permit is issued when first applying for permission; simplified permits may be issued in the case that rights of the neighbours are not infringed.
BE_FL	Applies three categories including a permit from the provincial authorities for truly hazardous activities (cat.1), which includes information about the environmental impact of the activity, a category II permit for slightly less risk associated activities, but follows more or less the same procedure. Cat. III permit is for activities with limited effects on the environment. Only a notification to the municipal authority is needed.
BE_WA	Applies three categories containing of two different permits according to the risk associated to the activities and registration for very low risk activities. Additionally an agreement of the operator is required.
CY	Applies two categories distinguishing between a permit for waste collection, transportation and treatment activities and registration for waste producers of packaging, WEEE, batteries, used tires, etc.
DE_HE	Applies three categories dividing permits according to IPPC and the National Waste Act and registration for hazardous waste producers and waste collectors. Additionally requirements are made e.g. requesting certificates about proper disposal or transport certificates.
EE	Applies four categories containing of waste permit or registration and hazardous waste handling licence and/or IPPC permit.
ES	Applies two categories dividing between authorizations for hazardous waste managers and registration for non hazardous waste managers.
FR	Applies three categories distinguishing between full permit for non-hazardous and hazardous landfills, simplified permit for inert landfills and

Abbreviations

AT_VI: Vienna (AT)

AT_VO: Vorarlberg (AT)

BE_FL: Flanders (BE)

BE_WA: Walloon (BE)

DE_BE: Berlin (De)

DE_HE: Hesse (DE)

UK_SC: Scotland (UK)

MS	Description of authorisation categories
	registration. WEEE treatment facilities require either a registration or a full permit, according to the quantity of waste stored at sorting or dismantling plants.
IE	Applies four categories containing of waste (or IPPC) licence, a waste facility permit, a waste certificate of registration and no authorisation for an exempted activity.
LT	Applies three categories dividing registration, waste permit and license, which has to be applied additionally by operators handling hazardous waste
LU	Applies three categories distinguishing between waste permits (this type of permit is further divided into waste permit to transform waste, waste transport/waste broker permit and permit to dispose waste), operation permits under the “commodo law” given to companies producing significant amount of waste and operations which produce biogas by anaerobic digestion and registration given to collection and transport companies.
LV	Applies two categories dividing waste management permits for operator of collection, storage, transportation and sorting facilities or an integrated permit.
NL	Applies two categories containing full permits where general rules for a whole category of activities apply, e.g. for operations like landfilling and simplified permits for smaller waste management operations like ELV dismantling and collecting of WEEE mostly obtained from local authorities.
PT	Applying five categories divided into environmental licence, special licence, licence, simplified licence and prior notice.
UK	Applies three categories distinguishing between environmental permits covering waste recovery and disposal operations, either being standard rules permits or being bespoke permits for major operations. Registered exemptions from the need for an environmental permit are provided for low risk waste operations.
UK_SC	Applies three categories containing of IPPC permits, waste management licences and registration of exemptions from waste management licensing.

Application for a permit

Description of systems applied to authorise a facility

Member States' implementation in practice

Which authorisation categories (registration/ simplified, waste, environmental permit) are in general applied to which waste management operations?¹

- **Hazardous and non-hazardous waste producer** are usually required to apply for registrations or a waste permit. The competent authority decides either on basis of the risk of the facility (e.g. is it a classified well known operation or not) or on basis of the amount of waste generated (e.g. more than 10 t/year) whether registration is sufficient or whether a simplified/full waste permit is required.
- **Waste collection** according to the WFD requires a registration. However some Member States also require a full or simplified waste permit, e.g. in cases hazardous waste is collected.
- **Waste and WEEE sorting** usually requires a permit. Estonia, Ireland,

Abbreviations

AT_VI: Vienna (AT)
 AT_VO: Vorarlberg (AT)
 BE_FL: Flanders (BE)
 BE_WA: Walloon (BE)
 DE_BE: Berlin (De)
 DE_HE: Hesse (DE)
 UK_SC: Scotland (UK)

¹ Based on information provided by 14 authorities in response to a questionnaire.

Luxembourg and Lithuania only request a registration or a licence.

- **Waste transport, brokerage/dealing and reverse logistics** usually need registration. In some cases they do need some form of a licence or a permit.

For the other treatment operations including pre-treatment, reuse, recycling also full waste permits are required in most Member States. Exemptions according to Article 24 WFD are limited to non-hazardous waste treatment facilities that recycle waste, and exemptions according to Article 25 WFD are limited to hazardous waste treatment facilities (sorting, transit, temporary storage) with a capacity lower than 1 tonne of waste present at the facility. In the exempted cases, a registration or license is required (see details in Table 4.2-2).

Application for permit

Competent authority mostly responsible for facilitating the permitting procedure:

- Regional
- National
- Local / Municipal
- Other

Table 4.2-2: Overview of authorisation categories applied to waste operations

Waste management operations	AT (VI)	AT (VO)	CY	DE (BE)	DE (HE)	EE	ES	IE	LT	LU	NL	PT	UK (SC)	UK
hazardous waste generation	-	5	1	5	1/3	-	1/5	-	5	5	5/*	3	-	
non-hazardous waste generation	0	5	1	5	-	-		-	5	5	5/*	1	0	1
waste collection	5	5	5	1	1/3	1/5	1/5	3/5	5	1/5	5	3	1	1
waste sorting	5	5	5		6	3/5	5	-	1		5/*	3	0/4/6	0/5
WEEE sorting/dismantling	5	5	5	5	6	3/5	5	1/3/5	3/5	1/5	5	-	4/6	0/6
waste transfer	0	0	5	0	1/3	1/3/5	1/5	3/5	1	1/5	1	-	1	1
waste broking/dealing	5	5	1	-	5	1	-	1	1	5	1		1	1
reverse logistics operation	0	5	1		3	0	-	-	1	5	1		1	0
waste pre-treatment	5/7	5	5	5	6	3/5	-	1/3/5	3/5	5	5		0/4/6	0/5
waste re-use	5/7	0/5	0			0	5	1/3/5	3/5	5	5		0/4/6	0/5
waste recycling	5/7	5	5	3/5	6	3/5/6	5	1/3/5	3/5	5	5/*	3	0/4	0/5
waste incineration	5/7	5	5	3/5	6	3/5/6	5	3	3/5	5	5	3	0/6	5
waste co-incineration	5/7	5	5		6	3/5/6	5	3	3/5	5	5	3	6	6
waste landfilling	5/7	5	5	5	**	3/5/6	5	3	5	5	5	3	6	6

Explanation 0 no permit/exemption

1 registration (including transport and plant registration and for Portugal prior notice)

3 licence (e.g. waste transport, waste handling, hazardous waste handling licence)

4 waste management licence

5 waste/environmental permit (for Spain: hazardous authorisation)

6 IPPC permit

7 additional plant permit

*general rules

**plan approval procedure

One of the first steps of the permitting procedure includes the **estimation of the potential risk** of the operation. Thus, some Member States elaborated systems on the national/regional level guiding competent authorities in the risk assessment. Different national/regional systems are described in detail in the accompanying practical manual, in particular:

Further reading

Best practice example in practical manual: chapter 2.2.3 and 2.2.4

- The UK **Risk assessment tool** called the Operational Risk Appraisal Scheme (Opra) is based on five attributes (risk parameters), each of which is allocated one or more lettered rating bands. These bands provide a profile, the so called Opra-banded profile, which is for instance used to plan how to use available resources and work out charges. An operator with a higher risk has a higher charge to cover the extra costs needed to assess the risk and ensure they are being managed in a proper way. The Opra scheme provides a detailed guidance on how to apply Opra and work out Opra-banded profiles for waste management facilities.

See chapter 2.2.3 of the practical manual

- The UK **Risk-based approach to exempt waste operations** applies a five-step approach used by the Government to determine whether to provide an exemption for a certain waste operation.

See chapter 2.2.4 of the practical manual

Application for permit

Competent authority mostly responsible for facilitating the permit procedure:

- Regional
- National
- Local / Municipal
- Other

Setting of conditions:

- WFD and LC includes list on minimum content

2. Designation of responsible authority

The next step in the permitting procedure is the designation of **the competent authority responsible for facilitating the permitting procedure**. According to the type of operation, the competent authority can be:

- A national authority;
- A regional authority;
- A local or municipal authority;
- An authority on another level.

Member States' implementation – practical example

Which authority is responsible for permitting procedures?

For most waste management operations, the permitting procedure is managed by **regional authorities**. However, for waste transfer, brokerage/dealing and reverse logistic operations, the responsibility mostly lies within **national authorities**, in most cases running a national register of such operations. **Local authorities** are also given responsibilities in the permitting procedures in many EU Member States (for details see Table 4.2-3). Further specifications are made in France and Ireland:

In **France**, non-hazardous and hazardous waste landfills are under the authority of the Prefect, made up of sworn State officials.

In **Ireland**, waste permitting and enforcement is carried out by the Environmental Protection Agency (EPA) and by Local Authorities (LAs). In general, the EPA is responsible for higher risk recovery and disposal activities (e.g. landfills) and LAs are responsible for lower risk recovery and disposal activities and for waste collection. The responsibility for producer

responsibility initiatives varies, e.g. both the EPA and LAs have responsibilities for WEEE and batteries, the EPA is responsible for RoHS and LAs are responsible for waste tyres.

Table 4.2-3: Overview of authorities responsible for issuing permits

Waste management operations	AT (VI)	AT (VO)	BE (FL)	BE (WA)	CY	DE (HE)	EE	ES	FR	IE	NL	PT	SI	UK	UK (SC)
hazardous waste generation		1	1/2/3	1/2	0	1	0	1	2		1/2	0	0	0	0
non-hazardous waste generation		1	1/2/3	1/2	0	1	0		2		1/2	1	0	0	0
waste collection	1	1	1/2/3	1	0	1/2	0	1	2	2	0	2	2	0	0
waste sorting	1	1	1/2/3	1/2	0	1	0	1	2	0/2	1/2	1	2	0	0
WEEE sorting/dismantling	1	1	1/2/3	1/2	0	1	0	1	2	0/2	1/2	0	0	0	0
waste transfer	0	1		1	0	0/1	0	1	2	0/2	1/2	0	0	0	0
waste broking/dealing	1	1			0	1	0	1	2	2	0		0	0	0
reverse logistics operation		1			0	0/1		1	2		0			0	0
waste pre-treatment	1	1	1/2/3	1/2	0	1	0	1	2	0/2	1/2	1	0	0	0
waste re-use	1/2	1		1/2	0	2		1	2	0/2	1/2		0		0
waste recycling	1/2	1		1/2	0	1	0	1	2	0/2	1/2		0	0	0
waste incineration	1	1	1/2/3	1/2	0	1	0	1	2	0	0/1	0	0	0/2	0
waste co-incineration	1	1	1/2/3	1/2	0	1	0	1	2	0	0/1	0	0	0	0
waste landfilling	1	1	1/2/3	1/2	0	1	0	1	2	0	0/1	0	0	0	0

Explanation 0 National authority
1 Regional authority
2 Local authorities
3 Other level

3. Setting permitting conditions

After the level of registration/permitting system for the planned activity and the responsibility of the authority are decided, the next step includes the **setting of specific conditions** for the facility. In Article 23(1) of the WFD the minimum content of a permit is specified as:

- the types and quantities of waste that may be treated;
- for each type of operation permitted, the technical and any other requirements relevant to the site concerned;
- the safety and precautionary measures to be taken;
- the method to be used for each type of operation;
- the necessary monitoring and control operations;
- the necessary closure and after-care provisions.

Application for permit

Competent authority mostly responsible for facilitating the permit procedure:

- Regional
- National
- Local / Municipal
- Other

Setting of conditions:

- WFD and LC includes list on minimum content

For landfills, additional requirements are made in Article 8 Landfill Directive (see legal chapter in Part II of this guidance). As the following box and Table 4.2-4 show, the content of the permit differs depending on the risk potential of the different waste management operations.

Member States' implementation – practical example

Which elements are covered by registration/permits?²

- For most **waste generators**, no matter whether hazardous or non-hazardous, the registration/permit document needs to include storage requirements and information on how to collect and store monitoring data (e.g. information on amounts of waste generated, information of laboratory analysis of generated waste, etc.) .
- For **waste collection**, the registration/permit document needs to include information about waste which is accepted and information on how to collect and store monitoring data (e.g. on amounts and types of wastes collected, etc.).
- For **waste sorting and waste transfer installations**, the registration/permit needs to include additional conditions on technical requirements, information on waste acceptance and acceptance procedures and on emergency planning.
- **Waste broking/dealing and reverse logistic operations** generally need to meet fewer conditions, but they need to provide information on offenses / penalties and on inspections and training.
- For **waste pre-treatment and recycling**, almost the same conditions are set as for other waste treatment operations, with the difference that monitoring and control conditions are rarely included.
- For **waste re-use** operations, much fewer elements are required than for pre-treatment/recycling.
- For **waste incineration, co-incineration and landfilling**, most of the listed elements must be covered in the permit documents.
- **Overall, data documentation and management** are the most important elements to be addressed in the permit, followed by information on **storage requirements** and **waste to be accepted**.
- Information on **third party auditing and certification**, **auto-control** and the **proof of financial stability, guarantees and insurances** (the latter for non-treatment operations) are of minor importance for most national competent authorities.

A detailed overview of aspects covered by authorisation (registration, simplified/full permit) according to the listed waste management operations is displayed in Table 4.2-4 (information collected from 16 respondents from twelve EU Member States).

Application for a permit

Overview of aspects covered in a permit

Further reading

Best practice example in practical manual: chapter 2.2.1

² Based on information provided by 16 respondents from twelve Member States

Table 4.2-4: Overview of aspects covered in registration/permit documents

	Hazardous waste generator	on-hazardous waste generator	Waste collection	Waste sorting WEEE sorting/ dismantling	Waste transfer	Waste broking/ trading	Reverse logistics operation	Waste pre -treatment	Waste re-use	Waste recycling	Waste incineration	Waste co- incineration	Waste landfilling
Technical requirements for construction	7	5	7	14	15	7	1	4	16	11	14	16	16
Information which waste is acceptable	6	6	11	15	16	12	5	6	15	10	13	15	16
Acceptance procedures	2	3	8	13	13	9	2	5	14	10	12	15	15
Pre-treatment requirements	3	2	3	8	8	1	1	1	8	4	6	9	13
Storage requirements	13	11	7	15	16	7	2	7	16	11	14	16	14
Closure/Aftercare requirements	7	4	3	11	11	6	1	5	11	7	11	13	15
Emission limits	9	7	5	7	9	3	0	2	10	6	11	15	13
Emission collection	6	5	3	7	8	3	0	2	8	4	9	14	12
Emission abatement	6	4	3	7	8	4	0	2	9	5	10	15	12
Emission monitoring	8	5	4	5	7	2	0	2	9	5	10	14	15
Alert system	5	3	5	7	8	3	0	1	9	5	8	12	10
Emergency plan	9	6	6	12	12	7	0	3	13	8	12	13	13
Training/Expertise	5	3	8	10	13	7	4	3	12	7	11	15	14
Documentation and data management	13	11	13	13	14	14	8	10	14	9	13	14	14
Offenses/penalties	9	8	8	10	11	9	6	8	9	5	9	11	10
Inspections	11	8	8	12	13	11	6	8	12	7	12	14	15
Auto control/certification	6	4	5	5	5	3	2	3	5	2	4	8	6
Third party auditing/certification	5	3	1	2	2	1	0	2	3	2	3	5	5
Proof of financial stability	3	1	3	3	6	3	1	2	6	3	7	7	8
Insurances, financial guarantees	5	3	6	5	8	8	2	4	7	5	8	7	15

Application for a permit

Overview of elements covered in a permit

Further reading

Best practice example in practical manual: chapter 2.2.1

Similar to the described variation in registration/permit content, also the fees charged to the operator vary.

Member States' implementation – practical example

In Ireland, the fees are charged in accordance with the time spent for enforcement.

This approach ensures that the fees can be reduced in case of good implementation / reporting / self-monitoring / implementation of environmental management systems. In addition, operators are motivated to operate in compliance with the applicable legislative requirements.

The setting of conditions within a permit can be based on information about technical standards, national guidance or manuals, general rules to be applied, national lists and consent systems. The following box gives an overview of Member States' practice to set conditions showing that most of the Member States apply various sources.

Member States' implementation – practical example

What are the national procedures and provisions for issuing a permit for waste management operations?

- Most Member States use a set of **standardised conditions** to be included in the permit documents (i.e. 15 from 18 answers);
- 10 authorities apply **technical standards such as BAT or BEP** at national level;
- 9 authorities stated that **general rules**, specifying the waste covered and the treatment methods, are used (according to Article 25 WFD);
- 8 authorities use **guidance/manual specifying the conditions** for competent authorities;
- 8 authorities apply **national lists** specifying establishments or undertakings **exempted from permit requirements** (Article 24 WFD);
- 6 authorities said that an **information and consent system** for all waste treatment activities is applied. This system assures that all affected authorities have been informed and involved in the permitting procedure and have provided additional conditions, e.g. according to water law, and have given their consent to the permitting procedure.

Note: The total number of authorities that provided information was 16, which means that most of the Member States use **a combination of the different possibilities**.

Application for a permit

Setting of conditions (based on Member States' practice):

- Standardised conditions
- Technical standards
- General rules

Further reading

Best practice example in practical manual: chapter 2.2.1

In general, asking for the provision of **financial guarantees** is a good practice. Financial guarantees are asked to be provided by operators in advance to starting the operation, to ensure that the obligations arising under the permit are fulfilled (e.g. after-care treatment, the defined closure procedures). From a wider perspective, requesting financial guarantees supports the polluter pays principle.

Such guarantees are, for instance, required by the Landfill Directive (Article 8). However, it is uncertain to which extent Member States request financial guarantees also for other waste management operations, including smaller treatment facilities.

Best practice examples on the setting of conditions to be included in the permit are described in more detail in the accompanying practical manual, in particular:

- The example from Belgium (Flanders) about a **fixed set of conditions** is applicable to all waste operators; In order to avoid a case-by-case decision approach, the set of fixed conditions is directly applicable to companies. The conditions include general provisions applicable to all waste treatment facilities. In addition, a set of further provisions is determined for (1) waste storage and treatment facilities, (2) the type of waste, and (3) the type of waste treatment facilities (incinerators, landfills).

See chapter 2.2.1 of the practical manual

Application for a permit

Setting of conditions (based on Member States' practice):

- *Standardised conditions*
- *Technical standards*
- *General rules*

Further reading

*Best practice example in practical manual:
chapter 2.2.1*

Advisory service for applicants

In order to enable a smooth permitting procedure and to support the application for environmental permits, it is a good practice to provide advisory service for applicants, which could include:

- Designation of relevant contact person for further questions;
- Clarification whether other authorities should be included in the permitting procedure;
- Specification of the form, content and number of application documents (including possibility of online registration and delivery of missing electronic documents);
- Clarification if environmental risk assessment is required;
- Clarification which further certificates/expert reports are required, and where these can be obtained;
- Clarification of procedures to involve the public and ways of publishing the planned project (e.g. internet, newspapers, etc.);
- Information on the relevant legal basis;
- Information on the relevant guidance documents and links, if available;
- Indication on a time-frame for realizing the permitting procedures (envisaged date for issuing the permit).

This information can be provided in personal consultations, via helpdesks, hotlines and the Internet. It is good practice to make as much information as possible to be available online, including any guidance and the necessary forms.

