



Government of **Western Australia**
Department of Mines, Industry Regulation and Safety



Department of Mines, Industry Regulation and Safety

Mining Rehabilitation Fund – Guidance

Mining Rehabilitation Fund Act 2012

Mining Rehabilitation Fund Regulations 2013

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Background

Prior to the commencement of the *Mining Rehabilitation Fund Act 2012* (MRF Act), *Mining Act 1978* (Mining Act) tenement holders were required to provide Unconditional Performance Bonds (UPBs) as security to ensure they fulfilled their environmental obligations.

The UPB system did not cover the true cost of rehabilitating abandoned (i.e. disused or decommissioned) mines and increasing UPBs to cover the full rehabilitation costs would have imposed a significant financial impact on the mining industry.

UPBs also discouraged investment by tying up significant funds that could have been used for developing mining projects. Furthermore, UPBs had to be applied to the specific tenement(s) for which the security was held and therefore could not be used to address the problem of 'legacy' abandoned mines.

The Mining Rehabilitation Fund (MRF) provides a pooled fund, levied annually according to the environmental disturbance existing on a tenement at the annual reporting date.

This model was selected after extensive consultation with government, industry, conservation and community stakeholders.

Levies paid into the MRF are available for rehabilitation where an operator fails to meet their rehabilitation obligations and every other effort has been made to recover the funds from the operator.

Interest generated on the fund is available for the administration of the MRF and to undertake rehabilitation works on 'legacy' abandoned mine-sites throughout the state.

Funds from the MRF will enhance the state's ongoing capacity to manage and rehabilitate abandoned mines, leading to better environmental and community safety outcomes.

Liability to pay the MRF levy

Participation in the MRF is compulsory. This means that tenement holders are required to report to the MRF each year prior to the close of the levy period, which is on 30 June each year (prescribed day).

The only exceptions to this are tenements that are associated with State Agreements or otherwise not listed in the MRF Act.

Tenements with a Rehabilitation Liability Estimate (RLE) below the threshold (currently \$50,000), as set out in the *Mining Rehabilitation Fund Regulations 2013* (MRF Regulations), are required to report disturbance data but are not required to make payment into the MRF.

The tenement-holding used in MRF reporting will align with the details recorded in Mineral Titles Online (MTO). In accordance with the MRF Act, whoever is the tenement holder on the prescribed day of that year must, on or before that day, provide disturbance data through an MRF report. The Department of Mines, Industry Regulation and Safety (DMIRS) imposes no restriction on who may pay the MRF levy on the holder's behalf.

Penalties

It is an offence for a tenement holder to fail to report disturbance data by the prescribed day each year. The modified penalty is \$4,000 per tenement for each tenement holder that fails to report.

DMIRS has authority to impose penalties for the non-payment of an MRF levy amount. The current penalty rate is 20 percent per annum and is calculated daily until the levy is paid. Penalty notices for late payments are issued after full payment of the levy is received and are sent to the nominated party.

Penalties of up to \$20,000 may also be imposed for failing to provide information and records in response to a direction and, through a court process, for providing false or misleading information in an MRF report.

Reporting incorrect data

Each year, a proportion of MRF is audited by DMIRS officers.

Information submitted as part of a holder's MRF obligations is admissible as evidence in court and it is an offence to report disturbance data without regard to whether that information is false or misleading. The penalty for so doing can be up to \$20,000.

If it is suspected that incorrect data has been provided, DMIRS may conduct an audit of the MRF report. As part of the audit process, all reported disturbance and land under rehabilitation will be examined and verified to ensure that the data is accurate.

All disturbance data reported annually through the MRF is made public on the DMIRS website. If you have concerns regarding the published data, you can email mrfenquiry@dmirs.wa.gov.au, stipulating the tenement number(s) in question and the details of your concern.

Failure to report

All tenement holders are required to report disturbance data by the prescribed day each year. A holder that fails to provide this information may incur a modified penalty of \$4,000 per tenement.

If the prescribed day passes without data being reported, DMIRS may also initiate the process of lodging disturbance data on behalf of the tenement holder.

Once DMIRS has submitted data on behalf of the tenement holder, the holder may be required to pay the modified penalty for failure to report and any calculated levy payment.

Calculation of Rehabilitation Liability Estimate

Identifying disturbances

For the purpose of the MRF, all disturbances created, or re-used, within the life of the tenement (not just during the reporting period) must be reported to the MRF, whether in a disturbed state or under rehabilitation.

