Annex I

Sweden

Improving financial security in the context of the Environmental Liability Directive
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Prepared by:
Valerie Fogleman, Stevens & Bolton LLP,
Cardiff University School of Law and Politics
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1. INTRODUCTION

Financial security for the prevention and remediation of environmental damage under the ELD in the form of stand-alone environmental insurance policies is available in Sweden.

Environmental extensions to general liability policies that provide cover for the remediation of sudden and accidental off-site pollution from an operator’s activities at its own site are also available.

Environmental extensions to property policies are not available.

Sweden transposed the ELD by amending the Environmental Code by the Amendment of the Environmental Code Act (Lag om ändring av miljöbalken) of 20 June 2007 (SFS 2007:660); and adopting the Ordinance (2007:667) on serious environmental damage (Förordning (2007:667) om allvarliga miljöskador; Environmental Damage Ordinance).

Sweden does not impose mandatory financial security for liabilities under the ELD.

Section 3 of chapter 16 of the Environmental Code authorises a permitting authority to subject permits, approvals and/or exemptions under the Code to mandatory financial security requirements. Authorities have such power under the Industrial Emissions Directive (2010/75/EU) and the Seveso III Directive (2012/18/EU) in addition to other EU legislation that mandates financial security such as the Landfill Directive (1999/31/EC) and the Directive on the Geological Storage of Carbon Dioxide (2009/31/EC).

The authorities do not, however, generally require an applicant for a permit, approval and/or an exemption to have financial security except for the following (some of which are required by the EU legislation): landfill operations, quarries (mining), carbon capture and storage operations, and wind farms.

Sweden formerly imposed mandatory insurance for holders of environmental permits to provide cover for claims for bodily injury and property damage and, subsequently, the costs of measures to remediate land/soil and water damage if the person who was liable was unable to pay the costs. Sweden discontinued the mandatory insurance scheme in 2010.

2. ENVIRONMENTAL INSURANCE MARKET

The 2017 Environmental Implementation Report for Sweden stated that there was ‘a lack of information on the take-up of financial security provided by the insurance industry (to cover remediation costs where the operator cannot pay) following Sweden’s abolition in 2010 of mandatory financial security’. The report suggested that Sweden should, among other things, ‘take further steps to ensure an effective system of financial security for environmental liabilities (so that operators not only have insurance cover available to them but actually take it up)’. The report further noted that the Swedish government [had] already started to investigate if actions or measures need to be taken in order to improve the current system for financial securities to ensure sufficient financial security when needed.  

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The 2019 Environmental Implementation Report stated, among other things, that Sweden should ‘Improve financial security for liabilities’. 4

When this report was published, stand-alone environmental insurance policies that provided cover for all ELD liabilities were available in Sweden, not only for pollution but also for other types of environmental damage. Demand for the policies is moderate.

Environmental extensions to general liability policies were also available, especially for construction work. The extensions provide cover for claims for remediating off-site pollution from a sudden and accidental incident on an insured’s site. Some provide cover for bodily injury and property damage from construction activities that cause water or soil pollution. Some provide cover for the costs of preventing environmental damage.

The extensions tend to be limited to pollution. They do not provide cover for liabilities under the ELD, with many simply referring to liabilities under the Environmental Code (*Miljöbalken*). 5 Demand for the extensions is moderate.

Environmental insurance policies that provide more extensive cover for ELD and other environmental liabilities offered by multinational insurers to businesses with sites and/or operations in Sweden and other States, are widely available by passporting.

### 2.1. Commercial insurers

#### 2.1.1. Number of insurers

Approximately 10 to 15 insurers that are based in, or have branches in, Sweden provide stand-alone environmental insurance policies to businesses that have sites and/or operations only in Sweden.

In comparison, Insurance Sweden (*Svensk Försäkring*), the Swedish insurance association, has approximately 50 groups of insurers as members. 6

#### 2.1.2. New insurers entering the market since 2009

No information was provided on whether any new insurance had entered the environmental insurance market since 2009.

#### 2.1.3. Existing insurers that introduced environmental insurance policies since 2009

Some insurers that conducted insurance business in Sweden before 2009 introduced stand-alone environmental insurance policies after 2009. The precise number was not available.

### 2.2. Re/insurance pools

There are no re/insurance pools that provide policies for ELD or other environmental liabilities in Sweden.

#### 2.2.1. Date of establishment

Not applicable

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2.2.2. Descriptions of policies issued
Not applicable

2.3. Mutuals
No information was provided about any mutuals that offered stand-alone environmental insurance policies in Sweden.