Member States' implementation – practical example

Online advisory service for applicants

Several Member States provide detailed online information about the registration and permitting procedures, and conditions; including forms for download. Selected examples from EU Member States are:

AT (VO):

http://www.vorarlberg.at/vorarlberg/umwelt_zukunft/umwelt/abfallwirtschaft/start.htm

AT (VI): <http://www.wien.gv.at/umweltschutz/abfall/entsorgung.html>

BE (FI):

http://www.investinlanders.com/en/doing_business/legal_guide/environmental_regulations/

DE (HE):

<http://www.hmuelv.hessen.de> then click "Umwelt", then "Abfall" or directly http://www.hmuv.hessen.de/irj/HMULV_Internet?cid=9adcc9e645d201b34a4378c4bc45b012

Application for a permit

Advisory service for applicants could include:

- Helpdesk and consulting services
- Information on application documents required
- Online forms to fill in
- Advice on transparency and on how to include general public
- Support concerning legal requirements

DE (BE): <http://www.stadtentwicklung.berlin.de/umwelt/abfall/>

FR: <http://installationsclassees.ecologie.gouv.fr/-Permit-system-.html>

IE:

<http://www.epa.ie/whatwedo/licensing/waste/>

<http://www.epa.ie/whatwedo/licensing/files/>

UK:

<http://www.environment-agency.gov.uk/business/topics/permitting/default.aspx>

<http://www.defra.gov.uk/environment/quality/permitting/>

UK (SC):

http://www.sepa.org.uk/waste/waste_regulation/application_forms/waste_management_licence.aspx

http://www.sepa.org.uk/waste/waste_regulation/application_forms/exempt_activities.aspx

Advisory service for applicants - best practice example from the Vorarlberg region, Austria:

■ The **permitting for smaller waste treatment plants** involves a staff-intensive but very effective advisory service for operators, including face-to-face advice, a helpdesk, hearings in order to consider possible stakeholder complaints and ensure that no infringement of their rights occur, other public involvement and on-site inspections. Such cooperation brings about benefits for both the authority and the operator by taking into account constraints of stakeholders into account at an early stage of permitting procedures.

See chapter 2.2.2 of the practical manual

Preliminary check

After the delivery of the permit documents to the competent authority, the documents shall be preliminary checked for obvious mistakes and completeness (number of documents completed, all relevant topics addressed, etc.). A **checklist** could be developed to help identifying obvious mistakes. However, this quick completeness check should not replace a thorough verification of the content.

The applicant has to be informed about the result of the check, and if mistakes are identified, invited to complete the application within a defined time period.

In the further steps, the content of the documents delivered by the operator/manager and the information requested by the competent authority will be assessed.

Application for a permit

Advisory service:

Example of advisory service for small waste treatment plants operators

Preliminary check aims at:

- *Screening of documents against their completeness*
- *Identification of missing documents*

4.2.2. Assessment by competent authority

Assessment of completeness and compliance

If the application documents are delivered without obvious mistakes, the content of the documents will be:

1. Checked for **completeness** of documents;
2. **Checked for compliance** with waste, environmental and other legislation as well as with plans and strategies on different administrative levels.

1. Checking for completeness

The completeness check focuses on the following points:

- Identification of interim problems to prevent overlapping legislative requirements; e.g. overlapping requirements from waste legislation and other environmental legislation
- Elimination of conflict potentials; e.g. between divergent objectives of regional planning
- Checking for consistency as regards content, i.e. checking the consistency of the statements.

The **relevant concerned authorities** whose field of responsibility is affected by the planned facility shall be included in the completeness check. Each authority shall check the part which is relevant for it under consideration of all application documents within a given time period.

The approval of completeness of the application documents is given if:

- the relevant authorities have affirmed the completeness;
- the relevant authorities have already delivered their concluding statement; and
- no contrary comments of the relevant authorities were received.

The aim of the assessment is to receive complete permit documentation conforming to the legislative requirements also outside the waste legislation.

After the given time period, all additional claims should be collected, compared and sent to the applicant, explaining the nature of comments in a comprehensible way, and including the number of documents which have to be delivered or completed. The applicant of the permit should receive a deadline to complete his application documents. The completed documents will again be checked by all relevant authorities. If there are no further objections, the applicant of the permit is informed about the approval of completeness of the documents and about further steps.

Assessment of permit application

Assessment of completeness contains of:

- Identification and elimination of problems and conflict potential
- Check of consistency
- Inclusion of other authorities

2. Checking for compliance

Once the application documents are complete, the content will be **checked for compliance** by the relevant authorities. The relevant authorities shall be asked to prepare a statement concerning the documents within a defined and most possible short time period. The assessment could check whether the permit is compliant with:

- EU/national waste legislation;
- Further environmental legislation, e.g. nature conservation, water legislation;
- National/regional/local waste strategies and management plans;
- Regional/local development plans.

When checking the applications against the abovementioned requirements, it is important to verify complaints of the application with both the technical specifications (i.e. limit values and emissions) and the general objectives and strategic aims of the EU and national waste legislation. Points which should be checked include, for example:

- Compliance of the facility with the objective to move up the waste hierarchy (Article 4 WFD);
- Promotion of high quality recovery (Article 10 WFD), including preparing for re-use high quality recycling and separate collection (Article 11 WFD);
- Prevention of waste (including its hazardousness) and waste minimisation (Art 4 WFD);
- Establishment of an integrated and adequate network of waste recovery and disposal installations (Article 16);
- Compliance with the national waste policy, e.g. as regards bio-waste, incineration, etc.

When assessing a permit application, **the first question should be whether the planned facility is in line with the waste management hierarchy**, and whether it contributes to moving up the hierarchy. This is a crucial question for any application for a landfill permit, as this type of waste management should be reserved to residual waste which cannot be further recovered, hence granting of permits must be considered against a wider picture of available and planned waste management installations.

Then, the technical, safety, precautionary, monitoring and other requirements need to be checked.

Regarding the checking of compliance, the Best Practice Examples from Scotland and Finland included in the practical manual describe:

Assessment of permit application

Assessment of compliance includes checking of:

- requirements of EU and national waste legislation
- requirements of other legislation
- general waste policy and strategies

■ The **compliance assessment scheme** in Scotland applies for all kind of permits, including the assessment of the IPPC installations and waste management facilities requiring a licence in particular for transfer stations, civic amenity sites and fridge storage and treatment. The compliance assessment scheme is used to assess an operator's level of compliance with their permit/licence, distinguishing between environmental and management requirements.

See chapter 2.2.5 of the practical manual

■ Finland tries to include **waste prevention issues in the environmental permit procedures**, considering all steps of the procedure, but particularly focusing on setting conditions and compliance check: certain waste prevention conditions need to be fulfilled by the facility applying for a permit, and the way how to check whether those conditions were met is explained.

See chapter 2.2.8 of the practical manual

Participation of other authorities, the public and experts

In order to identify and eliminate conflicts and problems at an early stage of the permitting procedure and increase overall transparency, this step aims at the participation of:

1. Other **authorities** on different levels (national/regional/local) and from other areas of expertise (e.g. water board, chemicals, emission control);
2. The general **public**;
3. Further **experts**.

1. Participation of other authorities

The objective of the participation of the relevant authorities is to identify the facts which are relevant for the permitting decision and to check and coordinate all related environmental and technical matters. Besides, contradictory statements have to be cleared.

The participation of other authorities can be organised in different ways, for instance through:

- Notification of up-coming or running permitting procedures to other relevant authorities;
- Use of common data bases, open for comments, including information on permits and upcoming permits, e.g. waste facility registers;
- Hearings, addressing all relevant authorities;
- Consultation with or approval of the other authority.

The following box provides information on how the other authorities are informed about upcoming and issued permits.

Assessment of permit application

Participation of:

- Other relevant authorities
- The general public
- Further experts

Participation of other relevant authorities through:

- Notification
- Data bases / registers
- Hearings and consultations

Further reading

Best practice example in practical manual: chapter 2.2.5 and 2.2.8

Member States' implementation - practical example

How is the information about permits communicated between authorities?

12 Member States provided information about the communication procedures between the authorities which can be summarised as follows:

- The inclusion of the information into a **waste facility register** to which different authorities have access is the most common measure to distribute information (11 answers);
- **Upcoming and notified permits** are 3qually communicated to the regional/local authority if issued by national level, or to central level if issued by regional/local level) (5 answers each);
- All authorities stated that **communication is carried out** (no answer to the option that no communication is performed).

Some Member States also provided additional comments, in particular:

- **Portugal** stated that information on permits of waste management facilities is notified to the Departments of the Ministry of Environment and Spatial Planning;
- **Spain** is applying the new Integrated Environmental Authorisation (AAI) system under which permits are reported to national authorities twice a year (every six months);
- In **Estonia**, a permit application has to be approved by local government before introducing it to the national authority and then the national authority publishes the application.
- In **Ireland**, permits and certificates of registration are made publically available within a waste permit and certificate of registration database including waste collection permits, waste facility permits and certificates of registration issued by local authorities (at: <http://www.epa.ie/wastepermit>). An additional website includes the application, licences and the annual reports for all licenses issued by the Environmental Protection Agency (see <http://www.epa.ie/terminalfour/waste/index.jsp>).

Independent of the information communication instruments, the authorities should have the opportunity to provide comments to the permit documents. The comments shall be checked by the permitting authority which can accept or refuse them. The question arises to what extent the authorities competent for other environmental issues should be involved. The information provided from the EU Member States is included in the following box.

Assessment of permit application

Communication and information exchange between authorities

- waste facility register
- notification on upcoming and issued permits

Further reading

Example from Ireland:
<http://www.epa.ie/wastepermit>

<http://www.epa.ie/terminalfour/waste/index.jsp>

Member States' implementation – practical example

Are authorities competent for other environmental issues involved in the permitting procedure, and what is their level of involvement?

18 Member States provided information about the involvement of other authorities which can be summarised as follows:

- Over 80 % respondents stated that **other authorities are involved** in the permitting procedure under waste legislation (15 answers);
- Over 60 % respondents stated that **consultation with other authorities** is performed (11 answers);
- However, only a minor percentage (4 answers) stated that an actual **approval from other authorities** is necessary.

Five Member States provided additional comments, in particular:

- In **Belgium (Walloon Region)**, the requirements defined by the different competent departments (waste, air, water...) are taken into account before permits are given;
- In **Spain (Andalucía)**, the permitting procedure usually includes several environmental aspects and therefore requires the involvement of different authorities, such as the Provincial Delegations of the Environmental Ministry of the regional government. The involved authorities contribute with their specific expertise to the permitting procedure.
- In **the United Kingdom**, the Environment Agency has responsibilities in respect to other environmental controls, e.g. some water discharge consents/radioactive substances controls. On waste matters, the Agency may consult with planning authorities. Primary care trusts are consulted over health effects of installations. They may seek advice from the Health Protection Agency as well.
- In **Estonia**, a committee oversees all applications received for hazardous waste handling. The committee is a consulting body and consists of experts from different authorities.
- In **Ireland**, the Waste Management (Licensing) Regulation 2004 includes in Article 18 an extensive list of whom to inform, including the Ministry of Environment, the Ministry for Communications, the Central Fisheries Board, The National Trust, any local authority, sanitary authority, health board, the National Authority for Occupational Safety and Health and others

Assessment of permit application

Examples from Member States regarding information and level of involvement of other authorities

2. Public involvement

For certain permitting procedures, **public involvement** is necessary. Public involvement should be – following Annex I of the Aarhus Convention – at least realised for the following types of waste installation permits:

- Installations for the incineration, recovery, chemical treatment or landfill of hazardous waste;
- Installations for the incineration of municipal waste with a capacity exceeding 3 tons per hour;
- Installations for the disposal of non-hazardous waste with a capacity exceeding 50 tons per day;
- Landfills receiving more than 10 tons per day or with a total capacity exceeding 25,000 tons, excluding landfills of inert waste.

Member States may decide whether to include further waste management operations in this list.

Where the applicant insists on a public participation, this should always be done.

The public can be informed by:

- Public notice;
- Publication on the internet;
- Hearings;
- Individually.

In the case of a public participation, the project plan should be published in public media and the application documents made publicly available by the permitting authority/other public institution close to the planned facility (e.g. municipality, mayor offices, etc.). A deadline for objections has to be announced clearly. If statements, service reports or other relevant documents are already available, these should also be made publicly available.

Public involvement can be performed at different stages of the permitting procedure. However, following Article 6(2) of the Aarhus Convention, the public shall be informed at an early stage of the environmental decision procedure. Thus, some Member States already require public involvement at the stage of defining what should be included in the assessment file; others, however, invite the public to comment on the finalised assessment documents.

According to Article 6(2) and the Guidance document of the Aarhus Convention, the following information shall be made available to the public:

Assessment of permit application

Public involvement can be performed as:

- Public notice
- Internet
- Hearings

Should be performed as early as possible within the authorisation procedure

Reference

The Aarhus Convention, 'An implementation guide', United Nations, 2000

Further reading

<http://live.unece.org/fileadmin/DAM/env/pp/acig.pdf>

Table 4.2-5: Overview of information provided to the public

Text Aarhus Convention	Explanation
<i>'Information about the proposed activity and the application on which a decision will be taken'</i>	Public authorities must at least make the application available for inspection. The publication notification may include information on the: • type of waste management activity • proposed technology • exact location and the project applicant and • any other information that is necessary for the public to fully understand the scope and potential consequences of the proposed activity
<i>'The nature of possible decisions or the draft decision'</i>	Nature of decision making refers to e.g. permit, registration, license
<i>'The public authority responsible for making the decision'</i>	Identify the public authority responsible for making the decision; identification should be complete enough to enable the public concerned to contact the identified person or body
<i>The envisaged procedure, including, as and when this information can be provided: (...)</i>	The information must at least include the following issues: • Information/Invitation to participate in public procedure • Information about how and when public can gain access to further information • Time and venue of any • Envisaged public hearing • Who to contact

After the public participation, the applicant and the concerned authorities have to be informed about all comments and objections. The relevant authorities shall get the possibility to check and revise their comments due to public objections.

Regarding the involvement of the public, a Best Practice Example from Ireland is described shortly in the following box:

■ **Public access to licensing files** and other relevant information about permitting procedures is realised in Ireland by following the policy of openness and transparency. The available material includes summary details of the licence applications and the related documents and annual reports. Currently, about 40,000 pdf documents are available online.

See chapter 2.2.7 of the practical manual

Assessment of permit application

Information to public necessary:

- Proposed activity
- Draft decision
- Responsibilities
- Procedures

Further reading

Best practice example in practical manual: chapter 2.2.7

Consideration of objections

The public and other authorities have the possibility to raise objections, either during the public hearings or in written form. The competent authority then:

- notifies the sender that they received the objection;
- organises further workshops/hearings/discussion rounds to discuss the objection;
- assesses the objection, possibly carries out further investigations on the case or requires further documents from the operator;
- decides whether the objection is justified and whether to take it into account by setting additional conditions or by reviewing the decision.

According to the objections received from the relevant authorities and during the public participation, the permit authority can decide to organise a discussion round in which the objections will be considered by the relevant authorities, experts and stakeholders, as far as such consideration is of concern for the result of the evaluation of the permit application. The discussions of objections will strengthen the decision basis of the permitting authority.

The consideration of objections should be performed as early as possible in the permitting procedure. However, the consideration of an objection is also possible within a certain time frame at the end of the procedure, after the decision on the permit was made public (e.g. 28 days of notification of a decision).

As a consequence of the consideration of objections, the relevant authorities can propose **additional conditions**.

Control of criteria and conditions (on-site inspections)

For most facilities, a **check of criteria and conditions set in the permit/registration requires on-site inspections** to approve the practical implementation of the set permit conditions.

In close cooperation with the facility operator, the authorities' expert or inspector should visit the site together with the operator. Usually, the operator is informed in advance to prepare for the inspection. Key conditions and questionable points should be announced in advance to the operator. An exemplary announcement letter is included in the practical manual (chapter 4, Further Tools).

Assessment of permit application

Consideration of objections in form of:

- *Notify sender*
- *Organise workshops*
- *Assess objections*
- *Decide on objection*
- *Take into account as early as possible*

Further reading

Letter of advice to announce inspection included in chapter 4 of the practical manual

4.2.3. Issue of permit

Formulation of permit

This step includes the formulation of a permit, setting the content of the permit including the explanation of conditions, information about monitoring and inspection and the legal specifications.

The permit should be limited to the necessary content, tightly written, understandable, and receiver-oriented. The content has to be expressed clearly so that the applicant and the authority can see the positive and negative regulatory content of the permit.

The following information is essential:

- Delivery note (with delivery forms)
- Date of the application
- Name of the applicant
- Address of the applicant
- Type of approval with indication of legal basis (short term)
- Exact location of the project
- Exact name of the application object
- Exact description of the facility
- Decision to the immediate enforcement (if requested)
- Cost calculation

The application documents shall be further checked and occurring inconsistencies shall be cleared. If no open issues occur, or if all open issues are solved, the decision will be made including a justification. In the justification the essential factual and legal grounds have to be presented, which are essential for the decision of the permitting authority, and the specific features of the case have to be indicated. It has to be made clear that with the project, under consideration of additional conditions, permit conditions, eligibility requirements, especially environmental protection measures according to the state of the art, but also other public regulations, are fulfilled. The justification has to be clearly structured and shall be provided with a legal and technical assessment for the different areas of law covered by the decision.

Issue of permit

Formulation of permit:

- *Formulation of permit*
- *Setting the content of permit including explanation of conditions*
- *information about monitoring and inspection*
- *legal specifications*

Issuing a permit

To the permit a legal remedy shall be attached. Besides, the address of the competent administrative court has to be indicated. The permit must be signed and has to bear an official seal.

Respondents from different EU Member States indicated the following examples of best practice when asked to provide best practice examples on issuing permits/registration (e.g. conditions, exemptions, national specifications).

Table 4.2-6: Best Practice Examples for issuing permits/registration

MS	Best Practice Examples for issuing permits/registration
AT	<i>Pre-assessment of the permit before formal hearing</i>
DE_HE	<i>Information and various guidance documents available for download: http://www.hlug.de/start/luft/downloads/downloads-genehmigungsverfahren.html</i>
ES	<i>Permitting models for hazardous waste</i>
FR	<i>For registration there are standard provisions. For registration/permitting there is either Ministerial Decrees containing minimal provisions or a referential for national specifications.</i>
IE	<i>Tiered system of permitting</i>
NL	<i>Fully electronic permit system for requesting permits</i>
UK	<i>On-line registration system for exemptions</i>

Issue a permit

Summary of Best Practice Examples for issuing permits/registration in EU Member States

4.2.4. Follow-up

Information storage

In order to allow easy access to permit files for stakeholders and the general public, appropriate data management and storage techniques are necessary during the follow-up stage. The available data can be managed in both electronic and hardcopy form and information can be stored in paper form as well as in electronic databases (local, central, etc.). The access to information can be limited to the competent authority or organised as open access for other stakeholders and the general public.

The following box provides information on how permit related data and underlying information is managed and stored in different EU Member States.

Example on Member States' implementation

What kind of data management for documentation and storage of permit and underlying information do you use?

17 respondents provided information related to the data management and storage of permit related information. Most of the respondents manage data in both electronic and in hardcopy form. The same applies for data storage where relevant information is stored in paper form as well as in electronic databases (local, central, etc.).

In most of the cases data is stored in local databases with access limited to the competent authority, central databases with access limited to the central authority and open databases with open access for general public. In few cases respondents indicated that local databases and central databases (with authorised access for other authorities) are in place.