The only circumstance where a tenement holder does not need to report disturbances is where there has been a break in tenure and any disturbances that were created prior to that break have not been re-disturbed during the life of the current tenement.

All disturbances that occur after this break in tenure must be reported.

Reporting disturbance data for each tenement

Disturbance data is to be reported for each individual tenement. Multiple types of disturbance can be reported for an individual tenement and the same 'Mine Activity Type' and 'Mine Activity Reference' can be reported across more than one tenement. This is to take account of the circumstances where disturbance 'footprints' cross the boundaries of multiple tenements.

The 'Mine Activity Type' relates to the description of infrastructure or land, with each corresponding to a category and unit rate that is specified in Schedule 1 of the MRF Regulations.

When entering data, the 'Mine Activity Reference' is the short description that the holder uses to identify a specific disturbance and to distinguish it from others of the same type. It should be the same reference that is used in your approval documents and in Annual Environmental Reports (AERs). It should be unique and cannot be used more than once in relation to an individual tenement.

	Mine Activity Type	Mine Activity Reference	Disturbance Category	Ph
⊖	Dam - fresh water	Lama Dam	B	
			Total:	

Accuracy of areas

The area of each disturbance must be input in hectare (ha) units only. Measurements in acres or square metres are not permitted. In addition, they must be recorded with at least 1 digit before the decimal point (this can be '0') and to a minimum of two decimal places (e.g. 1.12). The amount should be reported as a numeric value because text is not recognised.

Assessment date

The assessment date you select is the date on which your disturbance data was collected and verified. It must fall within the relevant levy period for your report.

No disturbance

If there are no disturbances (as defined above) on a tenement, you must still report this for the MRF each year. This can be done by selecting the 'no assessment information to report' check-box and providing the assessment date.

Calculating the RLE

The RLE is calculated from the disturbances listed against each tenement. For each disturbance, the unit rate is multiplied by the area of the disturbance. Any rehabilitation that has been completed against this tenement, but is yet to be approved by DMIRS, is added at the Category Unit Rate for Land Under Rehabilitation. These amounts are then summed to produce the RLE for the tenement.

$$\text{Disturbance} = (\text{Disturbance hectares}) \times (\text{Category Unit Rate}) + ((\text{Land Under Rehabilitation hectares}) \times (\text{Category E } (\$2,000))) = \$\text{RLE}$$

Mine Activity Type	Mine Activity Reference	Disturbance			Land Under Rehabilitation		Total Area of Activity (ha)	RLE (\$)
		Category	Previous (ha)	Total (ha)	Category	Total (ha)		
Landfill site	Jacksonville Landfill	B		15 014	E	1 50	16 5140	453 420 00
Mining void (with a depth of at least 5 metres) - above ground water level	Jacksonville Mining Void	C		54 025	E	10 60	64 6250	993 650 00
		Total:	0 0000	69 0390	Total:	12 1000	81 1380	1,447,070.00

In the example above,

$$\begin{aligned}
 \text{Mining void} &= 54.025 \times (\text{C}) \$18,000 + 10.60 \times (\text{E}) \$2,000 &= \$ & 993,650.00 \\
 \text{Landfill site} &= 15.014 \times (\text{B}) \$30,000 + 1.50 \times (\text{E}) \$2,000 &= \$ & 453,420.00 \\
 \text{Tenement RLE} &&= \$ & 1,447,070.00
 \end{aligned}$$

If the RLE for a tenement is at or below the threshold specified in the MRF Regulations (currently \$50,000), no levy is payable for that tenement. No assessment notice will be issued to the tenement holder if the RLE for each tenement is below the threshold. The tenement holder will, however, receive email confirmation that no levy is payable.

Calculating the amount of levy payable

The amount of levy payable is assessed as the RLE (if over \$50,000) multiplied by the Fund Contribution Rate (FCR), as expressed in the MRF Regulations (currently set at 1%):

$$\text{Amount of Levy Payable} = \text{RLE} \times \text{FCR (1\%)}$$

Using the data supplied in the example above:

$$\begin{aligned}
 \text{Amount of Levy Payable} &= \$1,447,070.00 \times 1\% \\
 &= \$14,470.70
 \end{aligned}$$

Description of activities used to calculate the Rehabilitation Liability Estimate

The MRF requires tenement holders to 'self-assess' the disturbance data for the tenement(s) they hold. This includes identifying the type of disturbance and estimating the relevant area (in hectares) but, except for exploration and prospecting licences, self-assessment does not extend to rehabilitation work.