2.3.1. Date of establishment
Not applicable

2.3.2. Descriptions of policies issued
Not applicable

2.4. Other
There are no captives, underwriting agencies, or other types of providers of environmental insurance policies in Sweden.

3. VOLUNTARY INSURANCE POLICIES FOR ELD AND OTHER ENVIRONMENTAL LIABILITIES

3.1. Environmental insurance policies
Stand-alone environmental insurance policies are available in Sweden, and have been available since at least 2005. They provide cover for all liabilities under the ELD, including other types of environmental damage in addition to pollution.

3.2. Cover for ELD preventive costs
Stand-alone environmental insurance policies in Sweden provide cover for the costs of preventive measures under the ELD.

3.3. Cover for ELD primary, complementary and compensatory costs
Stand-alone environmental insurance policies in Sweden provide cover for primary, complementary and compensatory remediation under the ELD.

3.4. Cover for non-ELD liabilities
Stand-alone environmental insurance policies in Sweden provide cover for non-ELD liabilities such as third-party claims for bodily injury and property damage from pollution.

3.5. Nature of policies (liability only or liability and on-site remediation)
Stand-alone environmental insurance policies in Sweden provide cover for the costs of remediating environmental damage caused by an insured to third-party sites as well as the costs of remediating such damage on an insured’s own site. The policies also provide cover for third-party claims for bodily injury and property damage from pollution.

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The policies do not provide cover for damage to on-site property in the form of buildings, other structures and equipment unless, under some policies, the damage results from carrying out remediation measures themselves.

3.6. Description of policies

3.6.1. Format

Environmental insurance policies offered by multinationals for risks in Sweden generally have a menu format so that an insured may select the insuring agreement(s) it requires. There is a wide range of such policies (see section 3.6.3 below).

3.6.2. Claims made or occurrence based

Stand-alone environmental insurance policies are underwritten on a claims made basis rather than an occurrence basis. That is, a claim must be made during the policy period or an extended reporting period, with the environmental damage from which the claim arose having to occur during the policy period.

Extensions to general liability policies are occurrence based, that is, the risks that are covered by the policy must occur during the policy period; claims may be brought after the policy period.

3.6.3. Policies for operators

Insurers based in, or with branches in, Sweden offer a wide range of environmental insurance policies to operators with sites and/or operations in Sweden. The policies are available to small to medium sized operators as well as large operators.

Depending on the insurer, the policies include insuring agreements for the following:

- the remediation of on-site and off-site environmental damage under the ELD caused by operations, including transportation, carried out by the insured operator;
- the remediation of pollution under other environmental legislation caused by operations, including transportation, carried out by the insured operator;
- emergency costs and costs of preventive measures under the ELD under the two above bullet points;
- third-party claims for bodily injury and property damage;
- third-party business interruption;
- the insured’s business interruption costs and extra expense caused by environmental damage including pollution; and
- related legal costs.

Only the first and third items are liabilities under the ELD and, thus, covered by the mandatory financial security system. The policies are thus designed to include, not only protection under the ELD but also protection under other public law as well as civil law and non-liability requirements.

In addition to specimen wordings for each type of policy, multinational insurers have libraries of standard endorsements for each type. They also draft manuscript endorsements to supplement the endorsements in their libraries to meet the needs of individual insureds, as necessary.

All environmental insurance policies offered by multinational insurers to operators with sites and/or operations only in Sweden as well as sites and/or operations in Sweden and other States are not necessarily designed for Swedish operators. Some policies are specifically
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designed to reflect – and provide cover for – the legal and licensing situation in Sweden; others are not.

3.6.4. Policies for contractors and others

Stand-alone environmental insurance policies that provide cover for ELD and other environmental liabilities are also available for contractors. The policies tend to provide similar types of cover as the policies for operators, as described in section 3.6.3 above, including liability for remediating environmental damage including pollution at sites at which the contractor is carrying out operations in addition to the insured contractor’s own site. Some policies specifically provide cover for exacerbating pollution at a site.

3.7. Model terms and conditions

There are no model terms and conditions for environmental insurance policies, endorsements to other policies, or any other financial security instruments for ELD or other environmental liabilities in Sweden.

3.7.1. Organisation issuing model terms and conditions

Not applicable

3.7.2. Description of model terms and conditions

Not applicable

3.7.3. Relationship between policies with model terms and conditions and environmental insurance policies

Not applicable

3.8. Date of general availability of environmental insurance policies

Stand-alone environmental insurance policies have been available since about 2005. Their range and scope increased after the ELD was transposed into Swedish law on 1 August 2007.

