

Manual of European Environmental Policy

The following pages are a section from the Manual of European Environmental Policy written by the Institute for European Environmental Policy.

The Manual was published by Earthscan/Routledge from 2010 to 2012. It was designed as an on-line interactive reference work and annual printed versions were also produced.

This section is the text of the Manual as published in 2012. It is therefore important to note the following:

- The contents have not been updated since 2012 and no guarantee is given of the accuracy of the contents given potential subsequent developments.
- The sections include links to external websites (e.g. to legal texts). These links continue to work as long as those links are not broken by those websites.
- The sections also include the original links that enabled interactivity within the published on-line version of the Manual. These links no longer work.

© Copyright IEEP 2014

The Manual should be cited as follows:

Farmer, A.M. (2012) (Editor). Manual of European Environmental Policy. 1043pp. Routledge, London.

Mining Waste

2006/21/EC (OJ L102 11.4.2006)	Directive on the management of waste from extractive industries and amending Directive 2004/35/EC
Proposed 23.10.2000 – COM(2003)319	
Amended by:	
Regulation (EC) No 596/2009 (OJ L188 18.7.2009)	Adapting a number of instruments subject to the procedure referred to in Article 251 of the TEC (Article 294 TFEU) to Council Decision 1999/468/EC with regard to the regulatory procedure with scrutiny – Adaptation to the regulatory procedure with scrutiny – Part Four
Legal base	Article 192 TFEU (originally Article 175(1) TEC)
Binding dates	
Entry into force	31 April 2006
Transposition	1 May 2008
Commission to have published all supporting measures to be developed through Comitology committees	1 May 2008
New waste facilities to be managed in a way that does not prejudice the Directive’s objectives	1 May 2006
General transitional provisions end for facilities in operation on 1 May 2008	1 May 2012
Transitional periods in relation to the financial guarantee end	1 May 2014

Note: This Directive amends Directive [2004/35/EC](#) on environmental liability with regard to the prevention and remedying of environmental damage

Purpose of the Directive

The Directive, often referred to as the Mining Waste Directive, outlines provisions for the management of waste explicitly from the ‘prospecting, extraction, treatment and storage of mineral resources and the working of quarries’ (excluding offshore activities). It requires such waste to be ‘managed without endangering human health and without using processes and methods which could harm the environment’ in particular ‘water, air, soil, fauna and flora and landscape’. In line with the objectives set out in the Sixth

Environmental Action Programme, the Directive is intended to reduce the environmental impact of mining, reduce the hazardousness of the waste generated, encourage the prioritization of recovery and recycling and allow the minimization of the quantities of waste for disposal.

Summary of the Directive

Under the Directive operators of waste management facilities are required to develop waste management plans, ‘major accident prevention policies’ and provide a ‘financial guarantee’ covering both operation and after-closure phases. Details of permitting, inspection, monitoring and closure requirements are also outlined.

The scope covers facilities conducting the prospecting, extraction, treatment and storage of mineral resources and working quarries. The main focus, however, is upon activities falling within ‘Category A’ and defined as follows:

- where a failure or incorrect operation could give rise to major accident, based upon a risk assessment;
- when the waste facility is dealing with waste classified as hazardous; and
- when the waste contains substances or preparations classified as dangerous.

Whilst the Directive is designed to control waste resulting from these activities, it does not cover waste generated indirectly from operations, such as food wastes, waste oil etc. In addition, the provisions only cover onshore activities and do not extend to the injection of water and re-injection of pumped ground water. Resultant inert waste and unpolluted soil is also exempted from the majority of the Directive’s requirements, unless deposited at a Category A facility. In addition, Member States are allowed flexibility in implementation with the right to reduce or waive certain requirements for:

- the deposit of non-hazardous waste generated except oil and evaporates;
- the deposit of unpolluted soil and waste resulting from the extraction, treatment and storage of peat; and
- non-hazardous non-inert waste, unless deposited at a Category A facility.

The Directive’s purpose is to ensure that extractive waste is managed without endangering human health or without using processes/methods that could harm the environment. This covers the sites and facilities defined above, during both operation and, importantly, after closure. The Directive also requires Member States to prohibit the abandonment, dumping or uncontrolled depositing of extractive waste. Building on the approach taken in Directive 2008/1/EC, the Integrated Pollution Prevention and Control (IPPC) Directive, action taken by operators to prevent and reduce adverse impacts on the environment and health should be based on the ‘Best Available Techniques’(BAT) (see Section on Integrated Pollution Prevention and Control). The application of BAT should take into consideration the characteristics of the facility, its location and local

environmental conditions. The Commission has formally adopted the BAT Reference Document on the management of waste from extractive industries¹.

