

Regulatory Framework for the implementation of the Mining Waste Directive

Introduction

The aim of this position statement is to explain to operators in England and Wales how we will implement the Mining Waste Directive¹ (MWD), and what they need to do to ensure that their sites comply.

Some sites may not generate extractive waste, so unless you are already certain that you need a permit, you should first read our position statement on 'The Definition of Extractive waste' (PS 015). If you conclude that you are dealing with extractive waste then this document applies to you.

The purpose of this position statement is to provide an overview of the regulatory framework starting with the MWD, through to how it may affect an individual site. As this is the first position statement we have produced for the MWD, we have included some information on the permitting requirements. However, this is not meant to be comprehensive and further information on permitting requirements can be found on the mining waste sector and environmental permitting pages of our website.

The permitting requirements of the Mining Waste Directive

The MWD covers the management of waste resulting from the prospecting, extraction, treatment and storage of mineral resources and working of quarries, which it refers to as 'extractive waste'. Defra guidance² provides an overview of the requirements of the MWD including which activities are excluded altogether.

In England and Wales the permitting requirements as set out in article 7 of the MWD have been transposed through the Environmental Permitting (England and Wales) Regulations 2010 (EPR). The Environment Agency is the Competent Authority. The requirements in the MWD for approval and review of a Waste Management Plan (WMP) will also be delivered by an environmental permit. The EPR cover a wide range of types of activity as well as mining waste. Each general type of activity is referred to as a class of regulated facility. A mining waste operation is one class of regulated facility. The other classes are; an installation, mobile plant, a waste operation, a radioactive substances activity, a water discharge activity, and a groundwater activity. All mining waste activities that require an environmental permit are included in the class of regulated facility called a mining waste operation. It covers

¹ Directive 2006/21/EC on the management of waste from extractive industries. It is commonly referred to as the Mining Waste Directive (MWD).

² Defra Environmental Permitting Guidance – The Mining Waste Directive

the management of extractive waste, whether or not it involves a mining waste facility³.

This position statement outlines the regulatory requirements for different types of extractive waste and explains how we have reduced the level of regulation as required by paragraph 9 of schedule 20 of the EPR. Paragraph 9 requires us to ensure that the requirements of the MWD are waived as provided for in article 2(3) of the MWD. More detailed explanation of the requirements of your permit, and how to apply for and comply with it are described in separate EPR guidance documents⁴.

Mining Waste Operations that do not require an environmental permit

The regulatory requirements for the following materials are waived if the operator ensures the requirements of article 4 of the MWD are met. Deposit of:

- unpolluted soil from working of a mine or quarry
- non-hazardous waste from prospecting of mineral resources (except oil, and evaporites other than gypsum and anhydrite)
- waste from extraction, treatment and storage of peat.

Defra have confirmed their intention to consider exemptions from EPR permitting for these extractive wastes. This will involve a simple registration process. In the meantime see Regulatory Position Statement 042 for further information.

Transitional provisions for existing sites

The regulations set out transitional provisions for when existing mining waste operations need to apply for a permit. The relevant date will depend on whether or not the operation includes an existing mining waste facility. An existing operation is one that was in operation on 1 May 2008. Operations that have come into operation since that date must apply for a permit now. The transitional provisions for existing operations are summarised below.

Date	Actions
30 December 2010	Last date for applications from operators with existing mining waste operations that do not include an existing mining waste facility.
1 May 2011	Last date for applications from operators with existing mining waste operations that do include one or more mining waste facility.
1 May 2012	Deadline for Environment Agency to determine all permits for existing mining waste operations.

Mining Waste Facility

A facility is an area designated for the accumulation or deposit of extractive waste and is defined in Article 3(15) of the Mining Waste Directive. With the exception of Category A facilities and facilities for hazardous waste, the definition of facility depends on the time period for deposit or accumulation: more than 6 months for

³ See below for definition

⁴ How to comply with your environmental permit and EPR 6.14 additional technical guidance for : mining waste operations

unexpectedly generated hazardous waste, more than one year for non-hazardous non-inert waste and more than three years for inert extractive waste. The definition then includes the following explanation:

'Such facilities are deemed to include any dam or other structure serving to contain, retain, confine or otherwise support such a facility, and also to include, but not be limited to, heaps and ponds, but excluding excavation voids into which the waste is replaced, after extraction of the mineral, for rehabilitation and construction purposes'.

However, it is still possible that some deposits of extractive waste into a void will be a mining waste facility. The table below sets out the distinctions to be made when the waste is deposited in the extraction void.