3.9. Environmental assessments and audits

Insurers that offer policies to industrial and commercial operators for their insurance programmes for sites in and outside Sweden tend not to require prospective insureds to carry out environmental assessments and audits for their operations. If the operators have already carried out such assessments and audits, they provide them to insurers as part of the underwriting due diligence process.

3.10. Average premium

The average premium for a stand-alone environmental insurance policy varies depending on factors such as whether the insured is a large business or a small or medium sized business. Other factors include the number and type of facilities operated by the insured.

One ELD stakeholder stated that the average premium for an operator with a site(s) in Sweden is between EUR 2,000 and EUR 10,000.

The premium for a general liability or property policies with an environmental extension depends on factors other than the extension.
3.11. **Average policy limit**

The average policy limit for a stand-alone environmental insurance policy varies depending on factors such as whether the insured is a large business or a small or medium sized business. Other factors include the number and type of facilities operated by the insured.

One ELD stakeholder stated that the average policy limit for a stand-alone environmental insurance policy for a site(s) in Sweden is between EUR 100,000 and EUR 3,000,000.

3.12. **Average deductible or self-insured retention**

It is not possible to state an average deductible or self-insured retention for a stand-alone environmental insurance policy in Sweden. The deductible or self-insured retention in some policies is based on a percentage; in other policies it is a specific amount based on underwriting criteria.

3.13. **Average policy period**

The average policy period for a stand-alone environmental insurance policy is 12 months.

3.14. **Sizes of typical insured businesses**

There is no typical size of a business that has environmental insurance in Sweden.

3.15. **Industrial and commercial sectors that typically purchase policies**

No information was provided on any specific industrial and commercial sectors that typically purchase environmental insurance policies.

Motor insurance policies provide cover for environmental damage.

There are also stand-alone environmental insurance policies specifically for farmers.

3.16. **Industrial and commercial sectors with limited or no accessibility to policies**

No information was provided on any industrial or commercial sectors that had limited or no accessibility to stand-alone environmental insurance policies.

3.17. **Number and amount of claims**

There are reportedly a few claims against stand-alone environmental insurance policies but no specifics were available.

3.18. **Coverage litigation**

Coverage litigation of environmental insurance policies is uncommon⁸ if it exists at all.

3.19. **Cover for ELD liabilities in general liability policies**

Cover for ELD liabilities is not generally available in environmental extensions to general liability policies. Cover is available for remediating off-site pollution from a sudden and accidental incident on an insured’s site. Extensions are available, in particular, for construction work.

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3.20. **Cover for ELD liabilities in property policies**

Property policies for risks in Sweden typically exclude cover for water, soil and air pollution caused by an insured. Environmental extensions to them are not available.

4. **OTHER VOLUNTARY FINANCIAL SECURITY INSTRUMENTS AND MECHANISMS**

4.1. **Type(s)**

Voluntary financial security instruments such as bank guarantees, bonds, etc. are not generally available for liabilities under the ELD or other environmental legislation. There is no demand for them because they are geared towards mandatory financial security requirements for known responsibilities such as closure and post-closure (aftercare) of a landfill, not voluntary financial security for liabilities under the ELD.

4.2. **Availability**

Not applicable

5. **MANDATORY FINANCIAL SECURITY FOR ELD LIABILITIES (ARTICLE 14(1))**

There are no mandatory financial security requirements for ELD liabilities in Sweden.

5.1. **Competent authority(ies)**

Not applicable

5.2. **Legislative provisions**

5.2.1. **Name(s) of legislation**

Not applicable

5.2.2. **Stand-alone requirement or hybrid**

Not applicable

5.2.3. **Consideration of mandatory financial security legislation (if not enacted)**

The Swedish Government stated, in the Act that revoked the Environmental Damage Insurance programme, that it was important that operators should bear the costs of remediating environmental damage. The Government is following developments in the EU to determine how best to introduce effective financial security solutions that reflect the polluter pays principle.

The Environmental Damage Insurance programme is described directly below.

In 1989, the Swedish Government established an Environmental Damage Insurance programme. The programme followed the introduction of liability for environmental damage into the Environmental Protection Act. The main principles of these rules were transferred into chapter 33 of the Swedish Environmental Code that entered into force on 1 January 1999.

Holders of environmental permits, with a few exceptions, were required to purchase insurance to provide compensation to individuals and small businesses that suffered bodily injury and/or property damage caused by environmental damage. The insurance was triggered only if the person that caused the damage or injury could not be found, was
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insolvent or was not liable due to the expiration of the limitations period. Premiums for the insurance policies were based on the type of permit and operations carried out under the permit; they were not based on a risk assessment.