A number of respondents provided additional explanations to their responses, in particular:

MS	Description of data management and storage
EE	<i>Open databases actually has two parts: 1) open part for everybody and 2) closed part for competent authorities.</i>
IE	<i>The Environmental Protection Agency is committed to being open and accessible. Licence application and enforcement files are available to the public for viewing both in hard copy and electronically - see following link for more details: http://www.epa.ie/about/info/files/ http://www.epa.ie/about/info/info/ Local Authorities are also required to provide public access to permitting files and there is a publically accessible register of waste permits issued by Local Authorities: http://www.epa.ie/wastepermit/</i>
NL	<i>Most national and also a part of regional/local permits are actively published of the authorities.</i>
UK	<i>Application for permit may be paper or electronic issued permits and supporting information is on a public register apart from commercial-in-confidence material. The names, types and locations of businesses handling</i>

Follow-up

Examples from Member States regarding data management, storage and access

Further reading

Best practice example in the practical manual: chapter 2.2.7

<http://www.epa.ie/about/info/info/>

MS	Description of data management and storage
	waste, or producing hazardous waste, are available online via a postcode search through the regulator's website, together with the reference number for the permit, registration or exemption. Further details are available from on receipt of an email enquiry.
UK_SC	A more sophisticated online application, storage, and public access system is currently under development.

Follow-up

Summary of Best Practice Examples for monitoring/follow-up in EU Member States

In relation to data management and storage/accessibility of permit related information especially the already introduced Best Practice Example from Ireland can be highlighted (see chapter 2.2.7 of the practical manual).

Communication of issued permits to the public, other authorities, etc.

The decision on the permit application should be announced/made available to the public. The information provided to the public shall at least include:

- operative part of the permit
- information about legal remedy
- a statement that with the end of the publicity of the permit documents, the permit applies as delivered also for third parties who have no objections
- an indication where and when the decision and its justification can be viewed or requested

For further information please also review Chapter 4.2.2, Participation of other authorities, the public and other experts.

Using of information for inspection planning

The available information should be used during the inspection planning procedure. Especially the content of the permit, such as the type and quantities of waste that may be treated, technical and any other requirements relevant to the site concerned, safety and precautionary measures which need to be taken, monitoring and control operations, etc. should be taken into consideration during planning of inspections (e.g. for defining the scope of the inspection plan, carrying out risk assessments, setting priorities, defining objectives and strategies, etc.).

Information about the permit procedure, the facility and operator (e.g. was cooperation between operator and authority established during procedure; have conditions been implemented smoothly and without time delay, etc.) could also be of use to plan further inspection and inspection intervals.

Respondents from EU Member States indicated the following examples of best practice when asked to provide best practice examples on monitoring/follow-up (e.g. reporting protocols, handling of information).

Further reading

Best practice example in the practical manual: chapter 2.2.7

Table 4.2-7: Best Practice Examples for monitoring/follow-up

MS	Best Practice Examples for monitoring/follow-up
DE_HE	<i>Various guidance documents available (e.g. waste generation, treatment facilities)</i>
FR	<i>Data system for monitoring emissions into air, water, soils and waste production and treatment</i>
IE	<i>EPA licences and LAs issued permits are available on the internet</i>
NL	<i>National database system for registering waste streams</i>
PT	<i>Publication of annual reports (Relatórios anuais)</i>

Follow-up

Summary of Best Practice Examples for monitoring/follow-up in EU Member States

4.2.5. Training, cooperation, guidance

As waste management operations include a wide variety of organisation structures and technical equipment, permitting authorities need expertise knowledge, qualification and regular training to facilitate a smooth permitting procedure. As authorities can be involved on different levels (e.g. including local and municipal level) the main objective should be to harmonize the quality of the permits.

In this regard, the Member States were asked to provide information about whether training, guidance and assistance for the staff is provided and to what extent. The following box summarises the information.

Example on Member States' implementation

Do you provide training/guidance/assistance to the staff involved in permitting under waste legislation?

15 Member States provided information about the provision of training and guidance, showing that the majority of the authorities (80 %) provide a mix of all available options, in particular:

- Supporting **networking and cooperation** amongst involved authorities with organisation of regular meetings, platforms, exchange programmes (13 answers)
- Providing **training** to the concerned authorities e.g. through regular training seminars, buddy system, etc. (13 answers) and **assistance** e.g. establishing a help desk, hot line, computer based information system, etc. (12 answers each)
- Elaborating and distributing **guidance** for issuing and handling of permits, e.g. guidance on particular facilities or for particular waste streams (12 answers)
- More or less same important is the application of **standardised permitting formats**

(see also Table 4.2-8)

Table 4.2-8: Overview of information on training/guidance and support

MS	Description of trainings/guidance/support to the staff in place
AT_VI	<i>Applies a mix of measures including the following: training of new employees (buddy system), seminars, team meetings and regular meetings of regional authorities.</i>
AT_VO	<i>A measure of training of new employees (buddy system) is in place.</i>
BE_WA	<i>The Local authorities are issuing permits based on advice and experience of regional competent authorities. Except the advisory service from the regional level to the local, other measures in place for assistance include occasional meetings between involved authorities and phone and electronic</i>

Training, cooperation, guidance

Examples from Member States regarding training, cooperation and guidance

Further reading

Best practice examples on training, cooperation and guidance within the practical manual: chapter 2.2.9 and 2.2.10

MS	Description of trainings/guidance/support to the staff in place
	contacts.
DE_HE	<i>An implementation guide for enforcement of the law on waste disposal includes inter alia standardized templates and editing information for investment approval/monitoring and certain waste streams. Further measures in place are: trainings aids, experience exchanges, templates and regular staff meetings. Information exchange platform is available over the software product "MOSS" to the Hessian environmental authorities.</i>
EE	<i>Advisory service is available on interpretation of legislations, problem solving solutions related to the permits' issuance.</i>
ES_AN	<i>Two type of advisory measures are in place: in electronic form – a computer based assistance and face to face meeting on a regular basis</i>
FR	<i>A mixture of different measures is in place, starting from the guidance documents, software solutions, helpdesk, over regular training sessions and computer based information exchange platform. Further, the Ministry gathers inspectors 4 times a year and assists them in their daily work on the field, if necessary. Additionally, an approval is required for becoming a state official inspector. This is made by the Ministry for the assessment of a permit application.</i>
IE	<i>EPA uses a general licence template with additional standard conditions for landfills, waste transfer stations and composting which are basis for waste licences issued. EPA understands Local Authorities (LAs) also have templates for Waste Facility Permits and Waste Collection Permits and EPA issued guidance to LAs which included template application forms for Waste Facility Permit, Cert of Registration and Waste Collection Permit applications. Training is provided on an on-going basis, as well as to 34 LAs on the implementation of LA Waste Facility Permit, Cert of Registration and Waste Collection Permit functions. Forums for Waste Facility Permitting and Waste Collection Permitting have been established for information exchange, along with an Environmental Enforcement Network (EEN) which brings together all authorities responsible for environmental regulation.</i>
LT	<i>Guidance document is available on the web-site, standard application and permit forms are developed, along training courses, seminars, workshops. Additionally, a computer-based assistance exists.</i>
NL	<i>Different measures are in place starting with training on the job and basic training, software applications and information exchange platforms to meeting for specific waste activities.</i>
UK	<i>Permitting Training Programmes and technical advisors are available.</i>
UK_SC	<i>Generic licensing/permitting training provided; backed up by specialist training courses where need identified (e.g. for landfill; composting); Permitting Training Programme supported by guidance; Mentoring schemes are also used as well as competency framework is being developed; Specialist waste team provides support and produces guidance. Team meetings are organized;</i>

Training, cooperation, guidance

Examples from Member States regarding training, cooperation and guidance

Further reading

Best practice examples on training, cooperation and guidance within the practical manual: chapter 2.2.9 and 2.2.10

Regarding the involvement of other authorities, two Best Practice Examples are described shortly in the following box:

- The Austrian (Vienna) permitting system aims at an efficient implementation of waste legislation with realising a good **cooperation amongst the involved** authorities and a strong support/cooperation with the plant operator. This is realised by regular training of the staff involved and the operator, by introducing a “buddy system” for new permitting staff and by communicating new developments in waste and environmental policy. One expert is in charge for the entire permitting procedure functioning as a contact person both for the authorities and the operator. Relevant information is available and managed by this contact person.

See chapter 2.2.9 of the practical manual

- The Estonian system for **training for authorities involved in permitting** and inspections foresees training sessions on a regular basis. Trainings are focusing on topics related to the permitting procedure, i.e. how to interpret legislation and how to solve problems in practice and on practical issues, i.e. the presentation of new technology. Trainings also include site-visits.

- **See chapter 2.2.10 of the practical manual**

Respondents from EU Member States specifically pointed out the following examples of best practice when asked to provide best practice examples for training, guidance and networking.

Table 4.2-9: Best Practice Examples for training/guidance/networking

MS	Best Practice Examples for training/guidance/networking
DE_HE	See DE_HE answers in Table 4.2-8
FR	The Ministry gathers inspectors 4 times a year for a workshop. On a daily basis the Ministry publishes feedback from inspectors on the internet
IE	Environmental Enforcement Network
NL	National platforms for improvement of regional waste enforcement
UK_SC	Introductory and specialist courses in waste regulation

Training, cooperation, guidance

*Examples from
Member States
regarding training,
cooperation and
guidance*

Further reading

*Best practice examples
on training,
cooperation and
guidance within the
practical manual:
chapter 2.2.9 and
2.2.10*

5. Inspection and Monitoring

5.1. Inspection and monitoring

Inspection and monitoring procedures are necessary to assess whether the practice of operation is in line with the conditions set in the permit documents, thus enabling a thorough enforcement of EU and national waste legislation on the ground.

As regards enforcement practice, EU legislation (WFD) divides between

- **Inspections**
- **Monitoring and control**

Inspections

The following **waste treatment establishments** need to be inspected by the competent authority on a regular basis (Article 34 WFD):

- Waste treatment operations
- Professional waste collectors or transporters
- Brokers and dealers
- Hazardous waste producers

Inspections on collection and transport operations shall cover the origin, nature, quantity and destination of the waste collected and transported.

While planning inspections MS may take into account the registration of the facility to the Community Eco-Management and Audit Scheme (EMAS).

Regarding **landfill operations** it is specified in the Landfill Directive, that authorities are obliged to carry out on-site inspections, in particular before the start of the operation and finally before closure (Article 8 and 13(b) Landfill Directive).

In general there are three types of inspections:

- Compliance checks during the permitting phase inspecting the compliance with the conditions set before starting the operation
- Regular (routine) inspections following the provisions set in the legislation and following an inspection plan
- Non-routine inspections (e.g. on basis of complaints)

A distinction between announced and not-announced inspections is also made.

Monitoring and control

Permits for **waste treatment facilities** need to include specifications to the monitoring operations as may be necessary for the facility (Article 23(1)(e) WFD).

Enforcement:

- *Inspections*
- *Monitoring and control*

Further reading:
Procedural requirements for permitting are explained in the legal chapter 3.

This applies also for **landfills** (Article 7(f) and 9(c) Landfill Directive). The Landfill Directive (Article 12, 13, Annex III) together with the WAC Decision specifies in great detail what kind of monitoring and control systems have to be applied during operation and after-care phase including information on sampling, limit values, testing and reporting for landfill operations.

Note:

Competent authorities are obliged to carry out regular **inspections** to check the implementation status of a waste management facility in comparison to the control referential (i.e. the permit). The inspection also covers the operating conditions.

The application of **monitoring and control procedures** is in general in the **responsibility of the operator**. However, the monitoring and control plan has to be prepared according to the waste legislation and in close cooperation with the competent authority. The operator is also obliged to **report** on the results of the monitoring programme on request or on a regular basis.

Waste management operations include a large variety of involved stakeholders, of different applied technologies and of size and design. Therefore, thorough planning of inspection activities, taking those issues into account, is crucial in order to utilise available inspection capacities to a full extent.

The following chapter therefore describes the steps to be followed when planning and realising inspections.

Enforcement:

- *Inspection*
- *Monitoring and control*

Further reading:
Procedural requirements for permitting are explained in the legal chapter 3.

5.2. The inspection cycle

Scope and background

The IMPEL Network elaborated a step-by-step guidance book for the planning and realisation of environmental inspections called “Doing the Right Things II”. The guidance includes the inspection cycle, describing the steps to be followed when planning and realising inspections at facilities.

Basis for elaboration of the step-by-step guidance is the EU Recommendation providing minimum criteria for environmental inspection (RMCEI). Pursuant to the RMCEI all inspection activities should be planned in advance, by having inspection plans that cover the entire territory of the MS and all the controlled installations.

The plans should be based on the EC legal requirements to be complied with a register of controlled installations, a general assessment of major environmental issues in the area and a general appraisal of the state of compliance of the controlled installations. Plans should take into account the risks and environmental impacts of installations and any available relevant information on the controlled installations, such as reports of operations, self-monitoring data, environmental audit information, environmental statements and results of previous inspections.

Planning is not an isolated activity, but closely interlinked with other activities. Therefore, the topics the RMCEI addresses can be grouped as:

- *Planning*: Establishing plans for environmental inspections
- *Execution*: Performing inspections and investigating accidents, incidents and occurrences of non-compliance
- *Reporting*: Reporting on inspections, accidents, incidents and storing inspection data
- *Evaluation*: Evaluating the implementation of inspection plans for internal purposes and reporting to the EC or other 3rd parties.

Inspection plans should be available to the public according to the “Aarhus” Directive (i.e. directive on public access to environmental information).

From the first “Doing the Right Things” project it was learned that practitioners find the minimum criteria on planning in the RMCEI useful. However, they also noted some desirable improvements, including the revision of the RMCEI and/or by producing further guidance. Hence a step by step environmental inspection cycle was developed, including the following steps:

Inspection

Inspection cycle:

- *Strategic Planning*
- *Execution Framework*
- *Realisation of Inspections*
- *Monitoring/Follow-up*

Further reading:
Information to RMCEI is included into the legal chapter 3.

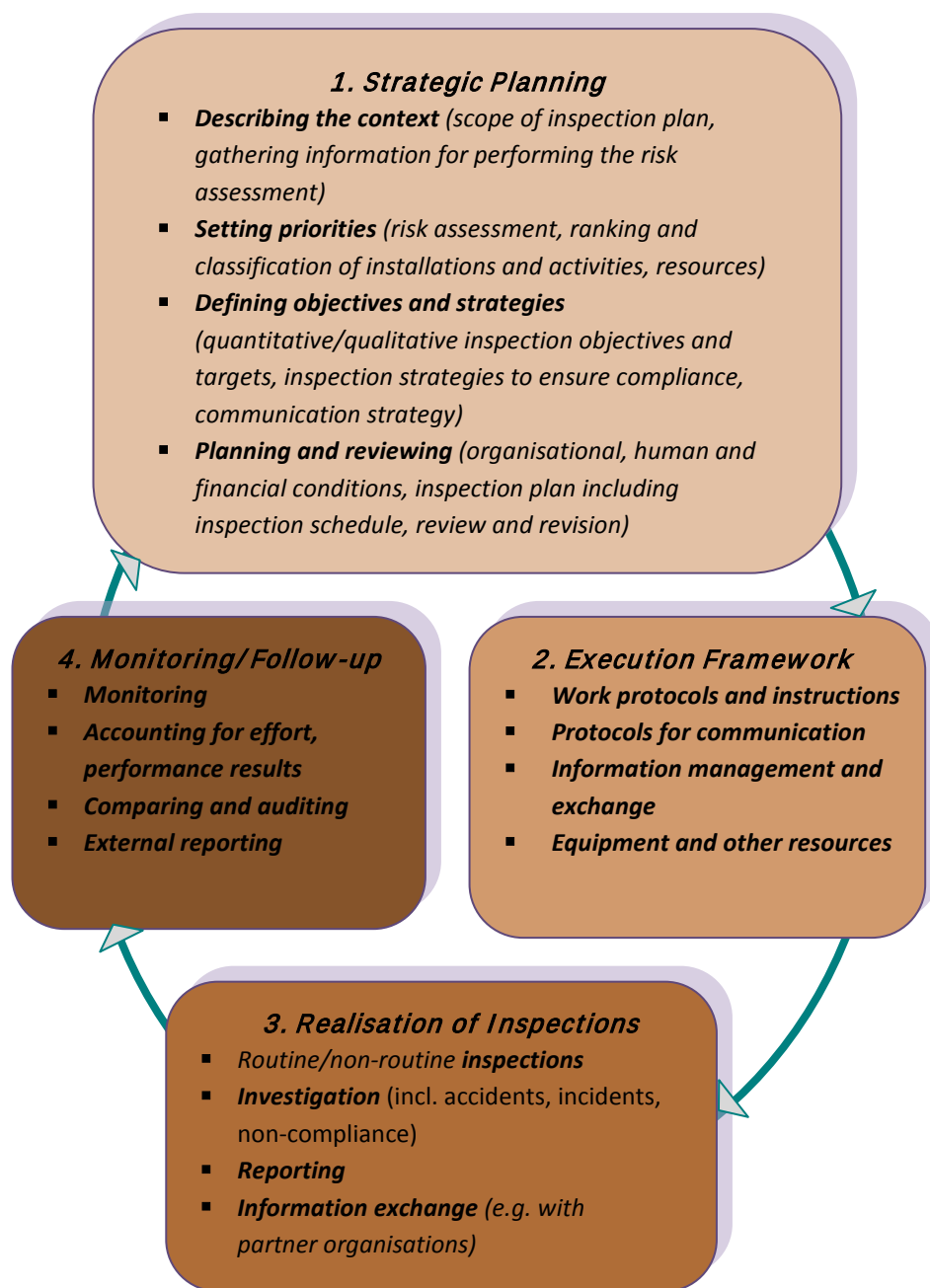


Figure 5.2-1: Environmental Inspection Cycle [inspired by: IMPEL DtRT II 2008]

Within all steps of the inspection cycle **training** of competent authorities as well as the organisation of effective **networking** amongst officials in competent authorities on local, regional and national level, etc. is important to effectively realise and follow up inspections.

Inspection

Inspection cycle:

- Strategic Planning
- Execution Framework
- Realisation of Inspections
- Monitoring/Follow-up

Reference:

[IMPEL DtRT II 2008]
 “Doing the Right Things II”, available as download at:
http://impel.eu/key-projects/key_1/doin-q-the-right-things

5.2.1. Strategic Planning

Strategic planning is a cyclic process, since the review of the inspection plan may lead to developing a new inspection plan or modifying the existing one. The strategic planning process, described in the IMPEL guidance [IMPEL DtRT II 2008] contains four main steps:

- Describing the context
- Setting priorities
- Defining objectives and strategies
- Planning and reviewing

Describing the context

In the first step the inspecting authority looks at its statutory tasks. The scope of the inspection plan is set and the necessary information is collected to perform the risk assessment.

Describing the context is a necessary input for identifying and analysing the risk.

A full inventory of the context within which the authority has to operate is vital to define its activities and set the scope of the inspection plan. This scope is normally identified by elements such as:

- The general mission and objectives of the authority
- Its statutory tasks and competences
- National, regional or local policies

Furthermore, an inspectorate may want to take into consideration particular opinions expressed by the general public, NGO's, industry or other relevant stakeholders.

On a more detailed level, information about companies and installations that fall under the competence of the authority concerned can be gathered, including data on their:

- Environmental impact
- Permit situation
- Compliance behaviour
- etc.

Strategic planning

Main steps:

- Describing the context
- Setting priorities
- Defining objectives and strategies
- Planning and reviewing

Reference:
 [IMPEL DtRT II 2008]
 "Doing the Right
 Things II", available
 as download at:
http://impel.eu/key-projects/key_1/doing-the-right-things

Setting priorities

Data gathered in this step is used for carrying out the risk assessment process, which is included in the second step. The risk assessment results in a list of installations or activities that are ranked and classified. Besides, in this step the list of priorities is developed which is the input for the next step (i.e. defining objectives and targets).

The following information sources could deliver valuable information to perform a risk assessment:

- Waste facility register, holding information on location, size and type of waste facilities
- State of compliance, e.g. information about previous inspections in form of inspection reports etc.
- Risk and environmental impact studies performed for e.g. certain waste types, waste streams or facilities e.g. on national/regional level
- Voluntary agreement schemes (e.g. EMAS), providing information on waste management of the facilities

Only some Member States provided information about what information is used for inspection planning. The following box gives a brief summary on MS responses.