For all tenure other than exploration and prospecting licences, approval by a DMIRS officer is required before any disturbance can be classified as 'rehabilitated' and it must be reported in the 'Land under Rehabilitation' category until approval is obtained.

The disturbance data provided must be accurate and supported by evidence. DMIRS officers may conduct audits and inspections to verify data and tenement holders are therefore required to keep records for a minimum of two years after the close of each levy period. Penalties can be imposed for providing false or misleading information.

Tables 1 and 2 and Appendix 1 provide guidance and examples of disturbance types and the appropriate categories for reporting in the MRF.

Table 1. MRF categories for exploration/prospecting operations activities and all other disturbances.

	1 Disturbed land	2 Land under Rehabilitation	3 Rehabilitated land
Exploration/prospecting operations	Category D \$2,000 per hectare		Self-assessed No levy applicable
All disturbances, other than exploration operations	Self-assessed as categorised by Unit rates list \$18,000–\$50,000 per hectare Categories A,B, C	Self-assessed \$2,000 per hectare Category E	DMIRS sign-off No levy payable

Table 2. Example of MRF criteria for ‘land under rehabilitation’ and ‘rehabilitated land’.

	Closure Objective	Land under Rehabilitation	Rehabilitated land
Mining Void... (above ground water level)	Safe and stable bunding	Completed bunding – self assessed Category E	Completed bunding – DMIRS signed off
Road	Accepted by local shire – no works required	Cease use of disturbance – self assessed Category E	Sign-off from local shire accepting the liability for the road – DMIRS signed off
Road	Rehabilitated	Completed primary and finishing earthworks – self assessed Category E	Completion criteria met – DMIRS signed off

Prospecting and Exploration operations

Under the MRF Act, ‘exploration operations’ are activities that have been approved through, and are subject to, a Programme of Works (PoW) for the purposes of exploration or prospecting. The rehabilitation commitments and closure obligations are contained in the relevant PoWs and tenement conditions. PoWs have a number of standard rehabilitation commitments, which are generally agreed to on the last page of the PoW application form.

Where exploration operations have been carried out and all works related to rehabilitation have been completed in accordance with the requirements of the PoW, the tenement holder is able to declare that there is ‘no assessment information to report’. This is the only type of disturbance that does not require rehabilitation work to be approved by DMIRS before it can be self-assessed as completed.

If you select ‘no assessment information to report’, an additional question will appear asking “Are you sure you want to specify that there is no assessment information on this tenement?” If you select ‘ok’ it will generate a further question that requires you to select one of the two options below:

- (a) No activities have commenced on this tenement.
- (b) All disturbances have been completely rehabilitated. This excludes historical ground disturbance.

If you select (a), it means that, since the time the tenement was granted, you have not conducted any prospecting or exploration work that requires a PoW.

If you select (b), it means that you have conducted some exploration or prospecting activities under a PoW, however you have since completed all required rehabilitation activities to which you committed in the approved PoW and have sent in the completed Exploration Rehabilitation Report (as attached to your PoW approval).

Option (b) also states that historical ground disturbance is excluded. ‘Historical ground disturbance’ refers to disturbances that were created on a ‘previous’ tenement over the same land. For example, if you are granted a new tenement (rather than having purchased a tenement from an existing holder), you do not need to report on any existing disturbances that were created on the previous tenement, unless you have re-disturbed some of these works or were a holder of the previous tenement.

If, however, the tenement has been converted (for example, from a prospecting licence to an exploration licence) and you have not completed your rehabilitation, you would need to report disturbances that were created on the previous tenement type.

Mining Activities

Mining operations are activities that have been approved under a Mining Proposal.

As indicated above, when reporting areas of disturbance for the purposes of the MRF, these activities are identified, firstly, by using one of the 'rehabilitation liability categories' listed in Schedule 1 of the MRF Regulations (shown in Appendix 1 and referred to as 'Mine Activity Types' in the reporting process) and, secondly, by an individual 'Mine Activity Reference' of your own choosing.

Land under Rehabilitation

For mining disturbances to be reported as 'Land Under Rehabilitation' (Category E), the completion criteria within the relevant Mine Closure Plan (or the closure obligations within the relevant Mining Proposal) must have been fully met and monitoring of rehabilitation must have commenced.