In 1999, an additional type of insurance, called remediation insurance, was introduced to complement the environmental damage insurance. Remediation insurance provided cover for the costs of measures to remediate land/soil and water ordered by competent authorities up to a limit of SEK 50,000,000 (EUROS 4,720,000) per claim, with an annual aggregate of SEK 200,000,000 (EUR 18,880,000). The trigger for payment under the policies was non-compliance by the person that caused the damage with an order to remediate it and confirmation by the competent authority and the receiver in bankruptcy that money was not available to remediate the damage.

The programme was initially managed by a consortium that included all Swedish insurers that participated in the programme. Due to competition law issues, the insurance was subsequently provided by a single insurer selected by a public procurement procedure.9

In 2007, a public investigation report stated as follows:

Evaluation of the environmental damage insurance shows that its application has been very limited. The Inquiry has only been able to speculate on the reasons. So far in 2006, there have only been three cases of compensation paid, amounting to just over SEK 363,000 [EUR 34,267]. Over the first ten years, fees amounting to SEK 250 million [EUR 23,600,000] were levied to fund the environmental damage insurance; in the same period, the insurance made one payment of SEK 6,025 [EUR 569] in a claim involving a polluted well.

This background of course begs the question of whether this insurance meets any actual need that must be met by public fees. It is, in any event, clear that this compensation system needs to be arranged in a more cost-effective form.

The clean-up insurance has not had the broad application that seems to have been expected, either.

In the eight years it has existed, a total of just over SEK 6,109,000 [EUR 576,690] has been paid out from the clean-up insurance. The fee-funded cost of this insurance and environmental damage insurance has in the same period amounted to almost SEK 120 million [EUR 11,328,000]. The fact that compensation has not been paid from the insurance does not, however, seem to be due to any lack of clean-up cases; supervisory authorities have instead said that the narrow framing of some insurance terms and over-strict application of these terms has made it difficult to obtain funds from the insurance, and that this has sometimes led to supervisory authorities thinking that applying for compensation is not even worth the trouble. This criticism seems primarily to have applied to the insurance’s limits on what are compensable clean-up measures.

The above view that the policy terms had been narrowly framed and that there was an ‘over-strict application of the terms’ was not universally shared. It appears that most of the claims that were brought concerned environmental damage that had occurred before the relevant


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In addition, premiums were based on the estimate of a risk of substantial pollution from an incident which, although no such incident occurred during the time that the programme existed, could not be discounted.

The scheme was discontinued in 2010.

5.2.4. Reasons for decision not to enact mandatory financial security legislation
See section 5.2.3 above.

5.2.5. Revisions to legislation
Not applicable

5.2.6. ELD liabilities covered by mandatory financial security
Not applicable

5.2.7. Description of mandatory financial security provisions
Not applicable

5.2.8. Exception for low risk sites
Not applicable

5.2.9. Exception for ISO 14001 certification or EMAS registration
Not applicable

5.2.10. Other exceptions
Not applicable

5.3. Environmental licence conditions
Sweden has not introduced mandatory financial security for preventing and remediating environmental damage under the ELD by conditions to licences or other authorisations other than those indicated pursuant to legislation specifying such conditions.

5.3.1. Stand-alone requirement or hybrid
Not applicable

5.3.2. Revisions to licensing requirements
Not applicable

5.3.3. ELD liabilities covered by mandatory financial security
Not applicable

5.3.4. Description of mandatory financial security conditions
Not applicable

5.4. Date of introduction
Not applicable
5.5. **Effective date**
Not applicable

5.6. **Key reasons for introduction**
Not applicable

5.7. **Withdrawal of mandatory financial security**
Not applicable but see section 5.2.3 above.

5.8. **Guidance**
Not applicable

5.9. **Operators subject to mandatory financial security**
Not applicable

5.10. **Amounts and limits of mandatory financial security**
Not applicable

5.11. **Growth of mandatory financial security**
Not applicable

6. **REGULATORY OVERSIGHT OF FINANCIAL SECURITY INSTRUMENTS AND MECHANISMS**

6.1. **Review of financial security instruments or mechanisms**
Not applicable

6.2. **Financial security instruments and mechanisms accepted**
Not applicable

6.2.1. *Templates*

6.2.2. *Requirements for environmental insurance policies*

6.2.3. *Form of mandatory environmental insurance policy*

6.3. **Financial security instruments and mechanisms not acceptable**
Not applicable