Example on Member States' implementation

Which information do you use for risk assessment based inspection planning for waste management operations?

Seven respondents provided information regarding the information used showing that:

- Information on state of compliance is valuable information especially for such facilities not requiring a permit (e.g. non-hazardous waste producers, waste transfer stations, waste broking and dealing and waste pre-treatment operations).
- Information on risk and environmental impacts is in particular used for larger facilities, i.e. waste incineration facilities and landfills but also for hazardous and non-hazardous waste producers.
- Information from the waste register is in particular used for waste collection and transfer stations.
- The participation and information from voluntary agreements and management systems such as EMAS (Eco Management and Audit Scheme) are up to now of minor importance for the planning of controls, as such systems are not widely implemented in the waste management sector.

Strategic planning

Main steps:

- Describing the context
- Setting priorities
- Defining objectives and strategies
- Planning and reviewing

Reference:
 [IMPEL DtRT II 2008]
 "Doing the Right Things II", available as download at:
http://impel.eu/key-projects/key_1/doin-q-the-right-things

Some Member States also provided additional comments, in particular:

- **France** stated that incidents at the facility or complaints about it are other information sources.
- In the **United Kingdom** the information supplied with permit applications, compliance data and monitoring data is used as information source.

The **method used for the risk assessment** can also differ between inspecting authorities, but should be objective in nature and simple to apply.

Limited resources on the one hand and a multitude and variety of statutory tasks on the other hand make it necessary to set clear priorities. Priorities are set by using the outcome of the risk assessment, which could be a list or an overview of the identified/selected installations and activities and their respective risks. These installations and activities can, on the basis of their assessed risks, be classified, for example, in 'high risk', 'medium risk' and 'low risk' installations. In addition the inspection approach for each level can differ: the higher the risk level, the more attention it will get from the inspecting authority. As a consequence, the inspection approach will also determine the claim on the available resources, and is therefore equally relevant for the inspection plan and in the inspection schedule.

As regards inspection of waste management facilities it shall be considered that risk assessment and strategic planning have to be made at an early stage in order to determine which areas and operations to prioritise by inspections and monitoring activities.

As mentioned, in the first step the inspecting authority needs to set the scope of the inspection plan (e.g. general mission and objectives, statutory tasks and competences) and to collect all required information (e.g. information about companies and installations, including data on environmental impacts, the permit situation, the compliance behaviour) for performing the risk assessment. In addition, at this step, the inspecting authority may consider options expressed by various stakeholders (e.g. the general public, NGO's, industry).

Good practices regarding strategic planning of inspections can be found in various EU MS. The methods used for the risk assessment can differ between inspection authorities. The following box shortly explains examples from Sweden and the Netherlands.

Strategic planning

Main steps:

- Describing the context
- Setting priorities
- Defining objectives and strategies
- Planning and reviewing

Reference:
 [IMPEL DtRT II 2008]
 "Doing the Right Things II", available as download at:
http://impel.eu/key-projects/key_1/doin-g-the-right-things

Further reading

Best practice examples in the practical manual: chapter 2.3.1 and 2.3.2

■ The Swedish **methods for risk based classification and ranking of inspection objectives** are made with reference to the potential risk of the installation/activity as such and with reference to the experiences the inspection authority has obtained concerning how each operator runs the installation, how the management is performed and earlier records concerning contacts with authorities, etc. In order to create an overview of the risk assessment concerning the installations and activities a typical risk and experience score is applied and plotted. **See chapter 2.3.1 of the practical manual**

■ In the Dutch **waste stream based risk analysis** thirteen risk factors have been selected and for each factor it is indicated on what basis it will be assessed and how the severity of the risk is determined. The factors are divided into two effect factors (i.e. characteristics of the waste and waste cover) and 11 chance factors (e.g. export dynamics, risk destination countries, treatment costs in the NL, number of disposers, etc). For the final ranking a risk analysis is not the only aspect. Other factors such as the compliance behaviour, political priority etc. play also a role. Furthermore, future developments in the waste market, laws, regulations and policies, etc. are considered. **See chapter 2.3.2 of the practical manual**

In this connection, EU MS were asked to provide information on the applied instruments and methods for planning inspections of waste management operations. The following box gives a brief summary on MS responses.

Example on Member States' implementation

Which instruments/methods do you use for planning inspections of waste management operations?

In total 15 respondents provided information regarding the applied instruments/methods for planning inspections of waste management operations. Most MS apply a combination of different instruments:

- Almost all respondents (i.e. 14) indicated that inspection plans are used for the planning of inspections
- In 8 MS inspections are planned in accordance with legal provisions on periodic inspections
- In 6 MS risk assessment based instruments are in use
- An incident driven approach instead of a planned approach was also indicated by 6 stakeholders

Some Member States also provided additional comments, in particular:

- **France** stated that facilities under the Seveso, IPPC, Landfill and IED

Strategic planning

Main steps:

- Describing the context
- Setting priorities
- Defining objectives and strategies
- Planning and reviewing

Further reading

Best practice examples in the practical manual: chapter 2.3.1 and 2.3.2

Directives have to be inspected at least once a year.

- In **Ireland** inspection planning is carried out using RMCEI and risk assessment categorisation. This is done at EPA level for its inspections and by Local Authorities (LA) for their inspections (coordinated by the EPA). Enforcement policies are also in place in EPA and all LAs. Further explanations are given in Sections 1.1.2, 1.2 and 1.3 of the “*Focus on Environmental Enforcement in Ireland Report 2006-2008*”, available at: <http://www.epa.ie/downloads/pubs/enforcement/focus/#d.en.27305>

- In the **United Kingdom** a risk based approach is used to determine the inspection frequency. The inspection frequencies are planned at the start of each financial year. A compliance assessment scheme is used to reduce inspections for compliant operators and increase inspections for non-compliant operators.

In relation to **inspection frequencies** it can be summarised that most of the installations are inspected yearly, every two years or in larger inspection intervals. Only in a few cases more frequent inspections are required (e.g. half-yearly, quarterly). The stakeholder responses are summarised in the following box.

Example on Member States' implementation

What inspection frequency do you apply for different types of waste management operations?

Seven respondents provided information regarding the frequency of inspections, showing that:

- The majority of facilities is **inspected yearly**, i.e. hazardous waste producer, WEEE sorting and dismantling facilities, waste re-use-, recycling-, incineration- and co-incineration facilities and landfills.
- Non-hazardous waste producer and waste collection facilities are mainly inspected **every two years**.
- Waste sorting, transfer and pre-treatment is inspected **yearly or less frequent** in the majority of the MS.

Some Member States also provided additional comments, in particular:

- **Belgium (Walloon region)** stated that inspection plans and priorities are defined annually. It's not possible to specify a unique frequency for each type of activity.
- In **France** the inspection frequency depends on the nature of the facility environmental impacts, on the results of the previous inspections and on specific national actions planned by the Ministry.
- In **Ireland** and **the United Kingdom** the inspection frequency depends on the results of the risk assessment.

Strategic planning

Main steps:

- *Describing the context*
- *Setting priorities*
- *Defining objectives and strategies*
- *Planning and reviewing*

- In **the Netherlands** inspections of waste plants are mainly done by regional/local authorities. There are 12 provinces (regional authorities) and more than 400 local authorities. Each authority defines its own inspection frequency.

- In **Germany** (Hesse Region) frequency is set based on guidance for enforcement and inspection of waste facilities.

- In **Estonia** some of the inspections, e.g. of waste transfers, broking/trading are not carried out regularly but if necessary.

Defining objectives and strategies

Within the step the responsible authority for inspections identifies quantitative and qualitative inspection objectives and targets. The inspection strategies can be defined or modified in order to meet the objectives and targets. The output of this step (i.e. objectives, targets and inspection strategies) will be part of the input to the next planning step.

Based upon the priorities, the inspecting authority sets targets and objectives. In order to establish whether these objectives and targets can and will be met, the output and the outcome must be monitored. This is generally done by using performance indicators. Examples of performance indicators on outcome that may be useful are:

- The amount of incidents or complaints occurring
- The level of compliance
- The actual achievement of reduction targets for certain pollutants or certain risks at the site that are directly regulated or enforced by the inspection authority
- The Improvement of air, land and water quality through the actions of the inspectorate and/or in co-operation with other authorities

The inspecting authority may want to link its objectives with certain inspection strategies to ensure that its objectives can be reached in both an effective and efficient manner, causing minimal burdens for the company and the authority. It may furthermore want to adopt and use certain communication strategies for exchanging information internally and with other competent authorities.

Subjects that can be addressed are:

- The co-operation and information exchange between inspecting organisations and other authorities
- The character and form of inspections
- The effect of the operator's behaviour on the inspection frequency
- The path of administrative and/or criminal follow-up upon non-

Strategic planning

Main steps:

- Describing the context
- Setting priorities
- Defining objectives and strategies
- Planning and reviewing

compliance, which must be firm, fair and unambiguous in case of non-compliance

Planning and reviewing

In the final step, the inspection plan is developed, including an inspections schedule. The inspection plan can be seen as a strategic plan and does not contain operational information.

An inspection plan describes:

- The objectives that the inspecting authority, given its mission and tasks, wants to achieve
- The policy, environmental, legal, organisational, financial and other relevant conditions under which the inspecting authority has to perform its inspection activities
- The strategies which the inspecting authority has adopted for performing its inspection activities
- How priorities with regard to inspection activities are set, taking into account these objectives, conditions and strategies
- The priorities themselves

The general public has the right to know what the inspecting authority has planned for the defined period (it should be transparent) and the plan should therefore be available to the public. However, the inspecting authority may choose to withhold parts of the plan (e.g. the inspection schedule). This could be typically due to the inclusion of unannounced inspections or other unannounced enforcement actions which must be without warning in order to be effective.

The inspection plan will be used to compile an inspection schedule. This schedule should include information such as names of installations, dates, type of inspections, inspectors assigned, etc.

When developing the inspection plan and inspection schedule it is necessary to consider the organisational, human and financial circumstances. Most importantly the inspection plan and the inspection schedule should be in balance with the available resources and budget and should be in line with the organisational structure.

An example of effective allocation of available resources is presented within the practical manual (i.e. **chapter 2.3.3**; Administrative structure to enforce inspections).

Strategic planning

Main steps:

- Describing the context
- Setting priorities
- Defining objectives and strategies
- Planning and reviewing

Further reading

Best practice
example in practical
manual: chapter
2.3.3

■ In the **Polish administrative structure to enforce inspections** the Chief Inspectorate plans inspection activities on central level assigning tasks and actions for the regional levels (Voivodship Inspectorates). The Voivodship Inspectorate has to effectively allocate available resources. The Polish Central Inspectorate bundles responsibilities for enforcing waste legislation and coordinates inspections at regional level by setting priorities for the focus of inspections (on a 4 years basis), giving instructions to the regional inspectorates about the setting of inspections plans, providing general guidance for realising inspections, elaborating guidance for inspection cycles (campaigns) and the direction of inspection activities for the following years. Additionally it is a forum for information exchange for inspectors.

See chapter 2.3.3 of the practical manual

The review and revision of the inspection plan is also part of this step. When the process continues after the step 'performance monitoring', it returns to this step. Based upon the monitoring and evaluation of the inspection plan (including the inspection schedule), it will be reviewed and possibly revised.

Respondents from EU Member States highlighted the following examples of best practice when asked to provide best practice examples for strategic planning of inspections (e.g. risk assessment, inspection strategies, communication strategies).

Table 5.2-1: Best Practice Examples for strategic planning of inspections

MS	Best Practice Examples for strategic planning of inspections
DE_HE	<i>Guidance for enforcement and inspection of waste facilities (Chapter 1)</i>
FR	<i>National action on the control of hazardous waste treatment circuits, national action on PCB elimination (annual reporting to the public)</i>
IE	<i>See document 'Focus on Environmental Enforcement in Ireland'</i> http://www.epa.ie/downloads/pubs/enforcement/focus/FoEE_Exec%20Summ_Ch1.pdf
NL	<i>Risk based waste stream description</i>

Strategic planning

Main steps:

- Describing the context
- Setting priorities
- Defining objectives and strategies
- Planning and reviewing

Further reading

Best practice example in practical manual: chapter 2.3.3

5.2.2. Execution Framework

Taking into account the type of inspections and facilities, the following authorities on national, regional or local level might be involved in planning and executing inspections:

- Environmental authorities
- Inspectorates
- Police services
- Custom services
- Notified bodies like the green dot organisation or Extended Producer Responsibilities (EPR) bodies

Example on Member States' implementation

Who is involved in realising inspections at waste management operations?

Following the responses delivered by the stakeholders, the **environmental authorities** on all three levels (national, regional, local) play a major role in realising inspections.

Inspectorates and **police services**, in particular on the regional and local level, are also involved in some Member States.

Custom services and **notified bodies** are involved to a minor extend and mainly on the national level.

Further specifications are made in the Netherlands and Ireland.

In **the Netherlands** on the regional and local level the inspectorate, police, etc. is sometimes involved, depending on the particular case.

In **Ireland** the majority of inspections are done by the EPA and by LAs as the primary waste enforcement authorities. Other authorities (e.g. the police service, customs, regional fishery boards, national parks and wildlife services) may also be involved in specific cases.

In general, it is a good approach to involve various authorities in planning and executing inspections, also including multi-agency access to information. In particular the collaboration with police services can be highlighted and could be strengthened in the future. There are several reasons why the police should be involved in planning and executing inspections, such as:

- Illegal waste sites and movements can only be made visible by 'open eyes' and by carrying out as many inspections as possible
- The police is 24h/365d in the field and the officers mostly know their district quite well (this is especially of importance for the identification of non-registered/illegal waste sites)

Execution Framework

- Involved planning and executing authorities
- Examples on MS practice

Source:

Police Bremen, Presentation at the IMPEL 'Waste Sites Workshop' (26-27 Sep. 2011, Frankfurt): Waste streams and waste sites from a police perspective

- In most of the cases competent environmental authorities have limited resources and are working exclusively during ‘office hours’
- The police can carry out traffic inspections (synergy effects could be used) and has the legal power to stop transports in case of any doubts
- Police knowledge should be used to create professional investigation records in waste movement crime cases
- The experience shows, that close cooperation with competent authorities and customs is an effective tool to carry out inspections

In order to ensure effective cooperation with authorities in other countries and with the police and customs, it is advisable to contact the highest level and convince the top management of the importance of joint actions. Concerning the police, it is useful to point out the aspect of collateral (non-environmental) crime present on waste sites.

Furthermore, in order to bundle knowledge and competences, the setting up of waste units and personnel particularly trained for planning and carrying out inspections at waste facilities, is an important tool. It is possible to incorporate such waste units into the existing structures of the inspectorates.

Example on Member States' implementation

Do you have specific waste units in inspection authorities?

Most of the respondents answered that specific waste units exist on either national or regional level. 8 out of 13 MS stated that such units exist on **regional level**, 7 out of 13 MS stated that such units exist on **national level**. Two stakeholders however stated that such units are not in place.

In Germany (i.e. Bremen) a special unit within the Bremen Police Department responsible for environmental protection has been established. The main driving forces to establish such a special unit were:

- Criminal acts which cost human victims and create illegal money
- Connections to other forms of crime, such as trafficking in stolen vehicles, receiving stolen goods, etc.
- Crime prevention, detection and investigation is the ‘job’ of the police
- Police knowledge is absolutely necessary for professional law enforcement
- Bremen is a ‘good place’ for waste inspections

3. Combination with other inspection issues

Another way to make inspections more effective is the association of

Execution Framework

- *Cooperation with authorities*

Source:

*Police Bremen,
Presentation at the
IMPEL ‘Waste Sites
Workshop’ (26-27
Sep. 2011, Frankfurt):
Waste streams and
waste sites from a
police perspective*

inspection issues. Waste facilities, especially large ones, have to comply with other requirements in the field of air pollution, waste waters, safety requirements etc. Therefore inspections might be combined with those issues and most of the Member States perform combined inspections.

Are inspections at waste facilities associated with other inspection issues?

The vast majority (10 out of 13) of the Member States does **combined inspections to other environmental issues** (e.g. air pollution control).

Waste inspections are also connected to safety and fire issues (7 answers) or to procure standard issues (4 answers).

Only a minority stated that inspections are not combined (2 answers).

UK (Scotland) commented, that inspections are generally not combined, but that there are a few circumstances where the inspections may be related to activities with complementary permits (e.g. using pulverized fuel ash in cement batching processes controlled under air pollution control legislation).

It was also stated from **Belgium** (Walloon region) that inspections might be combined with social aspects (e.g. illegal workers, tax fraud).

Execution Framework

- *Combination with other inspection issues*

Work protocols and instructions

Before inspections can be executed, it is obligatory to meet all necessary conditions. The working procedures and instructions, powers and competences, equipment and other resources should be in place.

In particular, the execution framework serves to facilitate the different inspection activities (e.g. compliance checking through site visits, enforcement actions like imposing sanctions, compliance assistance through organising information campaigns etc).

In addition, protocols and working instructions are developed and conditions for realisation defined. This step is required in order to ensure that inspection activities can be executed effectively, efficiently, professionally and consistently.

The execution Framework should at least cover the following issues:

- Protocols and working instructions for routine and non-routine inspections
- Procedures for imposing sanctions
- Development of inspection and enforcement handbooks
- Protocols for communication with the public (access to information) and with the Industry
- Information management and information exchange

- Conditions for realisation (including competencies, systems for planning, programming and monitoring, facilities and materials needed, maintenance and calibration of equipment, etc.)

Good practices regarding provision of protocols and working instructions exist in several EU MS. The following box shows such examples.

- In order to guide routine inspections at waste management facilities, the **German** Federal State Hesse provides concise **guidelines for routine inspections of waste management facilities**. In the course of site inspections, a checklist is used. Some of the issues covered are: environmental quality standards, storage capacity, classification of waste, etc.

See chapter 2.3.4 of the practical manual

- The **Lithuanian** Environmental Protection Agency developed a **check list for inspections at waste management operations** including indicative questions in order to support routine and non-routine inspections at waste management facilities. Inspectors use and fill out the list when realising inspections. Some of the questions are related to: environmental management systems, waste management, storing of waste data documentation, hazardous waste management, packaging and packaging waste, fees for environmental pollution, etc.

See chapter 2.3.5 of the practical manual

In relation to information management and exchange, the Irish example of good practice can be pointed out. The following table briefly describes the main point of the Irish system for storing and accessing enforcement information, including inspection/audit/monitoring reports.

- The **Irish** EPA follows an open approach to **provide stakeholders and the public with information from inspection activities**. Access to documents is provided at the **Irish** EPA offices at four locations in Ireland. The EPA website provides a list of files available at each office and a Public Viewing Procedure. Every effort is made to ensure completeness and accuracy of the files. Photocopying is available and a PC is made available for website access.

See chapter 2.3.6 of the practical manual

At this point it should also be mentioned that the **IMPEL Network** did valuable work especially on the site of the preparation and realisation of inspections. Other projects of IMPEL aimed at promoting and improving inspections and harmonising reporting forms for inspections. A recent IMPEL project called 'Waste Sites Project' aims at identifying good practices and developing a practical guidance tool for inspection of upstream waste

Execution Framework

*Good practice
regarding provision
of protocols and
working instructions*

Further reading

*Best practice example
in the practical
manual: chapter 2.3.5
and 2.3.6*

sites and for the promotion of compliance with waste law on these sites, by competent authorities in the IMPEL Member Counties. Information regarding this project and the corresponding Terms of Reference can be accessed via the IMPEL project library: <http://impel.eu/projects/waste-sites>

Respondents from EU Member States particularly highlighted the following examples of best practice when asked to provide best practice examples regarding the execution framework (e.g. work protocols, information management, equipment, allocation of resources).