Mining waste operation that includes one or more mining waste facility	Mining waste operation without a mining waste facility
<p>A facility is an area designated for accumulation or deposit of extractive waste.</p> <p>To be a facility the time period of deposit is over 3 years for inert waste; one year for non-hazardous non-inert extractive waste; any planned deposit of hazardous extractive waste or any extractive waste in a Category A facility.</p> <p>The facility includes any heaps or ponds/lagoons and any dams or other structure that retains or otherwise supports the waste.</p>	<p>The accumulation or deposit of inert extractive waste for less than 3 years or of non-hazardous non-inert extractive waste for less than 1 year will not be a facility.</p> <p>Where non-hazardous extractive waste is deposited back into the extraction void and the extraction void itself is the structure serving to retain, confine or contain the waste, the deposit of waste would not be a facility even if the time periods are exceeded, so long as the following requirements are met:</p> <ol style="list-style-type: none"> 1. We consider that for a void to be such a structure serving to retain, confine or contain the deposit of extractive waste, all of the ultimate perimeter of the void must be natural undisturbed ground and the entire void⁵ must be below natural undisturbed ground level, and 2. Where additional engineered dams or structures are required in order to retain the waste, this will usually be a facility, if the time periods are exceeded. The presence of bunds completely inside the void, that are not essential for retention of the extractive waste within the void, would not make the deposit a facility so long as an operator can satisfy themselves that, in the unlikely event of internal cascade⁶ failure, extractive waste would not breach the natural perimeter of the void.

⁵ Most extractive waste deposited in the void will be in suspension. If a situation arose where solid waste was deposited in the void, then the final level of some of the waste may be above the ultimate perimeter of the void.

⁶ The term cascade failure is used to describe a series of interconnected events, the outcome of which is often significantly more serious than any one of those events having occurred alone. In most cases the final outcome, or such a severe level of impact, could not be realised except by a particular and consecutive train of events.

Deposit of extractive waste into the void, that is not a mining waste facility, has to meet the requirements of Article 10 of the Mining Waste Directive. This provides for the same level of environmental protection as though it were a facility. The requirements of the Waste Management Plan will thus be similar whether or not a deposit of waste is classed as a facility

The Waste Management Plan and Environmental Permit

All operations managing extractive waste are required to produce and implement a Waste Management Plan (WMP), (article 5 of MWD). The WMP must describe techniques for the minimisation, treatment, recovery and disposal of extractive waste, taking account of the principle of sustainable development. The plan must describe how the objectives in article 5.2 will be met and include the information required by article 5.3.

All WMPs must also:

- For each mining waste facility, either classify the operation as Category A or justify why not, as set out in article 5.3(a) MWD.
- Categorise the extractive waste as inert, hazardous, or non-hazardous non-inert as described in article 3.2 and 3.3 MWD.
- Confirm whether the operation will include a mining waste facility as described in article 3.15 MWD. (Facilities that are in the extraction void must meet the requirements of Article 10 of MWD).

A WMP will vary from the very simple to the more complex depending on the nature of the operation. To make clear the situations where the regulatory requirements are reduced, we have identified a number of types of extractive waste operation.

An activity type from M1 to M7 should be assigned to each mining waste operation. M1, Category A, is the highest risk activity where the full requirements of the MWD apply. This is the only activity type to which article 6 requirements for a Major Accident Prevention Policy and off-site emergency plan apply. Other regulatory requirements, e.g. need for a financial guarantee or after-closure plan, become fewer as you move from M1 to M4. A mine or quarry may have discharges to surface or ground water. If a discharge is integral to the mining waste operation or depends on it, for example the discharge to surface water from a pond that is for settlement of extractive waste, the discharge will be part of the mining waste operation. Where there is no connection to the mining waste operation, the water discharge will be considered to be a stand-alone regulated facility.

M5, M6 and M7 apply to inert extractive waste whether or not there is a mining waste facility, as long as the facility is not Category A. These sites have the fewest regulatory requirements. If there is no discharge to surface water or groundwater (and won't be) the activity is M7. These operations are of a reduced environmental risk and there is a set of published standard rules available for the permit. This could be a settlement

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pond without a point source discharge, or a storage heap. M6 applies if you have a pond used for settling inert extractive waste that has a point source discharge to water, as long as you do not do any other treatment or storage of extractive wastes and the settled material remains in the pond. In light of the low environmental risk, we expect to focus our regulatory input at these sites on the water discharge. In such a situation your permit will control the consented emissions plus refer to your waste management plan. Use M5 if you are otherwise storing or treating inert extractive waste. The activity types are summarised in table 1 below.