For each site an operator must draw up a waste management plan for the minimization, treatment, recovery and disposal of extractive waste. These plans are intended to:

- ensure the prevention and reduction of waste and its harmfulness;
- encourage the recovery of extractive waste by means of recycling, reusing and reclaiming such waste; and
- ensure short- and long-term safe disposal of extractive waste by ensuring its consideration during the design, operation and closure phases of a facility.

Details regarding what such a plan must include are outlined in Box 1 below. Plans must be reviewed every five years and approved by the competent authority.

Under the scheme operators must be granted a permit in order to operate. The waste management plan for a facility is an essential element of the permit. As for other industrial regulation, permits should be periodically reconsidered and updated as necessary.

Box 1

– Content of a waste management plan

According to Directive 2006/12/EC, the waste management plan for each facility must include at least the following elements:

- proposed classification of the facility that is, does it fall under Category A (if not, evidence to support this must be presented);
- characterization of the waste and anticipated quantities;
- description of the waste-generating activity and any subsequent treatment;
- description of potential impact upon human health and the environment;
- proposed control and monitoring procedures;
- proposed closure plan, importantly including rehabilitation and monitoring procedures;
- details of measures to prevent the deterioration of water quality in line with Directive 2000/60/EC, the [Water Framework Directive](#); and
- a survey of land to be affected by the facility and its condition.

The plan must provide sufficient information on these points to enable the competent authority to evaluate whether or not the plan will allow the objectives of the Directive to be met.

Given the background to its development (see below) an essential element of the Directive focuses upon major accident prevention. For Category A facilities, in addition to the waste management plan, operators must draw up a major accident prevention policy. Proof of this policy's existence must be included within the plan. A safety management system must be put in place in order to operationalize the prevention policy. This system must incorporate an emergency plan specifying measures to be taken onsite in the event of an accident. These facility-specific plans and policies will be

complemented by external emergency plans specifying offsite measures in the event of an accident, to be developed by Competent Authorities. These emergency plans, in combination, are intended to:

- contain and control major accidents;
- implement measures to protect human health and the environment from the effects of any incident;
- outline lines of communication; and
- provide for the rehabilitation, restoration and clean up of the environment following an accident.

The information in the plans must be reviewed every three years, and updated if necessary.

Planning for the future is central to the objectives of the Directive; therefore, it contains provisions to deal with site rehabilitation, closure and after-closure care. An innovation under this Directive is the requirement that, prior to the commencement of any operation, the Competent Authority requires a financial guarantee from the operator. This guarantee can, for example, take the form of a financial deposit, and is intended to ensure that all obligations under the permit are fulfilled – especially after-closure provisions and the rehabilitation of land affected by the waste facility. The guarantee will be calculated based on the likely environmental impact of the facility, and the assumption that independent, qualified third parties will assess and perform any rehabilitation work.

With regard to closure, a facility may only be classed as ‘closed’ once the Competent Authority has completed a final onsite inspection, certified that land affected by the facility has been rehabilitated, and communicated approval for closure to the operator. The operator will, however, still be responsible for the maintenance, monitoring, control and corrective measures in the after-closure phase, for as long as required by the Competent Authority. In addition, the operator must still report to the Competent Authority, is responsible for notifying the Competent Authority about any events likely to affect the stability of the facility, and is responsible for implementing its emergency plan if necessary.

The deadline for the Directive be transposed into national law was 1 May 2008. It is supplemented by a number of implementing measures, adopted by the Commission by Comitology in accordance with Article 22(1) of the Directive:

- Commission Decision [2009/337/EC](#) on the Criteria for the classification of waste facilities in accordance with Annex III.
- Commission Decision [2009/335/EC](#) on the Technical guidelines for the establishment of the financial guarantee.
- Commission Decision [2009/360/EC](#) completing the technical requirements for waste characterization.
- Commission Decision [2009/359/EC](#) on the Definition of inert waste in implementation of Article 22 (1)(f).

- Commission Decision [2009/358/EC](#) on the Harmonization, the regular transmission of the information and the questionnaire referred to in Articles 22(1) (a) and 18.

In accordance with Article 22(1) (b and f), the Commission has also given a mandate to CEN in order to develop the required standardized sampling and analysing methods.

Under the Directive transitional periods apply for facilities that have ‘been granted a permit’ or which are ‘already in operation on 1 May 2008’. These operators must comply with the Directive’s provisions by 1 May 2012. Additional time is allowed for compliance with requirements pertaining to the financial guarantee, with the deadline shifted to 1 May 2014. Member States are also required to ensure that an inventory, of ‘closed waste facilities which cause serious negative environmental impacts’ or those that potentially may become a threat in the medium to short term, is compiled and updated. This must be completed by 1 May 2012 and include closed facilities and also those that have been abandoned. Furthermore, until 2008 Member States had to manage extractive waste in a way that did not prejudice the twin objectives of avoiding danger to human health and preventing harm to the environment.