Table 5.2-2: Best Practice Examples for execution framework

MS	Best Practice Examples for execution framework
DE_HE	<i>Use of computer-aided systems such as AIS-I (Facility Information System), ASYS (Waste Monitoring System), etc.</i>
IE	<i>Correspondence/reports generated and tracked through databases</i>

5.2.3. Realisation of Inspections

Routine/non-routine inspections

In this step the inspections are actually carried out, which means that the various inspection activities (aimed at compliance checking and compliance assistance) are prepared and executed. Traditional inspection activities are the (physical) routine (site) inspections, non-routine (site) inspections and investigations of incidents.

In most EU Member States various inspection activities are carried out, dependant on different waste management operations, in particular:

- Checking of reporting/monitoring results delivered by operators (e.g. paper work, administrative check)
- Physical inspections of facilities
- Physical inspections of products and/or materials (e.g. RoHS compliance, compliance with other product standards, compliance with the essential requirements on packaging waste)
- Routine site inspections (e.g. based on hazardous risk assessment schemes)
- Non-routine site inspections (e.g. on demand inspections, incident driven inspections)
- Single waste movement/transports (i.e. road, waterways, inland port, sea port inspections)
- Verification inspections (e.g. following accidents, incidents, non-compliance)

Execution Framework

IIMPEL Network

Realisation of Inspections

Further reading

Best practice example in the practical manual: chapter 2.3.4 and 2.3.5

Many of these activities can and should be executed according to standard protocols and working instructions. An example is the guidance for routine waste inspections provided by the German Federal State Hesse (see chapter 2.3.4 of the practical manual). The Lithuanian EPA prepared a similar checklist in order to support routine and non-routine inspections at waste management facilities in Lithuania (see chapter 2.3.5 in the practical manual).

The cooperation and information exchange with partner organisations is also an important part of this step. Information on inspection activities, i.e. inspection reports, also including accidents, incidents, occurrence of non compliance, their results and follow-up (e.g. imposed sanctions) should be stored in an accessible database.

Example on Member States' implementation

What kind of data management do you use for documentation of inspection information?

According to MS responses, **electronic reports and paper documentation** (11/10 answers from 12) are the most common way of documenting information on inspection activities carried out, their results and their follow-up.

In relation to **data storage**, paper storage (10 responses) and the use of local databases with access limited to the competent authority (9 answers) was indicated by most respondents. View Member States answered that local databases are applied enabling other authorities an authorised access (2 answers).

Some Member States also maintain **central databases** in most cases with access only to the central authority (6 answers), access to the general public (4 answers) or in minor cases with authorised access for other authorities (2 answers).

Regarding inspection frequencies it can be stated that inspection frequencies can vary significantly, dependant on the type of waste management operations and/or the EU Member State where inspections are carried out.

The following table summarises Member State responses when asked to indicate inspection frequencies applied to different types of waste management operations (i.e. **summary of most common answers by respondents**).

Realisation of Inspections

Member State practice

Inspection frequency

Table 5.2-3: Inspection frequencies applied in EU Member States

Waste management operations	Yearly	Every two years	Every three years	Larger intervals
Hazardous waste generator	X			
Non-hazardous waste generator		X		
Waste collection		X	X	
Waste sorting	X			X
Waste sorting/dismantling	X			
WEEE transfer	X			X
Waste broking/trading				X
Reverse logistics operations				X
Waste pre-treatment	X	X		
Waste re-use	X			
Waste recycling	X			
Waste incineration	X			
Waste co-incineration	X			
Waste landfilling	X			

As it can be seen in Table 5.2-4, most of the waste management operations are inspected on a yearly basis. With regard to waste collection, waste sorting, WEEE transfer, and waste pre-treatment the answers provided vary greatly (especially in case of waste sorting and WEEE transfer operations). On the other side, respondents indicated that non-hazardous waste generation, waste broking/trading and reverse logistics operations are usually inspected in larger intervals (i.e. > 3 years).

Non-licensed waste management operations are mostly inspected only if competent authorities become aware of their activities (e.g. complaints/information received from residents).

Respondents from EU Member States particularly highlighted the following examples of best practice when asked to provide best practice examples regarding the realisation of inspections (e.g. guidance for inspections, staff involvement, inspection formats).

Table 5.2-4: Best Practice Examples for realisation of inspections

MS	Best Practice Examples for realisation of inspections
DE_HE	<i>Guidance for the enforcement and inspection of waste facilities</i>
FR	<i>Inspection guideline to harmonise and optimise inspection procedures</i>
IE	<i>The EPA has developed targeted inspection templates for landfill and waste transfer sectors. In addition, templates have also been prepared for certain Inspections under WEEE and RoHS</i>
NL	<i>Checklist for essential requirements and RoHS</i>

*Realisation of
Inspections*

*Inspection
frequencies*

5.2.4. Monitoring/Follow-up

To ensure that all objectives and targets are met, it is necessary to monitor the output and the outcome. The monitoring results can then be used to:

- Check whether inspections objectives and targets have been met and the effectiveness of the inspection plan applying meaningful performance indicators
- To review and possibly amend the inspection plan
- To report internally, to the public and stakeholders, at national or EU-level

Monitoring can take place on different levels. On the inspection schedule level, regular monitoring of progress should be carried out in relation to performance indicators (e.g. planned number of inspections vs. actual inspections carried out). This should inform the execution of the schedule and may be carried out for example on a six-monthly or quarterly basis. This should also include monitoring of actions taken as a result of inspections or complaints e.g. legal notices issued. Performance monitoring should also take place at a higher level in relation to the success of the plan. This could include measurements against plan outcomes, against the objectives and measurable targets (e.g. general environmental improvements, increase in compliance rate), and external reporting of plan outputs/outcomes to national or EU level etc.

Example on Member States' implementation

Do you use the outcome of previous inspections for future inspection planning (e.g. reviewing inspection plans, reviewing inspection frequency)?

A number of MS provided answers and additional brief explanations to this question:

- In **Belgium** (Walloon region) the outcome of previous inspections is taken into account when preparing annual inspection plans.
- In **France** the outcome of previous inspections is used in case one or more previous inspections have highlighted a generic issue.
- In **the Netherlands** the outcome of inspections is used as input to the risk based inspection planning performed for major waste sectors.
- In the **UK, Germany** (Hesse region) and **Austria** (Vienna region) inspection frequency can be reduced if good compliance is proofed within inspections (and vice versa).
- In the **UK** (Scotland) any actions required following previous inspections are checked at subsequent inspections.
- In **Lithuania** the use of the outcome of previous inspection documentation

Monitoring/Follow-up

Explanation of follow-up procedures

is encouraged and stimulated.

- In **Estonian** inspection results are reported within a protocol and entered into a database. For each inspection, review records from previous inspections are taken into account.

Follow up of inspection activities and the prosecution of cases is an important part within the inspection cycle. The follow up stage also includes the incorporation of inspection information/results into the data storage system of a facility. It is important that inspection time/budget for this part and prosecution is not underestimated.

Follow-up procedures can include the following activities:

- The elaboration of administrative orders to the operator e.g. in terms of clean-up activities, technical improvement, transport of waste to other facilities, etc.
- Adaptation of permit conditions within administrative ruling procedure, e.g. setting of additional conditions / reformulation of conditions
- Withdrawal of a permit
- Setting of sanctions, fines and penalties
- Court procedures

In case of any irregularities, MS indicated the following follow up procedures:

Example on Member States' implementation

In case of irregularities, what procedures follow the inspection?

In total 12 stakeholders provided answers to this question. As their responses show, in most EU MS different follow-up procedures are applied in practice.

- However, all respondents apply **sanctions, fines and penalties**.
- Further **administrative order** (e.g. clean up, technical improvements, transport of waste to other facility, etc.) was also indicated by most of the respondents (i.e. 11).
- **Administrative ruling** in terms of permit conditions (e.g. additional conditions within permit) and **withdrawal of a permit** was selected by 10 respondents, respectively.
- 9 respondents answered that **court procedures** can be applied in case of irregularities. Additional explanations were provided by almost all respondents.

Monitoring/Follow-up

Member State practice

A number of respondents provided additional explanations to their responses:

MS	Administrative order
FR	<i>A system is in place to remind the legislation to the facility operator ("Mise en demeure"). Administrative fines, work to achieve compliance and temporary closures are also used as measures to enforce waste legislation.</i>
NL, UK_SC, AT_VI	<i>The Netherlands, UK (Scotland) and Austria (Vienna region) mentioned clean up and technical improvements as a frequent administrative order.</i>
IE	<i>Non-statutory notices such as notifications of non-compliance may be issued if necessary specifying correction actions or statutory notices may be issued for example under Section 18 or 55 of the Waste Management Act, 1996 (as amended).</i>
EE	<i>In Estonia writing a prescription is the common administrative procedure to follow inspections.</i>
DE_HE	<i>If discrepancies are reported within the inspection, German (Hesse region) authorities are sending subsequent orders, in case the discrepancy is not eliminated by the operator.</i>
MS	Administrative ruling
MS	<i>Administrative order.</i>
AT, BE, EE, UK	<i>Austria (Vienna and Vorarlberg Region), Belgium (Walloon region), Estonia and the UK (including Scotland) stated that additional (or more prescriptive) conditions can be imposed in permits if necessary.</i>
FR	<i>While in France additional provisions are included in an additional permit.</i>
DE_HE	<i>In Germany (Hesse region) such additional provisions are included in subsequent orders.</i>
NL	<i>The Netherlands stated that additional provisions are not widely used; an example is the shortening of the terms of the permit.</i>
MS	Withdrawal of a permit
FR	<i>Withdrawal can be done after financial procedures (fines) only.</i>
NL	<i>A permit can only withdraw for waste collectors. However future permits might be refused for other sites also based on irregularities in the past.</i>
UK, DE_HE	<i>The withdrawal of a permit is only practiced in serious cases to avoid/reduce severe effects to the public.</i>
MS	Sanction, fines and penalties
NL	<i>Sanctions are the type of follow-up procedures which are principally used.</i>
UK	<i>In the UK civil sanctions are becoming available.</i>
UK_SC	<i>In general those actions require court proceedings.</i>
IE	<i>Sanctions, fines and penalties are generally only imposed by the courts in the event of a successful prosecution; the enforcement authorities (EPA ad LAs) do not have the power to issue fines except for litter pollution which LAs can issue fines for.</i>
DE_HE, EE	<i>Penalty proceedings for misdemeanours are applied. In case of suspicion, the enforcement authorities (public prosecutor) are informed.</i>
LT	<i>Administrative fines are applied according to the inspection guidelines.</i>
MS	Court procedures

Monitoring/Follow-up

Member State practice

BE_WA	<i>In case of significant environmental violations.</i>
FR	<i>Penal sanctions including fines and imprisonment.</i>
NL	<i>Sanctions which are either police or competent authority based. Police based sanctions are more likely to end up in court.</i>
UK	<i>For serious breaches of permit conditions.</i>
IE	<i>Summary proceedings (prosecutions) can be brought to the District Courts enforcement authorities (EPA ad LAs). EPA and LA can also take injunctive proceedings in the Higher Courts. Prosecutions on indictment in the Higher Courts are taken by the Director of Public Prosecutions (DPP) so in such cases EPA or LA must submit a file to DPP.</i>

Respondents from EU Member States particularly highlighted the following examples of best practice when asked to provide best practice examples connected to monitoring/follow-up (e.g. reporting protocols, administrative decision, court decision, penalties).

Table 5.2-5: Best Practice Examples for monitoring/follow-up

MS	Best Practice Examples for monitoring/follow-up
FR	<i>The Ministry does annual reporting on the Inspectorate action</i>
DE_HE	<i>Computer aided systems for information on treatment installations (ASYS), electronically certification on waste treatment, measurement and monitoring equipment own by the Federal State</i>

Monitoring/ Follow-up

Member State practice

5.2.5. Training and Networking

As waste management operations include a wide variety of organisational structure and technical equipment, inspection authorities require expertise knowledge, qualification and regular trainings. In this regard, the Member States were asked to provide information on whether training, guidance and assistance to the staff is provided and to what extent. The following box summarises the information received.

Example on Member States' implementation

Is training/guidance/assistance provided to the staff involved in inspections of waste management operations? If yes, please specify and shortly describe the activities.

11 Member States provided information about the provision of training and guidance, showing that the majority of the authorities provide a mix of all available options, in particular:

- **Guidance for realising inspections**, instance guidance for **particular facilities, particular waste streams**, etc. (10 answers)
- **Trainings**, for instance **training seminars, buddy system**, etc. (10 answers)
- **Networking/Cooperation** amongst involved authorities, for instance **regular meetings, platforms, exchange programmes** at national or international level, etc. (10 answers)
- **Assistance**, for instance **help desk, hot line, computer based information systems**, etc. (9 answers)

(see also Table 4.2-8)

A number of respondents provided additional explanations to their answers. These are summarised in Table 5.2-6 below.

Table 5.2-6: Overview of information on training/guidance and support

MS	Description of trainings/guidance/support to the staff in place
BE	<i>Guidance for realising inspections is provided (e.g. guidance given by competent authorities to police before specific inspection operations). Assistance is provided (e.g. phone and electronic contacts). Networking/Cooperation amongst authorities is established (meetings are carried out if necessary).</i>
DE_HE	<i>An implementation guide for enforcement of the law on waste disposal includes inter alia standardized templates and editing information for investment approval/monitoring and certain waste streams. Further measures in place are: trainings aids, experience exchanges, templates and regular staff meetings. The Information exchange platform is available through the software product "MOSS" to the Hessian environmental authorities.</i>
FR	<i>A mixture of different measures is in place, starting with the guidance</i>

Training and Networking

Member State practice

	<i>documents, software solutions, helpdesks, through to regular training sessions and computer based information exchange platforms. Further, the Ministry gathers inspectors 4 times a year and assists them in their daily work on the field, if necessary.</i>
IE	<i>A Guidance Manual for enforcement officers is prepared as part of the Environmental Enforcement Network. EPA provides trainings to staff on an ongoing basis. There is also an EEN which supports enforcement by EPA and LAs. For more information see: http://www.epa.ie/whatwedo/enforce/network/</i>
NL	<i>Guidance for realising inspections is provided (e.g. training on the job). Various training seminars are carried out. Assistance is given (e.g. National helpdesk, infomi/agentschap nll). Networking/Cooperation amongst authorities is established (e.g. national platforms for waste sectors).</i>
NL	<i>Guidance for realising inspections is provided (e.g. Q&A for inspection of essential packaging acquirement). All inspectors are getting different training modules to improve their skills. In relation to the provision of assistance, there is a database for all inspectors which has to be used for all inspections. There are different kinds of information meetings for sharing information.</i>
UK	<i>Guidance for realising inspections is provided (Environment/IPPC Officer Training Scheme). Assistance and technical advice is available from experts. Networking/Cooperation amongst authorities is established (team meetings).</i>
UK_SC	<i>Guidance for realising inspections is provided (inspection manual sets out general best practice for inspections, activity specific guidance if for instance provided for landfills). Introductory and specialist courses are available, some mentoring provided where appropriate. Central support from experienced waste specialists is provided. Cooperation between UK authorities</i>

Training and Networking

Member State practice

For additional information regarding training and networking please also review Chapter 4.2.5 of this document.

Respondents from EU Member States indicated in particular the following best practices regarding training/guidance/networking (e.g. workshops, round tables, meetings, cooperation, guidance documents).

Table 5.2-7: Best Practice Examples for training/guidance/networking

MS	Best Practice Examples for training/guidance/networking
FR	<i>The Ministry manages a website and regular workshops for inspectors.</i>
IE	<i>As part of the Environmental Enforcement Network, workshops are convened from time to time to discuss producer responsibility inspections, etc.</i>
NL	<i>Questions and Answers developed for inspections essential requirements.</i>
DE_HE	<i>Collaboration with other Federal States (LAGA, German Federal Working Group Waste)</i>
EE	<i>Joint inspections with other countries, manuals and pockets for various waste streams.</i>

6. WEEE and RoHS Enforcement

6.1. RoHS enforcement

The RoHS Directive bans the use of hazardous substances above certain thresholds, in particular of mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBBs) and polybrominated diphenyl ethers (PBDEs) in domestically produced or imported electrical and electronic equipment (EEE). The Directive aims at approximating national legislation across Member States to ensure the free movement of goods.

The RoHS Directive has been recast and on 1 July 2011 published as Directive 2011/65/EU. The new RoHS Directive has to be implemented by the Member States by 3 January 2013. The new RoHS includes, amongst others, further applications (medical devices, monitoring and control instruments) and the necessity to apply CE marking to the products. However, banned substances and tolerance levels stay the same.

Permitting and classification issues are not subject to the RoHS Directive, as the RoHS Directive includes tolerance levels and certain uses specified in the Annex directly addressing the application of the banned substances in very specific products or techniques - and not processes for which permits would be required.

In consequence, the aim of a proper enforcement of the RoHS Directive must focus on monitoring, testing and controls of the products in questions.

The RoHS Directive does not include specifications on what or how to inspect or control. However the following types of activities might be included to support enforcement of the Directive and will be explained in more detail in the following chapters:

- Awareness and information exchange including involved business, the exchange of information amongst Member States and the support of the extended producer responsibility (EPR) concept
- Performing risk-assessment to concentrate resources on EEE with high risk potential
- Control of paperwork and physical inspections of equipment
- Support of self-control activities and networks managed by the industry

Further, controls and testing might be closely related to other specific substance-related regulations, i.e. REACH and POPs Regulation.

RoHS enforcement

Measures include:

- Awareness and information exchange
- Risk assessment
- Control of paper work and physical inspections
- Support of self-control activities

Further reading

Further information on legal requirements on RoHS can be found in chapter 4.3.

6.1.1. Awareness and information of stakeholders

Information and support to involved business

Enforcement of RoHS requirements starts with measures toward better information and knowledge of involved stakeholders, in particular manufacturers, traders and sellers of EEE and their supply chains. Therefore the national enforcement strategy should include measures to support business i.e. providing material and information on the internet, leaflets etc., maintain regular contact with trade organisations, provide training seminars etc.

The Industry can be helped when they are non-compliant due to lacking knowledge on the legal provisions. Especially on the complicated annex with applications exempted from the RoHS Directive (annexes III and IV in the new RoHS Directive) technical support can be very useful and should go hand-in-hand with the enforcement.

The combination of inspection and business support leads to better results than putting lots of effort in awareness raising without product testing or putting much effort in inspection without supporting and informing producers how to comply.

The UK follows an enforcement approach with strong focus on business support, described as follows:

- Enforcement of RoHS legislation in the UK is a national competence. Inspections are performed by the National Measurement Office Enforcement Authority (NMO) following a **mixed system of testing and awareness raising**. The implementation team for RoHS comprises of, besides enforcement and testing officers, also officers dedicated to support business. The NMO also facilitates a website (<http://www.bis.gov.uk/nmo/enforcement/rohs-home>) with leaflets, guidance booklets, and other publications. The website also holds inter alia information on industry events such as conferences and seminars, etc. where the NMO will be represented. The website also contains an online enquiry system where businesses can get answers to enquiries with regard to RoHS enforcement. Enquiries can also be made by phone or letter.