It may be possible for some disturbances to be rehabilitated on a progressive basis throughout the life of the project and, in most cases, this would have the benefit of reducing the activity's RLE and, therefore, the levy associated with it.

DMIRS recognises that there may be a wide variety of potential end-uses for the land after mining has finished. While there will be consistent requirements regarding the creation of safe and stable landforms, the broader closure obligations will be specific to the agreed end land-use stated in the closure obligations section of your Mining Proposal and/or Closure Plan.

For some disturbances, it may be neither possible nor necessary to complete all earthworks and subsequent revegetation. For some mining voids, for example, the Mine Closure Plan (or closure obligations section of your Mining Proposal) may only require the construction of a bund and/or the battering-down of the edges of a mining void.

These types of disturbances may still be categorised as 'Land under Rehabilitation' provided that this reduced extent of rehabilitation has been approved in the 'closure obligations' section of your Mining Proposal or in the completion criteria of your Mine Closure Plan.

Although MRF reporting is a self-assessment process, if you are unsure whether your rehabilitation work can yet be placed in the 'Land under Rehabilitation' category, please contact the Environmental Officer in your region. Your nearest Environmental Officer can be located using the map available on the DMIRS's website: <http://www.dmirs.wa.gov.au/Utilities/Environment-contacts-8367.aspx>

Rehabilitated land

'Rehabilitated land', in relation to all activities except prospecting and exploration activities, means land for which the completion criteria within the relevant Mine Closure Plan (or the closure obligations within the relevant Mining Proposal) have been fully met, monitoring of rehabilitation has commenced and DMIRS approval has been obtained. This land may have been categorised as 'Land under Rehabilitation' in the previous reporting period.

'Rehabilitated land' in relation to disturbances created by exploration or prospecting activities, means land for which all related rehabilitation work is completed in line with commitments in the relevant PoW.

Appendix 1: Rehabilitation Liability Categories and Unit Rates

The following tables have been reproduced from Schedule 1 of the MRF Regulations.

Description of infrastructure or land	Category	Unit rate
Tailings or residue storage facility (class 1) Waste dump or overburden stockpile (class 1) Heap or vat leach facility Evaporation pond Dam – saline water or process liquor	A	\$50,000
Tailings or residue storage facility (class 2) Waste dump or overburden stockpile (class 2) Low-grade ore stockpile (class 1) Plant site Fuel storage facility Workshop Mining void (with a depth of at least 5 metres) — below ground water level Landfill site Diversion channel or drain Dam — fresh water	B	\$30,000
Low-grade ore stockpile (class 2) Sewage pond Run-of-mine pad Building (other than workshop) or camp site Transport or service infrastructure corridor Airstrip Mining void (with a depth of at least 5 metres) — above ground water level Laydown or hardstand area Core yard Borrow pit or shallow surface excavation (with a depth of less than 5 metres) Borefield Processing equipment or stockpile associated with <i>Basic Raw Material</i> extraction Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and is not otherwise described in this Table	C	\$18,000
Land (other than land under rehabilitation or rehabilitated land) that has been disturbed by exploration operations	D	\$2,000
Land under rehabilitation (other than land that has been disturbed by exploration operations) Topsoil stockpile	E	\$2,000
Exploration operations: land under rehabilitation, rehabilitated land	No rate applicable	

Classes of activities

The class level of the 'waste dump or overburden stockpile', 'low-grade ore stockpile' and 'tailings or residue storage facility' activity types is dependent on the presence of certain materials, and whether specific management is required through imposed tenement conditions, or commitments provided as part of approval under the Mining Act.

If the 'waste dump or overburden stockpile', 'low-grade ore stockpile' and 'tailings or residue storage facility' does contain any materials requiring management conditions, then these land uses will be assigned as Class 1.

Materials requiring management condition include:

- fibrous minerals: materials capable of generating fibrous minerals
- radioactive materials.
- material capable of generating acid and metalliferous drainage, including neutral drainage and saline drainage
- erodible material that is capable of compromising the structure of the waste dump or overburden stockpile.

If the 'waste dump or overburden stockpile', 'low-grade ore stockpile' and 'tailings or residue storage facility' does not contain any of these materials, then its height will determine its classification.

A class level of 1 is assigned to a 'waste dump or overburden stockpile', and the 'low-grade ore stockpile' where its highest point is at least 15 metres above the surrounding landscape.

A class level of 1 is assigned to a 'tailings or residue storage facility' where its highest embankment is at least five metres high.