6.4. **Time of review**
Not applicable

6.5. **Regulatory costs of review**
Not applicable

6.6. **Requirements for operator to review**
Not applicable
7. **Enforcement of Financial Security Requirements**

Not applicable

8. **Ex post Environmental Damage Mandatory Financial Security (Article 8(2))**

For the purpose of overseeing compliance with the requirements set out in the Environmental Code and legislation issued under the Code, as well as the requirements set out in permits, the Code contains provisions concerning supervision. The term ‘supervision’ is broad and covers inspection, enforcement and issuing guidelines.\(^{11}\)

To supplement the supervision by authorities, operators of environmentally hazardous activities are required to conduct self-monitoring. The operator pays charges and fees for supervision carried out by the supervisory authorities according to provisions in chapter 27 of the Environmental Code and the Ordinance (1998:940) on Charges and Fees for Procedures and Supervision according to the Environmental Code (förorordningen (1998:940) om avgifter för prövning och tillsyn enligt miljöbalken).\(^{12}\)

Chapter 16 of the Environmental Code sets out general provisions concerning the consideration of cases and matters.

Section 3 of chapter 16, entitled Right of appeal, states that:

> [t]he validity of a permit, approval or exemption under the Environmental Code or rules issued pursuant thereto may be made subject to the requirement that the person who intends to pursue the activity must furnish a security for the costs of after-treatment and any other restoration measures that may be necessary as a result.

There is an exemption from the requirement for the State, municipalities, county councils and associations of municipalities, as well as persons required to pay a fee or lodge a security for specified waste products from nuclear activities.

8.1. **Date legislation or policy for mandatory financial security introduced**

The requirements, which are not limited to the ELD, pre-date the ELD.

8.2. **Effective date for ex post mandatory financial security**

See section 8.1 above.

8.3. **Financial security instruments and mechanisms accepted**

See section 8 above.

8.4. **Financial security instruments and mechanisms not acceptable**

There is no list of financial security instruments and mechanisms that are not acceptable.

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9. PROVIDERS OF MANDATORY FINANCIAL SECURITY INSTRUMENTS

9.1. Insurers
Not applicable

9.2. Banks and other financial institutions
Not applicable

9.3. Sureties
Not applicable

9.4. Providers outside Member State
Not applicable

10. MEASURES TAKEN BY MEMBER STATE TO DEVELOP FINANCIAL SECURITY MARKETS

See section 5.2.3 above.

11. EU ENVIRONMENTAL LEGISLATION WITH MANDATORY FINANCIAL SECURITY PROVISIONS

11.1. Landfill Directive

11.1.1. Competent authority(ies)

The Ministry of the Environment (Miljödepartementet) is responsible for implementation of the Landfill Directive, which is implemented in Sweden by the Environmental Code and the Landfill Ordinance (2001:512) (förordningen (2001:512) om deponering av avfall).\(^{13}\)

In turn, the responsibilities and tasks for competent authorities pursuant to the Landfill Directive are divided between many authorities. Some responsibilities are given to the authorisation authorities, some to the supervisory authorities and some to the Swedish Environmental Protection Agency or any other agency in charge of the specific area concerned.

11.1.2. Financial security provisions

Section 35 of chapter 15 of the Environmental Code states that an applicant for landfill operations must provide financial security in accordance with section 3 of chapter 16 of the Code or take other appropriate measures to provide financial security.

Section 3 of chapter 16 requires such an applicant to provide financial security for the cost of remedying environmental damage and other necessary recovery measures. The financial security must be approved by the permitting authority.

Section 3 provides an exception from the requirement for financial security for the State, municipalities, county councils and associations of municipalities.

11.1.3. **Financial security instruments and mechanisms accepted**

The general rule on financial securities in section 3 of chapter 16 applies to all financial guarantees under the Code. Section 3 states that financial security is accepted if it is shown to be satisfactory for its purpose by the competent authority (see section 13.3 below).

11.1.4. **Templates**

There are no templates for financial security instruments.

11.1.5. **Financial security instruments and mechanisms not acceptable**

There is no list of financial security instruments or mechanisms that are not acceptable.

11.2. **Extractive Waste Directive**

11.2.1. **Competent authority(ies)**

The competent authorities for the Extractive Waste Directive (2006/21/EC), which is implemented in Sweden by the Ordinance (2013:319) on recovery of waste (Förordning (2013:319) om utvinningsavfall),¹⁴ are the Ministry of Environment (Miljödepartementet) and the Environmental Protection Agency.