Table 1 - Activity types for mining waste operations

	Activity type	Is a financial guarantee required?	Is the determination of the permit dependent on planning permission being issued?	Is a point source discharge to water an integral part of the mining waste operation?	Does the activity need to meet the requirements of Article 7 of MWD ⁷ ?
M1	Management of any extractive waste in a Category A mining waste facility	Yes	Yes	Possible	Yes
M2	Management of hazardous extractive waste	Yes	Yes	Possible	Yes
M3	Management of non-inert, non hazardous extractive waste that includes a mining waste facility	No	Yes	Possible	Yes
M4	Management of non-inert, non hazardous extractive waste that does not include a mining waste facility	No	No	Possible	No
M5	Management of inert extractive waste that includes a point source discharge to water	No	No	Yes	No
M6	Management of inert extractive waste by passive treatment that is controlled by the conditions for the discharge set in the permit, e.g. a settlement pond that becomes part of the site restoration when dry.	No	No	Yes	No
M7	Management of inert extractive waste without a point source discharge to water	No	No	No	No

Assign the mining waste operation to the highest category on the site even though some of the activities will be lower risk. If any part of your operation is M1 then that is the activity to assign. If M1 does not apply, then consider M2 and so on. If you have an inert mining waste facility in the same mining waste operation as a higher risk mining waste facility, management of this waste should be included in the same WMP as the higher risk activity, but the appropriate regulatory requirements will be placed on the inert extractive waste. A Category A facility can be included in the same permit as other facilities. However, as a permit including a Category A facility will take longer to determine, it may sometimes be simpler to keep the Category A facility in a separate permit.

⁷ Activities covered by Article 7 of the MWD have regulatory requirements in addition to the WMP. All the appropriate requirements will be included the Environmental Permit.

The mining waste operation, including mining waste facilities where appropriate, will include all the areas to be used for management of extractive waste arising from a specific mining operation that have been active since May 2008, or which it is intended will become active in the future. Typically this will involve a number of discrete areas, joined by some routinely used linkage such as roads, railways, pipelines or watercourses. For example, the waste may be placed into lagoons to dewater, used to infill voids as they occur, accumulated in spoil heaps, or used in construction of lagoon bunds/dams, or in noise or amenity bunds. Hence, the plan of the regulated facility may have a leopard spot appearance and be spread across a wide geographical area. In deciding whether a remote area many miles away is part of the one facility we will weigh the nature and technical significance of the connections against the distance. Our aim is to regulate the mining waste operation as a whole, to get the required environmental outcomes. Generally, this would be best served by having a single permit for a mining waste operation that has one operator.

The environmental permit for the mining waste operation will reflect the WMP and thus the requirements of the permit will be as simple or as complex as the requirements for the WMP.

Water discharges not part of the Mining Waste Operation

If the extraction site has an existing discharge consent for surface water or groundwater, that is not an integral part of the mining waste operation, they will be regulated facilities but defined as standalone.

Type of environmental permit

Standard rules and a generic risk assessment have been published for inert extractive waste, number SR2009 No8. A permit that includes only activities covered by standard rules is a standard permit. Any other permit is called a bespoke permit. For example, the permit for mining waste operation M5, will be a combination of the standard rules and a water discharge with site specific conditions. This is a bespoke permit.

Discharges to ground and surface water became part of EPR from April 6th 2010. This means that stand alone water discharges will need their own permit or can be included in the same permit as water discharges that are part of mining waste operations. Our monitoring for compliance with the permit(s) will aim to consider the site as a whole whether there are two permits or one.

We are required to make a charge for determination of all permit applications, whether for a new permit or to vary, transfer or surrender an existing permit. The charges for mining waste operations apply per operation. Therefore if all parts of the mining waste operation are included in the same permit, and the application made at the same time, there will be a single charge. Charges for water discharges are additional. The charge for each water discharge will be the same regardless of whether it is an integral part of a mining waste operation or standalone.

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Application for an environmental permit

Before submitting a permit application you will need to assess, on a site by site basis, whether you are managing extractive waste. Our Regulatory Position Statement on Definition of Extractive Waste has full details. A Guidance Note on the CBI website⁸ sets out a straightforward process for making the assessment. Whether you use this process or not, the assessment needs to be made and agreed with us before the relevant permit application deadline. When an EMMS is completed and submitted using the CBI Guidance, we will accept the recommendation of the verifier, subject to any subsequent audit we undertake. We recommend that you make the assessment as soon as possible. Whilst we recognise that some operators may not be able to complete all their assessments before the first deadline of 30 December 2010, we recommend that you prioritise for assessment before 30 December, all sites where the activity includes deposit in the void of waste in suspension.