Fibrous minerals

Means any waste or low-grade ore that contains quantities of asbestiform fibrous hydrated silicate minerals, several of which occur naturally in asbestiform and non-asbestiform forms.

This definition also includes other natural mineral fibres that are potentially hazardous due to their physical and chemical properties including erionite, wollastonite, attapulgite and sepiolite, which require special management measures (e.g. Fibrous Materials Management Plan).

This is further defined in the DMIRS/Mining Industry Advisory Committee guideline 'Management of fibrous minerals in Western Australian mining operations'.

Radioactive minerals

Means any waste or low-grade ore generated from uranium or thorium ores that requires a Radiation Management Plan under Part 16 of the Mines Safety and Inspection Regulations 1995 (Safety Regulations).

Acid and metalliferous drainage

Acid drainage, neutral drainage, metalliferous drainage and saline drainage are the results of a complex process governed by a combination of physical, chemical and biological factors. The sources usually include the mine and process wastes, and mine and process facilities that contain reactive sulphide and potentially neutralising minerals involved in mitigation of acidity.

Acid drainage results from the exposure of sulphide minerals to atmospheric oxygen or oxygenated waters due to mining, mineral processing, excavation, or other earthmoving processes, whereby the sulphide minerals can become unstable and oxidise. Once this has occurred, it is difficult to halt further reactions from occurring. This results in the generation of acid.

Neutral drainage and metalliferous drainage occur when the acid water produced as a result of acid drainage further reacts with surface material prone to dispersion or has the potential to easily erode, or is capable of compromising the structure of the waste dump or overburden stockpile surrounding minerals and leads to the dissolution of a range of metals and salts. While the acid becomes neutralised by the minerals it dissolves, it causes increased toxic metal concentrations in the resulting drainage. Where the acid is completely neutralised by the dissolution of common carbonate minerals, the precipitation of metals and their removal through drainage may occur.

Saline drainage occurs where the acid drainage is completely neutralised and the resulting drainage does not contain toxic metal residues. This drainage may still require management conditions due to a sulphate salinity issue.

Erodible material

Any dispersible material that is susceptible to erosion and requires specific management.

Class of activities within the MRF Regulations

Classes of tailings or residue storage facility

Item		Class
1	Either or both of the following apply to the tailings or residue storage facility — <ul style="list-style-type: none"> (a) its highest embankment is at least 5 metres high; (b) it contains any of the following — <ul style="list-style-type: none"> (i) fibrous minerals; (ii) radioactive material; (iii) material capable of generating acid and metalliferous drainage, including neutral drainage and saline drainage, and management requirements imposed under a condition of the mining authorisation or under a mining proposal apply to those minerals or that material 	1
2	The tailings or residue storage facility is not of class 1	2

Classes of waste dump or overburden stockpile

Item		Class
1	<p>Either or both of the following apply to the waste dump or overburden stockpile —</p> <ul style="list-style-type: none"> (a) its highest point is at least 15 metres high; (b) it contains any of the following — <ul style="list-style-type: none"> (i) fibrous minerals; (ii) radioactive material; (iii) material capable of generating acid and metalliferous drainage, including neutral drainage and saline drainage; (iv) erodible material that is capable of compromising the structure of the waste dump or overburden stockpile, and management requirements imposed under a condition of the mining authorisation or under a mining proposal apply to those minerals or that material. 	1
2	The waste dump or overburden stockpile is not of class 1	2

Classes of low-grade ore stockpile

Item		Class
1	<p>Either or both of the following apply to the low-grade ore stockpile —</p> <ul style="list-style-type: none"> (a) its highest point is at least 15 metres high; (b) it contains any of the following — <ul style="list-style-type: none"> (i) fibrous minerals; (ii) radioactive material; (iii) material capable of generating acid and metalliferous drainage, including neutral drainage and saline drainage, and management requirements imposed under a condition of the mining authorisation or under a mining proposal apply to those minerals or that material 	1
2	The low-grade ore stockpile is not of class 1	2

Appendix 2: Definitions of disturbance categories

Airstrip

The specified area associated with the operation of the aerodrome and its traffic. This includes the active runway and any supporting infrastructure (i.e. weather stations, communication towers).