The Mining Inspectorate of Sweden grants exploration permits and exploitation concessions for mining activities. The County Administrative Board’s Environmental Permits Board grants permits for exploratory activities. The Land and Environment Court grants permits for exploitation activities; permits are conditional on the operator showing evidence of financial security.

The County Administrative Board carries out environmental monitoring of permits including financial security. The Swedish Environmental Protection Agency (Naturvårdsverket) and the County Administrative Board (Länsstyrelsen) are consultees for the above activities.¹⁵

See also section 11.1.1 above.

11.2.2. **Financial security provisions**

Section 3 of chapter 16 of the Environmental Code applies to the Ordinance on recovery of waste (see section 13.3 below).

Section 64 of the Ordinance on Recovery of Waste requires an applicant for a permit under the Regulation, among other things, to provide financial security for the extractive waste facility according to an independent qualified assessment that takes account, among other things, of an unplanned or premature closure of the facility and any additional costs to which the closure may entail.

In 2015, the Swedish National Audit Office published a report on financial risks for the State from mining waste.¹⁶ The report concluded that financial security for mining activities did not

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¹⁶ Ibid
sufficiently minimise the risk that central government and taxpayers would pay the costs of the post-closure (aftercare) of mines. The report criticised the requirement for financial security for mining activities after a licence had been granted, stating that this had resulted in the lack of financial security for periods of one to six months, with longer periods resulting if the competent authority reviewed the financial security instrument. The report further stated that the examination and monitoring of financial security instruments was resource intensive, requiring legal and financial competence. In one case, a competent authority had not noticed that a bank guarantee for mining activities had ceased to exist, resulting in a lack of financial security for over two years.\(^\text{17}\)

In September 2017, the Environmental Protection Agency and the Geological Survey of Sweden (Sveriges geologiska undersökning) published a proposed strategy for the environmentally sustainable management of mining waste.\(^\text{18}\) One of the 13 proposals in the strategy was to designate the appropriate competent authority as the mandatory authority for issues concerning financial security. The proposal questioned the adequacy of financial security for closure and post-closure costs, noting that calculation of the amount did not include all necessary costs\(^\text{19}\) due among other things to changes in circumstances from the time at which the amount of financial security was calculated and the time of closure. The proposal noted that calculations were regularly reviewed and adjusted, as necessary, but that problems could occur when remediation was required before sufficient funds had been built up. The proposal noted that it was not possible to design a general template to apply to all cases.\(^\text{20}\)

The Swedish Government subsequently set terms of reference for an independent inquiry into financial security for extractive waste to determine whether there were more effective ways to ensure the adequacy of financial security instruments.

The report of the inquiry, State Mining Risks, Report of the Mining Waste Financing Survey, was published in 2018.\(^\text{21}\) Among other things, the report described four bankruptcies in the mining sector since 2012; Dannemora Magnetit AB (Dannemora mine), Northland Resources AB (Tapuli mine at Kaunisvaara), Lappland Goldminers AB (Fäboliden mine) and Lappland Goldminers Sorsele AB (Blaiken and Svärrtrask mines). The report recommended several legislative amendments including specific requirements on how a financial security instrument for mining operations shall be calculated and which remediation measures and other restoration measures shall be covered.

\(^{17}\) Ibid 3


\(^{19}\) See Ann-Marie Fällman, ‘Proposal for a strategy for the environmentally sustainable management of mining waste in Sweden; parts on financial guarantees’ (presentation at European Commission Workshop on financial guarantees, 26 January 2018); http://ec.europa.eu/environment/waste/mining/pdf/financial_guarantees_presentations.zip


\(^{21}\) Statens gruvliga risker (Betänkande av Gruvavfallssafinansieringsutredningen) (1 June 2018); https://www.regeringen.se/49f4ae/contentassets/c5f50bbd9d434583913657640d5c697a/statens-gruvliga-risker-sou-201859 (in Swedish)
11.2.3. Financial security instruments and mechanisms accepted

The most common types of financial security instruments for facilities for extractive waste are various types of bank guarantees including performance bonds. Of the total amount of SEK 2.7 billion (EUR 249,351,000) in financial security instruments for mining activities in 2015, over 90% were bank guarantees.

See also section 13.3 below concerning section 3 of chapter 16 of the Environmental Code.

11.2.4. Templates

There are no templates for financial security instruments. Their terms and conditions for financial security instruments for mining activities and other environmentally hazardous activities are not standardised.

11.2.5. Financial security instruments not acceptable

There is no list of financial security instruments that are not acceptable.

11.3. Carbon Capture and Storage Directive

11.3.1. Status of implementation

There are no facilities for the storage of carbon dioxide in Sweden.