A separate timetable is set for the reduction in levels of dissolved cyanide in ponds linked to mining – the problem which led to the Baia Mare disaster following the failure of a dyke. Requirements are detailed in Article 13(6) of the Directive and include maximum limits for ‘weak acid dissociable cyanide’ for facilities already in operation on 1 May 2008. These limits decrease from 50 ppm on 1 May 2008 to 10 ppm by 1 May 2018. Facilities which come into operation after the 1 May 2008 deadline must automatically meet the 10 ppm target.

Development of the Directive

Waste from extractive industries represents a significant proportion of the total waste generated across the EU – estimated at 29 per cent in 2005. Major European disasters have also been linked to extractive industries; these include the Baia Mare disaster in 2000 when 130,000 cubic metres of cyanide-tainted water poured into the Lupes, Someş and, eventually, the Tisza and Danube rivers. In response to heightened concerns following such events the European Commission published its Communication entitled ‘safe operation of mining activities’ ([COM\(2000\)664](#)). A priority action under this measure was to regulate the management of waste from extractive industries. Directive 2006/21/EC is intended to respond to this need.

Proposal COM(2003)319 was adopted by the European Commission in June 2003. The original proposal differed substantially from the final Directive text, and was heavily criticized by environmental NGOs for failing to adequately address the key issues. Key areas of concern focused on the lack of adequate provisions to deal with old closed and abandoned sites, the length of time it would take to regulate existing sites under the provisions, and the limited scope. There were concerns about exemptions for non-

hazardous inert waste from provisions within the proposal, as these still have the potential, for example, to substantially disrupt freshwater ecosystems².

In response to such criticism the European Parliament, at its first reading, put forward substantial amendments. The Parliament was particularly concerned about historical waste facilities, adding the clauses pertaining to after-closure care. Parliament also added the requirement for Member States to produce inventories of closed sites. In its Common Position the Council supported many of the Parliament's amendments. In addition it added wording to clarify the scope and provisions of the Directive.

Despite the apparent wish of both the Council and Parliament to strengthen the Directive's provisions, it took three years and the convening of the Conciliation Committee before an agreement on the final text could be reached. The key points of issue were requests from the European Parliament to strengthen the Directive's requirements, objected to by Member States. Important areas of compromise during conciliation included the scope of the Directive, financial guarantees to cover operator liabilities, the content of waste management plans and transitional provisions. Despite the Directive being welcomed by environmental groups, concerns have been expressed relating to derogations from the Directive provided to Member States, and the gaps that remain in relation to historical waste sites and their remediation.

Implementation of the Directive

A list of measures transposing the Directive in the Member States can be found in their national [execution measures](#).

Work related to the implementation of the Mining Waste Directive has to date focused on the preparation of the remaining technical measures required by its Articles 20, 21 and 22. This concerns the preparation of a guidance document for inspection – Article 22 (1) d) and the exchange of information on the methodologies for preparing inventories of closed facilities (Article 20) and on rehabilitation. A specific working group on inventories has been set up and guidance documents are prepared in order to support the Member States for the implementation of Articles 20 and 21.

Enforcement and court cases

No cases specifically concerning the Mining Waste Directive 2006/12/EC have been decided by the ECJ, and no other infringement proceedings have been begun by the Commission.

Further developments

The Commission is studying the feasibility of creating an EU Waste Implementation Agency to help address the problem of inadequate implementation and enforcement.

Related legislation

Other EU legislation related to the Mining Waste Directive 2006/12/EC includes:

- Directive on waste (Waste Framework Directive) ([2008/98/EC](#)).
- Directive on environmental liability with regard to the prevention and remedying of environmental damage ([2004/35/EC](#)).
- Directive on the control of major-accident hazards involving dangerous substances (Seveso II Directive) ([96/82/EC](#)).
- Integrated Pollution Prevention and Control (IPPC) Directive ([2008/1/EC](#)).

The issues of relevance to these Directives are covered in the chapters which deal with them. However, a brief outline of their relevance to the Mining Waste Directive 2006/12/EC is given below.

The revised Directive 2008/98/EC sets the basic concepts and definitions related to waste management and lays down waste management principles such as the ‘polluter pays principle’ and the ‘waste hierarchy’. The Mining Waste Directive amends Directive 2004/35/EC. The Seveso II Directive was amended to include in its scope mineral processing of ores and, in particular, tailings ponds or dams used in connection with such mineral processing.

References

1. JRC, *Reference Document on the Best available Techniques on the Management of Waste from Extractive Industries*, <http://eippcb.jrc.ec.europa.eu/reference/mmr.html>
2. WWF (2003) *WWF Position Paper on the European Commission Proposal for a Directive on the Management of Waste from Extractive Industries*, November 2003, http://www.eeb.org/activities/waste/mining_waste/WWF-EEB-position-Mining-Waste-Directive-final-version-Dec2003.pdf