See chapter 2.3.10 of the practical manual

Extended producer responsibility as a tool to support RoHS compliant alternatives

High levels of recyclability and use of RoHS compliant alternatives for heavy metals can be obtained through eco-design. Even when RoHS substances are not banned, because its application resorts under annex III or IV, they

RoHS enforcement

Awareness and information might include:

- Information and support to involved business
- Extended producer responsibility (EPR)
- Information exchange amongst Member States

Further reading

Best practice example in practical manual: chapter 2.3.10

still can hamper re-use and recycling. Extended Producer Responsibility (EPR) could be an effective tool to enhance eco-design if collective schemes financing reflect differences in the cost of waste management based on their design and substances content. For banned RoHS substances eco-design and the use of alternatives is obligatory before a product can be put on the market. For substances under the threshold values or in exempted applications, other stimuli can be useful. If individual EEE producers are confronted with the costs for waste management, they have a financial stimulus for designing EEE in a way which allows good and easy recycling and avoids expensive disposal, e.g. through avoidance of RoHS substances and other hazardous substances, or through enhanced possibilities for disassembly or re-use. However, when individual EEE producers can comply with their EPR responsibilities by joining a notified body, and when the targets for the body have to be reached at the level of the entire body or the entire market, some bad performing producers could benefit from the better performances of its sector partners. Reaching high performance for all involved market actors may request enforcement on its individual contributions to reaching the targets.

Information exchange amongst Member States

Information exchange and awareness is also necessary to uniform meaning, interpretation and the different expectations on evidence for RoHS compliance amongst the Member States. To overcome the discrepancies an enforcement network on RoHS has been established on European level (see box).

RoHS Study – European RoHS Enforcement Network

The RoHS Administrative Cooperation Group (ADCO), informally known as the European RoHS Enforcement Network, was established in 2006, to facilitate communications and to ensure a mutual confidence and harmonization between RoHS competent bodies throughout the EU and EEA states.

Attendees at the Network meetings can consist of those organisations appointed in each Member State as market surveillance authorities, a few TAC members in support of the appointed market surveillance authority, a representative of the Commission and other persons invited to attend to provide technical or other support.

With at least one meeting per year, and regular email circulations, the members are able to share information on all aspects of enforcement activities such as cases of non-compliance, inspections carried out, to establish best practice enforcement procedures, to discuss testing procedures and harmonised standards and to develop consistent

RoHS enforcement

Awareness and information might include:

- *Information and support to involved business*
- *Extended producer responsibility (EPR)*
- *Information exchange amongst Member States*

Abbreviation

RoHS Administrative Cooperation Group (ADCO)

interpretation of scope issues. Furthermore, each year the group can carry out collaborative projects managed by one appointed Member State, to enable the Network to analyse findings and to present a collective European RoHS Enforcement Network view.

The Network continues to address the issues and challenges that confront each Member State and to ensure that products placed on the market comply with the requirements of the RoHS Directive. In the future the group will provide advice to the Commission and individual Member States on the practical enforcement of the Recast RoHS Directive.

6.1.2. Risk assessment of EEE equipment

The RoHS Directive covers a large range and variety of different electrical and electronic equipment (EEE) ranging from large and small household appliances to IT and telecommunication equipment, lighting and toys, etc. as covered as well by the WEEE Directive (see Annex I of the RoHS Directive).

Inspection is expensive due to purchase costs (EEE need to be destructed to carry out the analysis) and laboratory analyses.

To concentrate available resources to such equipment imposing the highest risk, the selection of products to be tested should be based on a risk assessment e.g. using risk modelling. The question: Which product groups, specific products or equipment, origin, target market, quality level etc... run the biggest risks of surpassing concentration limits set in the RoHS Directive?

The risk assessment should take into account:

- Number of produced items
- Export and import rates
- Involved stakeholders (who is trading/selling those products)
- Nature of the supply chain, including components produced inside or outside the European Union
- Level of information sharing within the supply chain
- Expected lifespan of the products
- Familiarity of the distribution network with the products (specialised sales network or occasional distribution...)
- Nature and percentage of recycled products used in the production process of the equipment and its components
- Inspectors also have a feeling of which products might be

RoHS enforcement

Risk assessment of EEE equipment:

- *As preparation step to plan controls and inspection*
- *To concentrate on EEE imposing the highest risk*

Abbreviation

XRF gun: X-Ray fluorescence gun, equipment for pre-testing EEE

breaching the restriction for example based on colour or content of recycled material (poses also a higher risk)

The outcome is not a static list of products, but a continuous, dynamic assessment of new products. For instance, at the appropriate time in the production cycle, Christmas related electronic products might pose a risk because they come out only once a year. The Dutch risk assessment came to the result, that especially discount warehouses, cosmetic or drug stores selling a whole variety of products hold a higher risk of being in violation with the RoHS Directive because selling of EEE is not their core business and products are usually sold to lower prices.

More information about the risk assessment of RoHS items can be retrieved from the competent authorities from the United Kingdom and the Netherlands (*see Best Practice Examples in chapter 2.3.8 and 2.3.10 of the practical manual*).

6.1.3. Controls and testing of equipment

RoHS compliance can be tested in three different ways:

1. by examining **paper declarations, notifications or proofs**
2. by performing **pre-tests** on equipment
3. by performing full **laboratory testing** of equipment

Examining paper declaration, notifications or proofs

Paper control might focus on the CE marks for RoHS compliant equipment, as imposed by the new RoHS Directive. The presumption of compliance, when carrying a CE mark, has to be taken into account. The major problem with RoHS compliance certification using paper sources is however the enormous multitude of components out of which EEE equipment frequently is assembled. Guarding RoHS compliance throughout the whole (also often worldwide) supply chain of parts and components is a challenge for the EEE assembler preparing the final product. Several RoHS-compliance labels have been generated (examples see Figure 6.1-1) by the market to ensure the information flow throughout the supply chain, however real physical testing, both by the assembler and by the inspector, may remain necessary.

RoHS enforcement

Controls and testing of equipment includes:

- Examining paper declaration, notifications or proofs
- Pre-testing (e.g. XRF gun)
- Full laboratory testing

Further reading

Best practice example in practical manual: chapter 2.3.8 and 2.3.10



Figure 6.1-1: RoHS compliance labels as in use in the UK in 2007³

Pre-tests on equipment

Physical RoHS compliance testing requests a laboratory analysis on the presence and the concentration of lead, mercury, cadmium, chromium VI, PBB and PBDE in homogeneous components of the equipment.

Several Member States use a mobile X-Ray fluorescence gun (XRF gun, see photo) for non destructive pre-tests in order to facilitate a first selection of products. Only products that indicate high or exceeding heavy metal concentrations are



sent to a laboratory for further analysis. Mobile XRF guns have proven to make inspections more efficient and effective because less equipment needs to be sent to laboratories and direct measures can be taken if the equipment does not comply.

However the usage of mobile XRF guns cannot replace full laboratory testing for the equipment showing higher concentrations. The following issues also have to be regarded when testing the equipment with mobile XRF guns:

- The non-destructive pre-test is not fit for reaching interior parts of EEE.
- The XRF gun is unable to distinguish between chromium VI and other isotopes like chromium III.
- The further expansion of the RoHS legislation to nano-particles, HBCDD, DEHP, BBP and DBP (mentioned in whereas 10 and 16 of the

RoHS enforcement

Controls and testing of equipment includes:

- Examining paper declaration, notifications or proofs
- Pre-testing (e.g. XRF gun)
- Full laboratory testing

Further reading

Best practice example in practical manual: chapter 2.3.8

³ ARCADIS/RPA Study on RoHS and WEEE Directives, N° 30-CE-0095296/00-09 for DG ENTR, March 2008

new RoHS Directive, and to be decided upon before 22 July 2014) may also limit the possibilities of pre-testing using an XRF-gun.

Therefore, a destructive analysis and, if needed, a confirmation through a full grade laboratory analysis, may be necessary.

Sampling and laboratory testing of EEE

In this regard it is helpful when samples can be taken by the inspection services free of cost, because of the high costs of some EEE, e.g. on the basis of national legislation.

It should be taken into account not to bias the test by only sampling cheap EEE, but to use a reliable risk assessment for selecting EEE to be tested and/or destructed.

The Best Practice from the Netherlands, included in the practical manual, describes the concept of free sampling, pre-testing and risk-assessment:

- In order to check whether EEE appliances fulfil the requirements of the RoHS Directive, inspections are performed at national level in the Netherlands with the Dutch Environment Ministry (VROM) as the responsible authority. The key element of enforcement is the **free sampling and destructive analysis of EEE**, rather than the checking of paper documents. The inspection officers select a number of products, taking into account a risk assessment made on a yearly basis in the warehouse, and are allowed to take free samples. They use XRF guns to make a first rough assessment of the concentrations of heavy metals and irregular samples are sent to a laboratory.

See chapter 2.3.8 of the practical manual

RoHS enforcement

Controls and testing of equipment includes:

- Examining paper declaration, notifications or proofs
- Pre-testing (e.g. XRF gun)
- Full laboratory testing

Further reading

Best practice example in practical manual: chapter 2.3.8

6.2. WEEE Enforcement

The WEEE Directive aims to reduce the negative environmental impacts of waste of electrical and electronic equipment (WEEE) and to facilitate proper treatment by setting collection, recycling and recovery targets for a defined set of WEEE in EU-27. It requires Member States to ensure that collection and treatment schemes are established. Through the instrument of producer responsibility and the provision of collection schemes where consumers return their used e-waste free of charge, the recycling and re-use of WEEE is stimulated.

In addition to the requirements set in the WFD regarding **permitting** of waste treatment facilities, the WEEE Directive requires in Article 6(4), that all permits have to consider the necessary elements to comply with WEEE requirements (e.g. the removal of all fluids and selective treatment in accordance with Annex II, technical requirements set out in Annex III, and to ensure recovery according to Article 7).

Besides the requirements set in the WFD generally applying to all waste treatment facilities (including WEEE facilities), Article 16 WEEE Directive includes the general obligation to the Member States to realise inspection and monitoring to ensure enforcement. Further Article 6(2) obliges for inspections before a facility is registered in the case the facility is derogated from permit requirements.

Thus for WEEE collection and treatment facilities in general the requirement set in the WFD have to be applied and the information given in this guidance about permitting and registration (chapter VI) and inspection and monitoring (chapter V) fully applies.

However, this chapter includes specifications which have to be regarded in particular for the enforcement of WEEE, including:

- Awareness and information exchange, in particular training of staff and self-support of the involved industry
- WEEE inspections planning, realisation and follow up
- Support of self-control activities and networks managed by the industry

WEEE enforcement

Permitting and inspection/controls:

- In general provisions of WFD apply
- Some specifications are made in WEEE Directive

Further readings

Further information on legal requirements on WEEE can be found in chapter 4.4.

6.2.1. Awareness and information for stakeholders

Both for the RoHS and the WEEE enforcement, awareness raising can be an important tool. The following aspects can play a role:

- Generating awareness in cooperation with the consumers, and by stimulating consumer activism, the scope of enforcement can be reached through market mechanisms (people refusing to buy obvious non-compliant, non CE marked products, or consumers refusing products from companies on a black-list).
- Integrating distributors in the awareness of WEEE collection through adequate contractual agreements with the collective schemes.
- Providing training to small and medium size enterprises to encourage initiatives for WEEE reuse and recycling.
- Encouraging joint work between competent authorities and operators to provide management guidelines to have them checked by inspectors.
- Assuring smooth functioning of EPR collective schemes and respect the competitiveness between authorised operators.

Inspection activities carried out by competent authorities should always be seen as a possibility to enhance knowledge of the operator and to cooperate with the operators to improve the level of compliance of the facilities, rather than to immediately penalise activities.

However, infringements of national provisions by companies, operators and EPR collective schemes will result in penalties according to national regulations.

Industry approach

Some problems have been identified in implementing the WEEE Directive. The EU Commission, EU Council and EU Parliament have already agreed to recast the WEEE Directive in December 2011. This recasting intends to solve the identified problems.

Up to now, even though the competent authorities have made efforts on the implementation of the WEEE Directive, some industry initiatives have been initiated in the WEEE Forum sphere to collaborate in implementation actions.

The WEEE Forum unites 39 WEEE producer responsibility organisations (or compliance schemes) from 22 EU Member States and represents approximately two thirds of officially reported WEEE collection in Europe.

WEEE enforcement

Awareness and information for:

- Consumers
- Industry
- Inspection staff

Further information

WEEE Forum website:
<http://www.weee-forum.org/weeelabex-project>

One project of the WEEE Forum is the WEEELABEX multi annual project. The initiative is explained in the following box:

WEEE Forum –WEEELABEX Project

A set of European standards with respect to collection, storage, handling, preparation for re-use, transport, treatment, recovery and recycling of WEEE and monitoring the processing companies has been developed, supported by EU LIFE funding. This initiative, called the WEEELABEX project, was started by the WEEE Forum in co-operation with stakeholders from the producers' community and the processing industry.

The initiative aims at providing a label of excellence for WEEE and WEEE management. The label system covers common standards on collection, logistics and treatment of WEEE. It includes checklists, guidance for classification issues (which fraction is recycling / which fraction is not recycling) and tools for calculating the recycling quotas (Reptool). It is foreseen to be introduced in 2012. Although the standards are elaborated by industry and not all Member States are following the same approach, they do provide a good basis for harmonising approaches amongst the Member States.

The ultimate goal of the project is to have a pool of WEEELABEX auditors who will inspect WEEE operators (i.e. collection sites, logistics sites, transporters and facilities involved in dismantling, de-pollution, preparation for re-use, disposal and recycling). Operators that comply with the WEEELABEX standards will be identified by a quality label or mark.

Standards and Guidance are provided covering the following issues:

- WEEELABEX Standard on Collection
- WEEELABEX Standard on Logistics
- WEEELABEX Standard on Treatment
- Further information like FAQs

The standards can be downloaded from the WEEE Forum website:
<http://www.weee-forum.org/weeelabexproject>

The role of WEEELABEX project on standards development and organization of private audits have been widely discussed by technical groups in the European Council reflecting the following problems:

- a high amount of WEEE is treated outside the system, therefore the effort by EPR collective systems and competent authorities to collect more WEEE must be increased;
- Member States consider this initiative interesting but highly skewed

WEEE enforcement

Issues for inspection planning and realisation of WEEE facilities:

- *Chain approach (upstream, downstream inspections)*
- *Registered facilities*
- *Connection to export*
- *Data follow-up and statistics*

since very few stakeholders and processing companies have been involved;

- Producers enforce conditions unilaterally to other actors avoiding reference to their own obligations such as reporting to the facilities about dismantling and recovery characteristics of the EEE and about content of components, materials and substances for proper treatment;
- Facilities who reject the private audit could not receive waste, even when they meet all the requirements of national legislation and are authorized, controlled and inspected by environmental authorities according to the WEEE Directive;
- Private audits made by “a group of interest”, and not by a standardization and certification organization could have lack of independence and could lead to market distortions in the waste management sector;
- Double fulfilment, under national laws and private conditions, could lead to unnecessary higher costs of waste management.

Thus WEEELABEX certainly being a supportive initiative to support enforcement of the WEEE Directive, it was clarified⁴ that only the Member States can create requirements binding under public law on their territory, that WEEELABEX compliance does not replace compliance with the laws of a Member State and also that could overlap with the inspections carried out by the Member States, responsible for authorisation and inspection of facilities Those authorisations guarantee the performance of competitive regulation in the EU market.

Therefore the text agreed in the recasting of the WEEE Directive between the Council, Parliament and the Commission stated in its Article 8 (Proper treatment) that “ in order to ensure uniform conditions for the implementation of this article, the Commission may adopt minimum quality standards based in particular on the standards developed by the European standardization organizations, that reflect the state of the art”. So it is guarantee that all stakeholders will be involved in the development of the standards and competitive rules market will be assured. Anyway Member States could make binding the EN standards in national laws.

WEEELABEX results should therefore be practical, reasonable and well integrated with the environmental authorities to avoid unjustified discrepancies and result in an environmental and business benefit.

WEEE enforcement

The WEEELABEX approach – its benefits and critique

⁴ In the Technical Adaptation Committee on WEEE & RoHS between the Commission and Member States held in November 2011

6.2.2. WEEE inspections planning, realisation and follow up

The following issues might be of important relevance when talking about inspection planning, realisation and follow-up of WEEE facilities:

1. One concept of inspections is following the **chain approach**
2. Facilities which are **exempted from permitting** under the WFD also need to be inspected
3. Inspections of WEEE are often **closely connected to export inspections**, especially for exports to non OECD countries
4. **Data follow-up and thorough statistics** are important for further planning

Chain approach

The long and complex chain with many actors between collection of WEEE and final disposal makes it difficult to keep a good overview and control of the WEEE. Beside the actual WEEE producers, brokers and dealers have an important impact on compliance with WEEE management. The whole distribution chain and the whole waste collection and treatment chain should be within the scope of enforcement. The chain approach is followed by performing upstream and downstream inspections, while:

- Upstream inspections concentrate on manufacturers, importers, wholesale and retail.
- Downstream inspections focus on waste collectors, civic amenity sites and waste treatment facilities

For upstream inspections the selection of companies to be inspected can be based on:

- Risk assessments providing information on WEEE with high risk, complex broker, selling chains and high import/export activities
- Looking in “Yellow Pages” (including information on local businesses) and picking out new or not yet known EEE and/or battery companies
- Inspecting the suppliers of companies that have been inspected (based on invoices)
- Using information of notified bodies about products and free-riders (see chapter 6.2.3).

The selection of companies for downstream inspections can be based on:

WEEE enforcement

Upstream inspection:

- manufacturers, importers, wholesale and retail

Downstream inspection:

- waste collectors, civic amenity sites and waste treatment facilities

- Information of companies working for notified bodies (see chapter 6.2.3).
- Incident driven inspections, e.g. as follow up activities from transport controls (i.e. in the case WEEE is transported to a non-licensed waste treatment facility)

Especially brokers and dealers, active outside the MS territory or even outside the EU, make enforcement a difficult exercise. EU-wide and international collaboration may be necessary.

The Best Practice from the Netherlands, included in the practical manual, describes how enforcement bodies addressing the leakages of the take-back scheme of WEEE follow the chain approach:

- The enforcement of the WEEE requirements in the Netherlands is a national competence and closely linked with the inspection on the implementation of the Waste Shipment Regulation. The WEEE enforcement in the Netherlands is therefore in particular **addressing the “leakages” in the take-back scheme** to prevent WEEE ending up in the illegal export circuit. After the identification of the “leakages” in the collection of WEEE, specific campaigns and agreements were set up with industrial associations, retailers and municipalities.

See chapter 2.3.9 of the practical manual

Inspection of WEEE facilities, which need to register

WEEE recovery facilities might be exempted from permit requirements under Article 24(b) WFD.

To ensure that treatment is only performed by establishments having the necessary knowledge and technical equipment, Article 6(2) WEEE Directive specifies that inspections in the respective WEEE recovery facilities are a precondition. In this regard the competent authority shall carry out an inspection *before the registration*, verifying:

- The type and quantities of waste to be treated
- The general technical requirements to be complied with
- The safety precautions to be taken

The inspection shall be carried out at least once a year and the results shall be communicated to the Commission by the Member States.

To facilitate proper implementation it is one possibility to grant certificates for such facilities providing primary treatment of WEEE. The certification should then be renewed on an annual basis. Within the certification procedures, inspections of the facility must be performed.

To perform those inspections, a helpful tool are checklists provided to the

WEEE enforcement

Facilities exempted from permitting need to be registered and to be inspected

Further reading

Best practice example in practical manual: chapter 2.3.9

Best practice example in practical manual: chapter 2.2.6

Further reading

Checklists for WEEE treatment facilities in chapter 3 of the practical manual

inspectors, i.e. on national level including questions based on the WEEE Directive and other additional requirements connected to the issue (i.e. Regulation on certain fluorinated greenhouse gases).

The Best Practice from Germany, included in the practical manual, contains such a checklist:

- The German Federal Working Group Waste (LAGA) established a guideline for WEEE, including a permitting checklist for primary EEE facilities in its Annex 6, which is meant to be used by authorised experts/inspectors. Administrative staff can subsequently use these checklists when proceeding permits /realising inspections at relevant waste treatment facilities or use it as a template to complete their own checklist. The checklist mainly focuses on questions regarding obligations set in the WEEE Directive. However, it also includes the checking of additional legal requirements to reduce administrative burdens and to bundle inspection capacities.