11.3.2. Competent authority(ies)


See also section 11.1.1 above.

11.3.3. Financial security provisions

Section 37 of chapter 15 of the Environmental Code states that an applicant for a storage site for carbon dioxide must provide financial security in accordance with section 3 of chapter 16 (see section 13.3 below).

The financial security must be sufficient to ensure that obligations under the storage permit, including closure and post-closure measures and obligations under the European Emissions Trading Scheme (implemented in Sweden by the Emissions Trading Act (2004:1199) (Lag om handel med utsläppsrätter) are carried out.

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22 See Peter Stoltz, ‘Public Inquiry on Financing of Extractive Waste’ (presentation at European Commission Workshop on financial guarantees, 26 January 2018)


24 Ibid 6; Peter Stoltz, Public Inquiry on Financing of Extractive Waste (presentation at European Commission Workshop on financial guarantees, 26 January 2018)


11.3.4. **Financial security instruments and mechanisms accepted**

No specific financial security instruments or mechanisms are stated to be acceptable. See section 13.3 below concerning section 3 of chapter 16 of the Environmental Code.

11.3.5. **Templates**

There are no templates for financial security instruments or mechanisms.

11.3.6. **Financial security instruments and mechanisms not acceptable**

There is no list of financial security instruments or mechanisms that are not acceptable.

12. **EU Recommendation on Hydraulic Fracturing**

12.1. **Status**

The Swedish Government has granted permits for the exploration and test-drilling for gas since 2008. By March 2019, it had granted 21 exploration permits. The exploration, however, showed that shale gas reserves were limited and that commercial production was not economically viable. As a result, and also as a result of strong opposition to fracking, Sweden does not have any commercial production of shale gas by hydraulic fracturing (fracking).²⁷

12.2. **Competent authority(ies)**

The competent authority for licensing the exploration of minerals and hydrocarbons, including concessions, is the Mining Inspectorate of Sweden (*Bergsstaten*).²⁸

Environmental permits are also a prerequisite for the extraction of hydrocarbons. Permitting is handled by the environmental courts or an independent function within each county administrative board in Sweden, depending on the size and location of the operation.

12.3. **Financial security provisions**


Provisions on financial security are found in section 3 of chapter 16 of the Environmental Code (see section 13.3 below).

Fracking is covered by the same basic legislation and provisions on environmental liability and financial security as other environmentally hazardous operations (see section 5.2 above and section 13.3 below). For exploration permits and exploitation concessions there are also provisions on financial security in the Minerals Act.

12.4. **Financial security instruments and mechanisms accepted**

See section 13.3 below concerning section 3 of chapter 16 of the Environmental Code.

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²⁸ See ibid

12.5. **Templates**
There are no templates for financial security instruments.

12.6. **Financial security instruments and mechanisms not acceptable**
There is no list of financial security instruments and mechanisms that are not acceptable.

13. **EU ENVIRONMENTAL LEGISLATION WITH NO MANDATORY FINANCIAL SECURITY PROVISIONS**

13.1. **Industrial Emissions Directive**

13.1.1. **Competent authority(ies)**
The competent authority for the Industrial Emissions Directive, which is implemented in Sweden by the Environmental Code and various regulations and ordinances, in particular the Industrial Emissions Regulation (2013:250) (*Industriutsläppsförordningen (2013:250)*),\(^{30}\) is the Ministry of the Environment.

In addition, the responsibilities and tasks given to the competent authority by the Directive are divided between many authorities. Some responsibilities are given to the authorisation authorities, some to the supervisory authorities, and some to the Environmental Protection Agency and the Board of Agriculture. The Ministry of the Environment is responsible for the implementation of the Directive into national legislation and leads the Swedish participation in the Seville process for BAT reference documents (BREFs).

13.1.2. **Financial security provisions**
Provisions on financial security are set out in section 3 of chapter 16 of the Environmental Code (see section 13.3 below).

13.1.3. **Financial security instruments and mechanisms accepted**
No specific financial security instruments or mechanisms are stated to be acceptable (see section 13.3 below).

13.1.4. **Templates**
There are no templates for financial security instruments or mechanisms.

13.1.5. **Financial security instruments and mechanisms not acceptable**
There is no list of financial security instruments and mechanisms that are not acceptable.