If you think you will have a mining waste facility and delay making an assessment until after December 2010, you may find that you require a permit for a mining waste operation without a facility, and will thus have missed the relevant transitional date for permit applications. Where you have engaged with the process and submitted a completed EMMS, we will still accept an application for a permit so long as the 1 May 2011 deadline is met, and we will not take enforcement action.

You are strongly advised to contact your local Area mining waste contact if you find you have missed the December deadline. We will ask you to complete your assessment and then submit your permit application as soon as possible. We will still accept and process the permit application for a mining waste operation without a mining waste facility. Provided that the application is actively progressed, then in line with our enforcement and prosecution policy, it is most unlikely it would be in the public interest to take any enforcement action.

The Application Process

Application for a permit requires completion of the appropriate forms, available on our website, that are submitted together with the WMP. This can be done electronically. Full details are on our website⁹.

Applications for a mining waste operation that includes a category A facility (activity type M1) also need to include the following additional information as part of the application:

- MAPP (Major Accident Prevention Policy)
- Internal Emergency Plan
- Information to allow Emergency Planners to draw up an external emergency plan. Further guidance on what information is required is available on the Defra web site.

⁸ www.cbi.org.uk/minerals

⁹ www.environment-agency.gov.uk/business/sectors/116542.aspx

Application for a standard rules permit or to vary an environmental permit to add an activity covered by the standard rules, is a simpler application process that does not require submission of a separate WMP. However the WMP must still be prepared and implemented and be made available when requested during a site inspection visit.

Existing extraction sites with an existing water discharge consent

If the water discharge part of a mining waste operation regulated facility already has a consented water discharge, this became an environmental permit under EPA 2010. If a mining waste permit is also now required, this can be applied for by variation of the existing water discharge permit.

Due to other ongoing work that is separate from the MWD, there may still need to be a review of the water discharge permit limits after variation to a mining waste operation. The major drivers for this are the Catchment Management Plans prepared as part of the implementation of the Water Framework Directive. If a discharge from a mine or quarry is identified as causing or contributing to failure of a Water Framework Directive objective, then we will review the permit requirements and set limits to achieve the necessary improvement. This review would include discussion of an appropriate timetable for implementation.

For an operation where there is an existing water discharge consent in place, and the operation would meet all the requirements of the published standard rules, apart from the condition about no integral point source discharge, we will allow the application process to be the same as though the standard rules were being applied for. This is set out in more detail in the three scenarios described below.

1. Mining waste operation with inert extractive waste with no integral discharge to surface water

The WMP should refer only to activities that meet the standard rules. A standard rules activity can be applied for as a variation of the water discharge permit. You do not need to submit the WMP with the application and you should make clear on the application form that the existing water discharge remains standalone.

2. Mining Waste Operation with inert extractive waste with an existing integral discharge e.g. from a tailings pond

The WMP should refer to the existing water discharge conditions, as well as management of the extractive waste. If the management of extractive waste meets the standard rules, apart from the no point source discharge requirement, then we will add the published standard rules to the existing water discharge conditions. The application will be treated as a variation of the bespoke water discharge permit. After the variation the water discharge will not be classed as a standalone water discharge activity. The variation application process will not require submission of the separate WMP.

3. New Mining Waste Operation with inert extractive waste including a new integral water discharge activity

The WMP will need to be submitted and the relevant parts of the application form completed, to allow determination of the water discharge consent. The WMP should refer to management of all of the extractive waste. This is a bespoke application for a new permit, and a bespoke permit will be issued. The conditions relating to management of the extractive waste will be derived from the standard rules.

Surrender of an environmental permit

Surrender of all Mining Waste Operation permits is by application. The operator must demonstrate they are leaving the land in a satisfactory state for us to accept surrender of the permit. The complexity of the surrender process will depend on the nature of the mining waste operation. In all cases plans for closure will need to be included in the WMP and checked during compliance.

The full requirements of the MWD are waived for activity types M5, M6 and M7 that only cover inert extractive waste that is not part of a Category A facility. These activities should be able to meet the requirements of a basic surrender¹⁰. For a basic surrender, reference to the records and pollution measures referred to in the WMP should be sufficient to demonstrate that the site is being left in a satisfactory state.

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¹⁰ See Regulatory Guidance Note 9 for more details.