See chapter 2.2.6 of the practical manual

Note: The general inspection checklist gives an indication what to check at WEEE treatment facilities during the permitting procedure and operation period. It is also included in chapter 3 of the practical manual.

Connection to export inspections

A loophole for safe WEEE management is the export of the EEE before (or presumed before) it enters the waste phase. Second-hand EEE often ends up in non OECD-countries where it becomes waste after a short remaining lifespan and where no adequate recycling or recovery capacity is available.

For inspection officers, it is sometimes difficult to distinguish between WEEE and second-hand EEE. Illegal shipments often hold WEEE that has been fraudulently registered as second-hand EEE. This problem can only be solved by more intense training and the provision of proper information about the issue.

A link to inspection on transfrontier shipment of waste is obvious, as well as the development and application of testable criteria for the distinction between waste and second-hand EEE.

Such criteria are e.g. developed within the Correspondents' Guidelines regarding the Waste Shipment Regulation, in particular:

- Revised Correspondents' Guidelines No 1 on shipments of waste electrical and electronic equipment (WEEE) - to apply under the new Regulation No 1013/2006 from 12 July 2007
- Correspondents' Guidelines No 4 on classification of waste electrical

WEEE enforcement

Support of self-control activities:

- Extended producer responsibility is key instrument
- Assigning notified bodies

Further reading

Best practice example in practical manual: chapter 2.2.6

and electronic equipment and fly ash from coal-fired power plants according to Annex IV, part I, note (c) of Regulation (EC) No 1013/2006 on shipments of waste

(See: <http://ec.europa.eu/environment/waste/shipments/guidance.htm>)

However, this will only filter out false second-hand products (waste), but it will not solve the problem of real second-hand (non waste) products with a limited lifespan (exported to non-EU countries and disposed shortly after). Supplementary provisions on international take-back when entering the waste phase, or on guaranteed lifespan, could be part of the solution.

Statistics and data follow up

The European WEEE policy is largely based on the concept of setting and reaching targets for separate collection, recovery and recycling. In order to measure distance-to-target for policy reasons, and to check and enforce compliance with the targets for individual market actors and products, robust, reliable and accurate indicators are needed.

Both data collection (e.g. through complete and up-to-date waste registers) and data processing are essential on regional/national level for this purpose. Quality statistics are necessary to pinpoint the amounts of WEEE that is not collected and treated properly.

WEEE enforcement

Statistics and data follow up:

- *Providing and maintaining of statistics*

6.2.3. Support of self-control activities and networks managed by the industry

Extended producer responsibility (EPR) for industry putting EEE on the market is a key instrument. Producers of EEE have to take care, at least financially, for the collection, treatment, recovery and environmentally sound disposal of WEEE from private households. This is often realised through a take-back obligation, managed by **notified bodies**.

Producers of EEE, associated with a notified body for Extended Producer Responsibility (EPR), have to pay a fair remuneration. Thus, they have a strong self-interest for a proper implementation of the Directive, as they suffer from illegitimate competition from free-riders, putting EEE on the market without contributing to its collection and treatment costs. Competent authorities and notified bodies can be objective allies in fighting free-riders.

Notified bodies have good market knowledge and can inform authorities on presumed free-riders.

The notified bodies could take over a large part of the inspection effort, usually on their members, thus public authorities can focus on identifying and enforcing free-riders. It will remain, however, necessary to control the controller, by inviting the notified bodies to inspections or by requesting third party certification. This should not only be done at the moment of permitting or renewing the permit of a body, but also throughout its day-to-day activities. In the Best Practice, included in the practical manual, the collaboration of Belgian authorities and the notified body is described in the following box:

■ In order to **target inspections especially at manufacturers, importers, wholesale and retail** (upstream inspection) and to identify free-riders, the Belgium Public Waste Agency of Flanders (OVAM) works in close cooperation with the Belgian collective take-back organisation (Recupel for EEE and BEBAT for batteries incl. flashlights). If new EEE is added to the Recupel list of covered products, those products will be inspected. Also the charging of a Recupel fee might be controlled. Free-riders are signalled by Recupel and BEBAT.

Authorities and take-back organisations have a mutual interest in discovering and fighting free-riders that afterwards become a contributing member of the take-back organisation. This is especially the case where only one take-back organisation is active in a specified territory.

See chapter 2.3.7 of the practical manual

WEEE enforcement

Support of self-control activities:

- Extended producer responsibility is key instrument
- Assigning notified bodies

Further reading

Best practice example in practical manual: chapter 2.3.7

An important aspect of using notified bodies for EPR schemes like reverse logistics is auto-control or third party certification, with enforcement by public authorities as a backstop or second line strategy. Notified bodies set up their own inspection systems, usually at national level.

Further, it is important that the “polluter pays” principle is respected throughout the waste treatment chain. When use is made of public infrastructure (like civic amenity sites), a fair retribution has to be foreseen, at market prices.

Cooperation with **NGOs** could also contribute to higher success rates in detecting free-riders.

WEEE enforcement

Support of self-control activities:

- *Extended producer responsibility is key instrument*
- *Assigning notified bodies*

Further reading

Best practice example in practical manual: chapter 2.3.7

7. Annex: Summary table on relevant information

Summary of relevant IMPEL Projects Cluster 1: Permitting, Inspections & Enforcement (<http://impel.eu/category/cluster/cluster-1>)

Note: The titles of the studies (projects/activities) are linked to the original study (hyperlink) for easy accessibility (move cursor over title and press Ctrl+click)

Relevant for:	Lead Country	Projects/Activities	Year/Period	Executive Summary/Project Description	Cluster 1: Participants	Cluster 1: Participants
risk assessment; planning of inspections	DE	Development of an easy and flexible risk assessment tool as a part of the planning of env. inspections linked to European environmental law and the RMCEI (easyTools), phase 2	Running 2011	The aim of the new project is to develop a flexible and user friendly programme for the risk assessment within the planning of environmental inspections as an application from the internet.	Gisela Holzgraefe Ministerium für Landwirtschaft, Umwelt und ländliche Räume Mercatorstraße 3 24106 Kiel Gisela.Holzgraefe@mlur.landsh.de	
permit	DE	Energy efficiency in permitting and inspections, phase 2	Running 2011	In 2002/2003 IMPEL has carried out a project on energy efficiency with Finland as lead country. A second project on that item was carried out in 2010 and the evaluation of the current situation showed that during the last years only minor changes have occurred in the consideration of energy efficiency issues in permitting and supervising procedures.		
strategies of enforcement	DK	Strategies of Enforcement	Running 2011	This project can be considered as a continuation of previous IMPEL projects like: Review of Compliance promotion, Inspections practices and Enforcement for IPPC installations (2007), IMPEL Better Legislation Project – Effective Enforcement Needs a Good Legal Base (2003) and Doing the right things I, II and III (2006, 2007, 2008).	Ms Ulla Ringbæk Danish EPA Strandgade 29 DK-1401 Copenhagen K ur@mst.dk	
evaluation of performance	FR&UK	Exploring qualitative and quantitative assessment tools to evaluate the performance of environmental inspectorates across the EU	Running 2011	To provide a better and more comprehensive insight into the opportunities to use various tools to assess and compare performance of inspectorates across the EU. The findings will feed into the current debate on Member State and EU level on evaluating the performance of inspectorates across the EU as part of the ongoing discussion on the further development of the RMCEI.	Benjamin Huteau Service des risques technologiques et de l'environnement industriel DREAL Midi-Pyrénées benjamin.huteau@developpement-durable.gouv.fr	Mr Will Fawcett Environment Agency Rio House, Waterside Drive Aztec West, Almondsbury UK-BS32 4UD Bristol Will.Fawcett@environment-agency.gov.uk

Relevant for:	Lead Country	Projects/Activities	Year/Period	Executive Summary/Project Description	Cluster 1: Participants	Cluster 1: Participants
inspections, monitoring	NL	Setting Inspection Targets and Monitoring Performance	Running 2011	In this IMPEL-project we will act upon the recommendation from the DTTR and Performance Indicators reports to further look into the issue of setting inspection targets and monitoring performance against these targets.	Mr Jan Teekens Inspectorate of Housing, Spatial Planning and the Environment P.O.Box 16191; IPC 530 NL-2500 BD The Hague jan.teekens@minvrom.nl" >jan.teekens@minvrom.nl	Patricia Weenink-Driessen Province of Overijssel team EMTV PO box 10078 8000 GB Zwolle PA.Weenink-Driessen@overijssel.nl
inspections, monitoring	TBC	Doing the Right Things for Waste Shipment Inspections (DTTR-TFS)	Running 2011	Using the IMPEL project: Doing the Right Things (DTTR), this project looks at how DTTR could help authorities improve their inspections related to the Waste Shipment Regulation.		
risk assessment; planning of inspections	DE	Development of an easy and flexible risk assessment tool as a part of the planning of environmental inspections linked to European environmental law and the RMCEI (easyTools), phase 1	2010	A key issue of the "Recommendation on minimum criteria for environmental inspections" (RMCEI) and the IMPEL "Step by step guidance book for planning of environmental inspection" is the prioritisation of environmental inspections. An essential part of this prioritisation is the assessment of the probability of environmental disruptions caused by industrial or comparable activities. These risk assessments also play a key role in inspection planning according to the Seveso II Directive and the Industrial Emissions Directive (IED).	Gisela Holzgraefe Ministerium für Landwirtschaft, Umwelt und ländliche Räume Mercatorstraße 3 24106 Kiel Gisela.Holzgraefe@mlur.landsh.de	
reporting	FI	Reporting to the public	2008-2009	The objective of the project was to identify what core information on environmental inspections carried out should be provided to the public and how this information can best be provided, especially via electronic means (Internet), and to give recommendations. The project was successful in finding out what information is made available to the public and in what form it is available.	Sirpa Salo-Asikainen Ministry of the Environment PO Box 35 FIN-00023 Helsinki sirpa.salo-asikainen@ymparisto.fi	
permits and inspections	IT	Comparison programme on the tariffs for environmental permits and environmental inspections	2007-2009	The objective of the project was to build a picture of existing practice in Member States on the tariffs the operators have to pay to the competent authorities to cover the costs for the prior verification and inspections necessary to evaluate the application of the permit, and the successive environmental controls/inspections (including compliance, site visits, sampling etc.).	Francesco Bafundi ARPA Lombardia Viale F. No. Restelli 3 1 – 20124 Milan f.bafundi@arpalombardia.it	

Relevant for:	Lead Country	Projects/Activities	Year/Period	Executive Summary/Project Description	Cluster 1: Participants	Cluster 1: Participants
inspection guidelines	IT	INSPECT-CEM – Environmental Inspection Guidelines for the Cement Clinker Industry	2007-2009	This report is the result of a group work involving 13 countries by the participation of experts in inspecting cement plants. The considerations here reported are derived both from the compilation of a questionnaire submitted to all the participants with the aim of understanding similar and different aspects linked to cement plants and environmental inspections, and from four meetings involving the participants.		
planning of inspections	NL	Doing the right things III: Implementation of the step-by-step guidance book for planning of environmental inspections	2008-2009	The main objective of this project, executed in 2008 and 2009, was to facilitate, support and promote the implementation of the Doing the right things methodology, using the step-by-step guidance book.	Mr Jan Teekens Inspectorate of Housing, Spatial Planning and the Environment P.O.Box 16191; IPC 530 NL-2500 BD The Hague jan.teekens@minvrom.nl >jan.teekens@minvrom.nl	Patricia Weenink- Driessen Province of Overijssel team EMTV PO box 10078 8000 GB Zwolle PA.Weenink- Driessen@overijssel.nl
permit, inspections, monitoring	UK	Practical Application of Better Regulation Principles in Improving the Efficiency and Effectiveness of Environmental Inspection Authorities	2009	Fifty examples of initiatives were received from 14 countries in response to a questionnaire. These included initiatives to improve permitting, inspection, and monitoring as well as broader initiatives that spanned the whole regulatory cycle.	Mr Will Fawcett Environment Agency Rio House, Waterside Drive Aztec West, Almondsbury UK-BS32 4UD Bristol Will.Fawcett@environment-agency.gov.uk	
planning of inspections	EC	IMPEL input to the further development of the RMCEI	2007	This project can be regarded as complementary to the project 'Doing the right thing II: developing a step-by-step guidance book for planning of environmental inspections'.		
planning of inspections; enforcement practices	EC	Review of Compliance promotion, Inspections practices, and Enforcement for IPPC installations	2007	This report summarizes the replies received from 25 Competent Authorities (CAs) in 16 different Member States (MS) to a questionnaire on the implementation of Article 14 IPPC Directive. Member States were asked to provide practical information on their inspection planning and practices and enforcement activities, which should ensure that IPPC installations are operated in compliance with the Directive's requirements.		

Relevant for:	Lead Country	Projects/Activities	Year/Period	Executive Summary/Project Description	Cluster 1: Participants	Cluster 1: Participants
planning of inspections	NL	Doing the right things II: Step-by-step guidance book for planning of environmental inspections	2007	In 2006 the Netherlands led an IMPEL Comparison Programme Doing the right things I. One of the main aims of this project was to explore how inspection authorities set priorities with regard to their tasks and activities, being one of the key steps in setting up inspection plans.	Mr Jan Teekens Inspectorate of Housing, Spatial Planning and the Environment P.O.Box 16191; IPC 530 NL-2500 BD The Hague jan.teekens@minvrom.nl >jan.teekens@minvrom.nl	Patricia Weenink-Driessen Province of Overijssel team EMTV PO box 10078 8000 GB Zwolle PA.Weenink-Driessen@overijssel.nl
planning of inspections	UK	IMPEL input to the further development of the RMCEI	2007	This project can be regarded as complementary to the project 'Doing the right thing II: developing a step-by-step guidance book for planning of environmental inspections'. In the first phase of the project a questionnaire was developed asking for each part of the RMCEI whether it should be amended and if yes how. Answers to the questionnaire were received from 22 countries.	Mr Will Fawcett Environment Agency Rio House, Waterside Drive Aztec West, Almondsbury UK-BS32 4UD Bristol Will.Fawcett@environment-agency.gov.uk	
prioritising inspections	NL	Doing the right things I: Comparison Programme on prioritising environmental inspections	2006	This project report presents the main outcomes of the IMPEL Comparison Programme on prioritising environmental inspections, also called "doing the right things". Within the project 25 European countries participated by means of completing a questionnaire on prioritising environmental inspections, and more in particular about inspection plans and inspection programmes, all within the framework of the "Recommendation for Minimum Criteria on Environmental Inspections".	Mr Jan Teekens Inspectorate of Housing, Spatial Planning and the Environment P.O.Box 16191; IPC 530 NL-2500 BD The Hague jan.teekens@minvrom.nl >jan.teekens@minvrom.nl	Patricia Weenink-Driessen Province of Overijssel team EMTV PO box 10078 8000 GB Zwolle PA.Weenink-Driessen@overijssel.nl
benchmarking; evaluation of performance	DK	Benchmarking on Quality Parameters for Environmental Inspectorates	2005	The report summarises the results of discussions at a workshop covered goals, targets, parameters, and indicators that reflect the quality of the inspectorate work itself. Specific focus was on practical and operational parameters and indicators that can easily be implemented at national, regional or local level.	Ms Ulla Ringbæk Danish EPA Strandgade 29 DK-1401 Copenhagen K ur@mst.dk	

Relevant for:	Lead Country	Projects/Activities	Year/Period	Executive Summary/Project Description	Cluster 1: Participants	Cluster 1: Participants
permit and enforcement	NL	Waste Permitting and Enforcement	2005	The report describes the results of a permitting and enforcement project carried out by twelve EU Member States, aiming at improving cooperation and information exchange on the permitting and enforcement of environmental conditions at landfills and waste incineration plants	Mr Jan Teekens Inspectorate of Housing, Spatial Planning and the Environment P.O.Box 16191; IPC 530 NL-2500 BD The Hague jan.teekens@minvrom.nl >jan.teekens@minvrom.nl	Patricia Weenink-Driessen Province of Overijssel team EMTV PO box 10078 8000 GB Zwolle PA.Weenink-Driessen@overijssel.nl
inspection guidelines	IT	INSPECTAN: Environmental Inspection Guidelines for the Tanning Industry	2004	The present report originates from the results of a questionnaire, discussed in meetings held over the interval Oct2004 – June 2005. The discussion concentrated on the economics; the production processes; laws and regulations; inspection procedures. The report is conceived as a tool for the public bodies involved in controls and in monitoring activities on the tanning industry.	Francesco Bafundi ARPA Lombardia Viale F. No. Restelli 3 1 – 20124 Milan f.bafundi@arpalombardia.it	
good examples of permit conditions	FI	Waste-related Conditions in Environmental Permits	2003	The report compiles a number of good examples of permit conditions which address amongst others, measures to minimise waste, substitution of raw materials, handling and disposal of waste as well as audits and assessments.	Sirpa Salo-Asikainen Ministry of the Environment PO Box 35 FIN-00023 Helsinki sirpa.salo-asikainen@ymparisto.fi	
best practice: training and qualification of inspectors	FR	Best practices concerning training and qualifications for environmental inspectors	2003	This report describes the results of an IMPEL project on best practices concerning the training and qualifications of environmental inspectors.	Benjamin Huteau Service des risques technologiques et de l'environnement industriel DREAL Midi-Pyrénées benjamin.huteau@developpement-durable.gouv.fr	
best practice: monitoring	IE	Best Practices in Compliance Monitoring	2001	The objective of the project was to exchange information and develop best practice on compliance monitoring as it related to industrial installations (e.g. for the IPPC Directive) and sewage treatment works (e.g. for the EC Directive on Urban Waste Water Treatment).	Ms Valerie Doyle Environmental Protection Agency PO Box 3000 Johnstown Castle Estate County Wexford, Ireland impelcoordinator@epa.ie	

Relevant for:	Lead Country	Projects/Activities	Year/Period	Executive Summary/Project Description	Cluster 1: Participants	Cluster 1: Participants
inspections; enforcement	NL	Comparison programme: Condoning – Compliance promotion – Communication – ISO/EMAS – One page permits	2001	The general objective of the Comparison Programme is to acquire a full picture of how different Member States carry out inspections and how they exchange experiences between one another. Another objective is that EU inspectors exchange information and hold discussions on ways how to carry out inspections in order to enforce environmental laws.	Mr Jan Teekens Inspectorate of Housing, Spatial Planning and the Environment P.O.Box 16191; IPC 530 NL-2500 BD The Hague jan.teekens@minvrom.nl >jan.teekens@minvrom.nl	Patricia Weenink-Driessen Province of Overijssel team EMTV PO box 10078 8000 GB Zwolle PA.Weenink-Driessen@overijssel.nl
permit	IE	Workshop on Integrated Permitting	2000	The aim of the project was to discuss and analyse the issuing of environmental permits to industry with regard to strict new requirements under the provisions of the IPPC Directive. The objectives were: To help explore differences which exist between Member States (MS) in the area of environmental permitting, and To assist in the establishment of consistency in the approaching IPPC permitting process, as required by the IPPC Directive.	Ms Valerie Doyle Environmental Protection Agency PO Box 3000 Johnstown Castle Estate County Wexford, Ireland impelcoordinator@epa.ie	
evaluation of performance	UK	IRI – IMPEL Review Initiative	2000	The IRI is a voluntary scheme developed by IMPEL providing for informal reviews of environmental authorities in IMPEL Member countries. The IRI is intended to enable the environmental authority and the Review Team to explore how the authority carries out its tasks. It aims at identifying areas of good practice for dissemination together with opportunities to develop existing practice within the authority and authorities in other IMPEL Member Countries.	Mr Will Fawcett Environment Agency Rio House, Waterside Drive Aztec West, Almondsbury UK-BS32 4UD Bristol Will.Fawcett@environment-agency.gov.uk	
minimum criteria: inspections	UK	Minimum Criteria of Inspections: Planning and Reporting	1998-1999	Inspecting authorities should prepare plans for inspection programmes. These should incorporate relevant goals of the particular authority and take account of several key elements such as industries to be inspected, resources available, time available for inspections, frequencies of routine inspections, reactive inspections and prioritisation.		
tool for environmental inspectors	DK	IMPEL Reference book for Environmental Inspections	1998	The purpose of the IMPEL Reference Book on Environmental Inspection is to provide a tool to environmental inspectors in the European Union. It is mainly meant for field inspectors but can also be useful to top and middle management.	Ms Ulla Ringbæk Danish EPA Strandgade 29 DK-1401 Copenhagen K ur@mst.dk	

Relevant for:	Lead Country	Projects/Activities	Year/Period	Executive Summary/Project Description	Cluster 1: Participants	Cluster 1: Participants
minimum criteria: frequency of inspections	UK	Minimum Criteria of Inspections: Frequency of Inspections	1998	The report aims to promote common principles for determining the frequency of environmental inspection of industrial installations. It covers the following types of inspections: Routine inspections, Reactive inspections and Specific inspection campaigns.	Mr Will Fawcett Environment Agency Rio House, Waterside Drive Aztec West, Almondsbury UK-BS32 4UD Bristol Will.Fawcett@environment-agency.gov.uk	
minimum criteria: operator self monitoring	UK	Minimum Criteria of Inspections: Operator Self monitoring	1998	The monitoring of industrial processes, their releases and their impact on the environment, is often carried out by the competent authorities. However it may also be an obligation on the operators themselves including an obligation to report the results to the competent authority. This is known as operator self-monitoring.		
minimum criteria: general principles	UK	Minimum Criteria of Inspections: General Principles	1997	The report presents minimum criteria for environmental inspections with the aim of promoting common principles for the inspection of industrial installations which arise from the obligations on industry to respect the implementation of environmental law and to protect the environment.		