13.2. **Seveso III Directive**

13.2.1. **Competent authority(ies)**
The Seveso III Directive is implemented in Sweden by the following legislation:

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- Act on measures to prevent and limit the consequences of serious chemical accidents \((\text{Lagen (1999:381) om åtgärder för att förebygga och begränsa följderna av allvarliga kemikalieleckor})^{31}\)
- Ordinance (2015:236) on measures to prevent and limit the consequences of serious chemical accidents \((\text{Förordningen (2015:236) om åtgärder för att förebygga och begränsa följderna av allvarliga kemikalieleckor})^{32}\)
- Environmental Code;
- Act on accident protection \((\text{lagen (2003:778) om skydd mot olyckor})^{33}\) and
- Planning and Building Act \((\text{plan-och bygglagen (2010:900)})^{34}\)

The competent authority for the Seveso III legislation is the Ministry of Justice and the Swedish Civil Contingencies Agency \((\text{Myndigheten för samhällsskydd och beredskap})\).

13.2.2. Financial security provisions
See section 13.3 below in respect of section 3 of chapter 16 of the Environmental Code.

13.2.3. Financial security instruments and mechanisms accepted
See section 13.3 below in respect of section 3 of chapter 16 of the Environmental Code.

13.2.4. Templates
There are no templates for financial security instruments or mechanisms.

13.2.5. Financial security instruments and mechanisms not acceptable
There is no list of financial security instruments or mechanisms that are not acceptable.

13.3. Other legislation
As referred to above, section 3 of chapter 16 is the general rule on financial security in the Environmental Code. It applies to all permits, approvals or exemptions given under the Code. The provision gives the permitting authority the potential to make the validity of a permit, approval or exemption subject to the requirement of a financial guarantee. The potential applies to all permits granted under the Environmental Code.

Industrial activities under the scope of Swedish legislation that implements the Industrial Emissions Directive and the Seveso III Directive are subject to a permitting procedure under the Environmental Code. For some operations, financial security is mandatory. The Environmental Code provides provisions for this requirement, namely quarries \((\text{chapter 9, section 6 e})\), landfill operations \((\text{chapter 15 section 35}; \text{see section 11.1.2 above})\) and carbon capture and storage \((\text{chapter 15, section 37}; \text{see section 11.3.3 above})\). Financial security is

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usually required by case law for permits for wind farms. Financial security is not, however, usually required for permits under the Industrial Emissions Directive and Seveso III Directive unless financial security is mandated as indicated above.

General considerations for the adequacy of financial security are set out in case law. See for example *Boliden Mineral AB, Environmental Protection Agency and County Administrative Board of Västerbottens County* (T 5420-08, 1 June 2011). 35

14. **Mandatory financial security for offshore oil and gas operations**

14.1. **Competent authority(ies)**

The competent authority for licensing the exploration of minerals and hydrocarbons, including concessions, is the Mining Inspectorate of Sweden. Environmental permits are also a prerequisite for offshore oil and gas operations. Permitting is handled by the environmental courts or an independent function within each county administrative board in Sweden, depending on the size and location of the operation.

14.2. **Status of offshore oil and gas operations**

Sweden was not carrying out any offshore oil and gas exploration and production when this report was published and does not intend to issue such permits (prop. 2014/15:64 p. 29). 36

14.3. **Requirements for financial security**

Not applicable

14.4. **Requirement for financial security for ELD liabilities**

Not applicable

15. **Failure of financial security**

15.1. **Inadequate level of financial security instrument or mechanism to pay claims**

Some financial security instruments in the mining industry have proven to be inadequate (see section 11.2.2 above).

15.2. **Insolvency of operator leading to failure of financial security instrument or mechanism**

There have been bankruptcies of mining companies in Sweden (see section 11.2.2 above).

35 *Boliden Mineral AB, Environmental Protection Agency and County Administrative Board of Västerbottens County* (T 5420-08, 1 June 2011); [https://www.domstol.se/globalassets/filer/domstol/hogstadomstolen/avgoranden/2011/t-5420-08.pdf](https://www.domstol.se/globalassets/filer/domstol/hogstadomstolen/avgoranden/2011/t-5420-08.pdf) (in Swedish)

15.3. Other

A 2015 report by the Swedish National Audit Office commented on examples of mines that had been declared bankrupt a short time after operations at them had begun, resulting in taxpayers having to pay substantial post-closure costs (see item 11.2.2 above).37

16. FUNDS

Sweden has not established a fund to provide funding for the prevention and remediation of environmental damage.

16.1. Name(s)

Not applicable

16.2. Extension of existing fund to cover remedial costs under the ELD

Not applicable

16.3. Purpose

Not applicable

16.4. Type

Not applicable

16.5. Source(s) of funding

Not applicable

16.6. Number and amount of claims

Not applicable

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