Summary of relevant IMPEL Projects-Cluster 2: Transfrontier Shipment of Waste (<http://impel.eu/category/cluster/cluster-2>)

Note: The titles of the studies (projects/activities) are linked to the original study (hyperlink) for easy accessibility (move cursor over title and press Ctrl+click)

Relevant for:	Lead Country	Projects/Activities	Year/Period	Executive Summary/Project Description	Cluster 2: TFS National Contact Points
inspections	DE	Waste Sites	Running 2011	Recent discussions in IMPEL-TFS and among high-level inspectors have addressed, among other things, the necessity to focus on “waste sites” in Europe in connection with illegal waste exports. The High Level Inspectors meeting of 28 April 2009, for instance, agreed on the need to look “upstream” to recycling and other waste treatment facilities which should be inspected in view of the poor quality of some waste going for export.	Mr. Harald Junker Umweltbundesamt Anlaufstelle Basler Übereinkommen Wörlitzer Platz 1 844 Dessau harald.junker@uba.de
inspections; enforcement	NL	European Waste Enforcement Actions/Joint inspections of waste shipments, phase 2	Running 2011	The objective of this project is to promote and improve inspections and enforcement of waste shipments through and out of the European Union and to verify the waste destination and treatment in countries of destination and develop tools to support a better implementation of the Regulation.	Mr. Johan Huijbregts Ministry of Housing, Spatial Planning and the Environment Inspectorate General, Dep. Crisis Management PO box 16191, ipc 550 2500 BD The Hague johan.huijbregts@minvrom.nl
inspections; enforcement	NL	Enforcement Actions II	Running 2008-2011	The main objectives of this project are to work towards an adequate level of inspections in all Member States and at all exit points of the EU, to introduce complete measures in order to prevent and detect illegal waste shipments and to deter illegal waste exporters, to verify waste destination and the treatment at destination within or outside Europe, to set up training and exchange programmes for inspectors, and to maintain and improve the network and collaboration of front line inspectors and other competent authorities and enforcement partners by exchange of information and knowledge.	Mr. Johan Huijbregts Ministry of Housing, Spatial Planning and the Environment Inspectorate General, Dep. Crisis Management PO box 16191, ipc 550 2500 BD The Hague johan.huijbregts@minvrom.nl
control strategy; inspections; enforcement	UK	E-waste project	Running 2008-2011	This project will require IMPEL TFS members to work together to develop a strategic threat assessment on European WEEE exports which will enable a fuller understanding of the trade to be achieved. A better understanding of the European WEEE export trade will provide the opportunity to develop a Europe wide control strategy which will identify the most effective interventions or tactical actions each member state can employ to disrupt illegal trade. The project also offers the opportunity for some collaborative inspection and enforcement work to test the effectiveness of the control strategy and make adjustments to it as required.	Mr. Richard Gray Environment Agency International Waste Shipments Team Richard Fairclagh House Knutsford Road Warrington, Cheshire WA4 1HT richard.e.gray@environment-agency.gov.uk

European Commission

Guidance (Final version)

Services to support Member States' enforcement actions and inspections concerning the application of EU waste legislation

Relevant for:	Lead Country	Projects/Activities	Year/Period	Executive Summary/Project Description	Cluster 2: TFS National Contact Points
inspections; enforcement	NL	Enforcement Actions I	2006-2008	Main aim of this Enforcement Actions project is to contribute to a permanent and consistent level of enforcement of Waste Shipment Regulation within Europe. The following objectives are derived from the projects' aim: continue performing inspections; improve (inter)national cooperation and exchange of knowledge and experience and develop and improve enforcement tools.	Mr. Johan Huijbregts Ministry of Housing, Spatial Planning and the Environment Inspectorate General, Dep. Crisis Management PO box 16191, ipc 550 2500 BD The Hague johan.huijbregts@minvrom.nl
inspections	DE	Manual on the return of illegal shipments of waste	2007	During controls of waste shipments, cases of non-compliance are detected by the inspectors on a regular basis. For these situations, the legislation has included take-back obligations. To support the involved authorities in the actual arrangements of repatriating the waste, IMPEL TFS has developed a guidance manual.	Mr. Harald Junker Umweltbundesamt Anlaufstelle Basler Übereinkommen Wörlitzer Platz 1 844 Dessau harald.junker@uba.de
control; enforcement	NL	Waste Interpretation Database	2007	During the IMPEL TFS activities it was generally acknowledged that there are interpretation differences and that they frustrate adequate control and enforcement of Waste Shipment Regulation. The objective of the pilot project was to collect WSR decisions of authorities in a database, so that decisions can be viewed and understood and so that decisions can be compared and differences in interpretation can be identified.	Mr. Johan Huijbregts Ministry of Housing, Spatial Planning and the Environment Inspectorate General, Dep. Crisis Management PO box 16191, ipc 550 2500 BD The Hague johan.huijbregts@minvrom.nl
minimum criteria; inspections	IE	End of Live Vehicles Project	2006	The aim of the project is: 1. To define and clarify the categories of vehicles intended for export and to agree minimum criteria for classification as waste. 2. To develop a core inspection procedure for vehicle export and common working methods. 3. To facilitate exchange programmes of inspectors to improve exchange of experience and information, and good communication and information sharing.	Mr. Pat Fenton Heritage and local government, department of the environment, Waste Infrastructure and regulation Section Environment Division Custom House Dublin Dublin 1 pat_fenton@environ.ie

Relevant for:	Lead Country	Projects/Activities	Year/Period	Executive Summary/Project Description	Cluster 2: TFS National Contact Points
inspections: enforcement	NL	Seaport Project II	2004-2006	Main aim of the IMPEL-TFS Seaport II project is to improve inspections and the enforcement of regulations on the transfrontier shipments of waste, and to align enforcement actions between seaports, organisations and countries involved.	Mr. Johan Huijbregts Ministry of Housing, Spatial Planning and the Environment Inspectorate General, Dep. Crisis Management PO box 16191, ipc 550 2500 BD The Hague johan.huijbregts@minvrom.nl
enforcement	NL	Seaport Project I	2003-2004	The aim of this project was the improvement of the European enforcement of waste shipment regulation as laid down in EU Regulation 259/93 and the Basel convention, by improved cooperation between the enforcement authorities.	Mr. Johan Huijbregts Ministry of Housing, Spatial Planning and the Environment Inspectorate General, Dep. Crisis Management PO box 16191, ipc 550 2500 BD The Hague johan.huijbregts@minvrom.nl

Summary of relevant other studies covering issues on permitting, monitoring, inspections, enforcement etc.

Relevant for:	Source	Project/Study	Year/Period	Executive Summary/Project Description	Contact
monitoring; reporting	[EERA 2010]	Improving WEEE Monitoring and Reporting	2010	Position paper Proposal for accountable monitoring and reporting of the WEEE Directive	The European Electronics Recyclers Association secretariat@eera-recyclers.com www.eera-recyclers.com
permitting, monitoring, inspection	[Ökopol 2010]	Transboundary shipment of waste electrical and electronic equipment / electronic scrap – Optimization of material flows and control	2010	The report describes approaches, measures and regulation structures for the export of used EEE and WEEE to non-EU countries. It aims at optimising the protection of the environment and resource flows. In the countries of destination, the equipment encounters recovery and disposal structures, which are not suitable to ensure the protection of human health and the environment as well as the extensive recovery of re-sources. The elaborated measures cover short-term measures (amendment of the WEEE Directive, export controls, information of the public, obligation of manufacturers and re-marketing firms, return logistics) as well as medium-term measures (modification of the foreign trade statistics, improvement of the situation in the countries of destination).	http://www.basel.int/techmatters/e_wastes/germany-report-18May2010.pdf
implementation	[ECO 2009a]	A Report on the Implementation of Directive 91/689/EEC on Hazardous Waste	2009	This report is a synopsis of the responses by Member States to the questionnaire (Commission Decision 97/622/EC) covering the period 2004-2006. The synopsis summarizes these responses article per article and country per country.	Ecologic and Institute for European Environmental Policy
implementation	[ECO 2009b]	A Report on the Implementation of Directive 1999/31/EC on the Landfill of Waste	2009	This report is a synopsis of the responses by Member States to the questionnaire (Commission Decision 2000/738/EC) covering the period 2004-2006. The synopsis summarizes these responses article per article and country per country.	Ecologic and Institute for European Environmental Policy
implementation	[ECO 2009c]	A Report on the Implementation of Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE)	2009	This report is a synopsis of the responses by Member States to the questionnaire (Commission Decision 2004/249/EC) covering the period 2004-2006. The synopsis summarizes these responses article per article and country per country.	Ecologic and Institute for European Environmental Policy
implementation	[ECO 2009d]	A Report on the Implementation of Directive 75/442/EEC on Waste	2009	This report is a synopsis of the responses by Member States to the questionnaire (Commission Decision 94/741/EC) covering the period 2004-2006. The synopsis summarizes these responses article per article and country per country	Ecologic and Institute for European Environmental Policy

European Commission

Guidance (Final version)

Services to support Member States' enforcement actions and inspections concerning the application of EU waste legislation

Relevant for:	Source	Project/Study	Year/ Period	Executive Summary/Project Description	Contact
enforcement; inspections; monitoring; guidance	[EPA 2009]	Focus on Environmental Enforcement in Ireland	2009	The report highlights the outcomes of enforcement activities by EPA and local authorities with respect to waste, water, air and noise during 2006–2008. A separate section outlines the outcomes achieved by the EPA from the regulation of large industrial activities under the Integrated Pollution Prevention and Control Directive (IPPC).	ENVIRONMENTAL PROTECTION AGENCY An Ghníomhaireacht um Chaomhnú Comhsaoil; PO Box 3000, Johnstown Castle Estate, Co. Wexford, Ireland Telephone: +353 53 916 0600 Fax: +353 53 916 0699; Email: info@epa.ie Website: www.epa.ie
implementation	[EU 2009]	Report on Implementation of the Community Waste Legislation	2009	This report aims to inform the other Community institutions, the Member States and the public about the implementation of the EU legislation on waste over the period 2004 – 2006. It covers Directives 2006/12/EC on waste, 91/689/EC on hazardous waste, 75/439/EEC on waste oils, 86/278/EEC on sewage sludge, 94/62/EC on packaging and packaging waste, 1999/31/EC on the landfill of waste, 2002/96/EC on waste electrical and electronic equipment, and 2000/53/EC on end-of-life vehicles.	
implementation	[Milieu 2009]	Study on the feasibility of the establishment of a Waste Implementation Agency	2009	The European Commission is taking a series of steps to strengthen the implementation of EU waste legislation and is exploring new initiatives for the coming years. As part of these efforts, the Commission has launched this feasibility study to outline the benefits and costs of creating a dedicated agency to support the implementation and enforcement of EU waste legislation.	Milieu Ltd. (Belgium), 15 rue Blanche, B-1050 Brussels, tel: +32 2 506 1000; fax: +32 2 514 3603; e-mail: zamparutti@milieu.be ; web address: www.milieu.be
enforcement; implementation; inspections; monitoring	[Arcadis & RPA 2008]	Study on RoHS and WEEE Directives	2008	With respect to the overall review of the WEEE Directive, this study will help at closing certain gaps by covering the assessment of the impacts on innovation, competition and the assessment of the relationships with existing Directives and broader policy objectives. The aim of the Study of the RoHS Directive consisted of identifying proposals to revise the Directive with a view to improving its cost effectiveness while maintaining the same level of environmental protection.	ARCADIS: Sarah Bogaert, Mike Van Acoleyen, Inge Van Tomme, Lieven De Smet RPA: Dave Fleet, Rocio Salado
enforcement; inspections	[EPA 2007]	EPA Enforcement of the WEEE Regulations	2007	The Environmental Protection Agency's Office of Licensing and Guidance, as part of the National Waste Prevention Programme, is responsible for enforcing the Waste Electrical and Electronic Equipment (WEEE) Regulations (S.I. No. 340 of 2005) in co-operation with local authorities and other regulatory bodies with related responsibilities. A programme of unannounced inspections, complaint investigation and surveillance is ongoing.	Additional information can be obtained from: http://www.epa.ie

European Commission

Guidance (Final version)

Services to support Member States' enforcement actions and inspections concerning the application of EU waste legislation



Relevant for:	Source	Project/Study	Year/ Period	Executive Summary/Project Description	Contact
implementation; inspections; monitoring	[JRC 2006]	Implementation of the Waste Electric and Electronic Equipment Directive in the EU	2006	The report identifies and describes regulatory and management approaches considering WEEE at worldwide level. It outlines key trends and describes the main benefits and problems in the implementation of the WEEE Directive. The report identifies opportunities for harmonisation and improvement in the way the Directive is being implemented across Member States.	European Commission Directorate-General Joint Research Centre Institute for Prospective Technological Studies Contact information Address: Edificio Expo. c/ Inca Garcilaso, s/n. E-41092 Seville (Spain) E-mail: jrc-ipts-secretariat@ec.europa.eu Tel.: +34 954488318; Fax: +34 954488300 http://www.jrc.es ; http://www.jrc.cec.eu.int
enforcement; implementation; guidance	[NMO 2006]	RoHS Enforcement Guidance Document	2006	This document has two primary intentions: • to assist Member States with national enforcement of the RoHS Directive; and • to provide clarity to industry on how producers may demonstrate compliance with its requirements. This document is also intended to become part of a wider, voluntary initiative to develop administrative co-operation between those Member State enforcement authorities that have responsibility for the implementation of the RoHS Directive.	Additional information can be obtained from: http://www.bis.gov.uk/nmo/enforcement
inspection	[Arcadis 2010]	support to implementation of waste shipment regulation requirements in the customs nomenclature and tariff	2010	the report describes the major procedures and inspection risks for 15 priority waste streams that are being transboundary shipped, and it includes detailed concordance tables between list of waste LoW codes, annexes III and IV codes (A and B codes and additions) from the Waste Shipment Regulation and the HS/CN harmonised system/combined nomenclature used by customs services. The aim is to support customs services in the inspection on waste shipments.	ARCADIS : Mike van Acoleyen, Ilse Laureysens BIO-IS : Lise Vanlong, Nejma Andre
permitting, monitoring	[bio-is, 2010]	plastic waste in the environment	2010	This report describes trends in plastic waste generation and management, develops a baseline scenario, presents five policy options that could change that scenario. One of them is "WEEE and automotive plastic waste targets".	bio-is: Shailendra Mudgal aea energy and environment : Phil Dolley IEEP : Catherine Bowyer http://ec.europa.eu/environment/waste/studies/pdf/plastics.pdf

Relevant for:	Source	Project/Study	Year/ Period	Executive Summary/Project Description	Contact
inspection	[Basel Convention secretariat]	draft Technical Guidelines on transboundary movement of e-waste, in particular regarding the distinction between waste and non-waste	2010 - ongoing	This draft for consultation (Version 22 September 2010) is included in the work plan for the environmentally sound management of E-waste (WEEE) as adopted at the ninth meeting of the Conference of the Parties to the Basel Convention. It offers support on the distinction between electrical and electronic equipment destined for repair or continued use and e-waste, to enable better inspection in case of a border control. Next revision will be published on 31 January 2011.	http://www.basel.int/techmatters/e_wastes/guidelines/guidelines/21Sep2010.doc
inspection	[Ökopol 2010]	Transboundary shipment of waste electrical and electronic equipment / electronic scrap – Optimization of material flows and control	2010	The report describes approaches, measures and regulation structures for the export of used EEE and WEEE to non-EU countries. It aims at optimising the protection of the environment and resource flows. In the countries of destination, the equipment encounters recovery and disposal structures, which are not suitable to ensure the protection of human health and the environment as well as the extensive recovery of re-sources. The elaborated measures cover short-term measures (amendment of the WEEE Directive, export controls, information of the public, obligation of manufacturers and re-marketing firms, return logistics) as well as medium-term measures (modification of the foreign trade statistics, improvement of the situation in the countries of destination).	http://www.basel.int/techmatters/e_wastes/germany-report-18May2010.pdf
monitoring, inspection	[OECD 2009]	Guidance manual for the control of transboundary movements of recoverable wastes	2009	The Guidance Manual explains the functioning of the OECD control system in detail. It assists national governments and competent authorities to implement the OECD control system and also helps private companies to import and export of recoverable wastes in an environmentally sound and economically efficient manner.	http://www.oecd.org/dataoecd/57/1/42262259.pdf
permitting, inspection, enforcement	[EC DG ENV 2006]	Frequently Asked Questions on Directive 2002/95/EC on the Restriction of the Use of certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) and Directive 2002/96/EC on Waste Electrical and Electronic	2006	These Frequently Asked Questions (FAQ) are intended to help the authorities in the Member States to interpret both directives. They could also be used as a reference by economic operators, as they will have to comply with the national laws transposing the Directives. These FAQ reflect the views of the Commission, and as such are not legally binding	http://ec.europa.eu/environment/waste/pdf/faq_weee.pdf

European Commission

Guidance (Final version)

Services to support Member States' enforcement actions and inspections concerning the application of EU waste legislation

Relevant for:	Source	Project/Study	Year/ Period	Executive Summary/Project Description	Contact
inspection, monitoring	[BAN network, 2006]	Equipment (WEEE) The digital dump	2005	Discarded electronic equipment is recognized as the fastest growing waste stream in the industrialized world for which many brokers and businesses have sprung up to channel from North to South. Strict enforcement of the Basel Convention for the hazardous hand-me-downs must become the norm. Thankfully, some countries have already embarked on such measures of responsibility. Australia is noted, for implementing rules that require full testing of electronic waste to certify compliance with the Basel Convention prior to any export.	http://www.ban.org/Library/TheDigitalDump.pdf

Contact details:

BiPRO GmbH
Grauertstr. 12
81545 Munich, Germany
Phone: +49-89-18979050
Fax: +49-89-18979052
URL: <http://www.bipro.de>