Basic raw material activities

The following materials are considered a mineral for the purposes of the *Mining Act 1978*, as long as they do not occur on private land. These materials are commonly referred to as raw materials:

- Limestone, rock, gravel
- Shale, other than oil shale
- Sand, other than mineral sand, silica sand or garnet sand
- Clay, other than kaolin, bentonite, attapulgite or montmorillonite

Processing equipment and stockpiles associated with basic raw material extraction incur a lower rate (Category C – \$18,000) than other commodity extraction activities, due to the inert nature of the materials and lower impact of the processing equipment (i.e. crushing and screening).

All other activities associated with basic raw material extraction, such as shallow surface excavations or voids, fuel storage facilities, etc, will incur the same rate as any other commodity extraction and must be reported in the appropriate MRF category.

Borefield

The area that contains the bores and associated infrastructure through which water is extracted.

Borrow pits and shallow surface excavations

Surface excavations that are part of mining operations and do not exceed five metres in depth from the surrounding levels. This includes, but is not limited to, shallow strip mining and sand mining. Mining voids that have been back-filled with waste rock to within five metres of the ground level can be included in this category.

Building (other than workshop) or camp site

Miscellaneous infrastructure, other than workshops, which are associated with the mining operation. Such infrastructure includes camp sites, office buildings, stores and laboratories.

Core yard

Area associated with the storage of samples obtained as part of conducting exploration activities.

Dams – freshwater

The area associated with the storage of water with a quality considered to be fresh to marginal/brackish (Total Dissolved Solids **not exceeding** 2000mg/L).

Dam – saline water or process liquor

The area associated with the storage of water or process liquors of poor quality, containing physical, chemical or biological characteristics capable of impacting upon the environment (Total Dissolved Solids **exceeding** 2000 mg/L).

Diversion channels and drains

Infrastructure associated with the diversion, capture and/or transport of overland water flows. These may be associated with freshwater and saline or processed liquid dams.

Evaporation pond

Facility used for the storage and evaporation of water or wastewater.

Fuel storage facility

The area of land (inclusive of infrastructure) associated with the storage of hydrocarbons and other fuels required as part of the mining operation. A fuel storage facility may also include refuelling facilities such as a refuelling pad, bowsers, and any associated infrastructure such as an oil/water separator.

Heap or vat leach facility

A facility used to extract minerals and/or other compounds from ore; either via placing the ore on a liner and adding chemicals through drip systems (heap leach), or by placing an ore slurry within a tank/vessel along with chemicals and mixing/agitating the solution (vat leach).

Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and is not otherwise described in this table.

This includes any clearing of vegetation for preparation of the activities described in this category, or any activity not described in this table (for example, mining in river beds).

Land (other than land under rehabilitation or rehabilitated land) that has been disturbed by exploration operations

This category includes all activities that are approved to be disturbed under a PoW application on prospecting, exploration and mining tenements.

Laydown or hardstand area

An area associated with the storage of miscellaneous mining equipment (with the exception of hydrocarbons or hazardous material).

Low-grade ore stockpiles

The area of land associated with the dry storage of ore of inferior grade or quality. Low-grade ore stockpiles are to consist predominantly of ore minerals, with little to no waste materials. Stockpiles consisting of predominantly waste materials are to be considered as a 'waste dump or overburden stockpile' for the purpose of the MRF.

The class of the facility must also be considered as part of assigning the above land description. The disturbance classes are detailed in Schedule 1 of the Regulations, and explained in the 'classes of activities' section above.

Mining Infrastructure not recognised in the regulations

The Regulations account for the majority of mining activities, however are not all-encompassing. Any activity type that does not fit into the current Mine Activity Types should be assessed on a case-by-case basis.

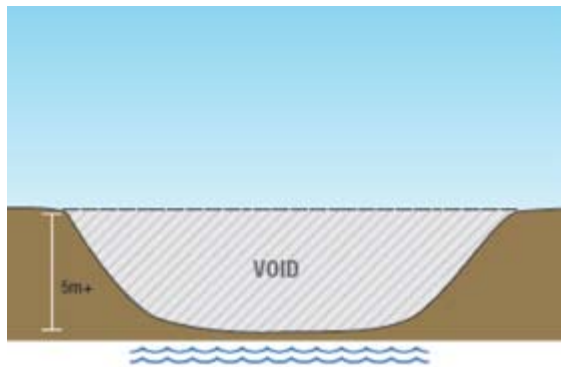
Tenement holders with a unique activity type are encouraged to contact DMIRS prior to lodging an MRF report to agree on an appropriate interim category for reporting.

Mining voids

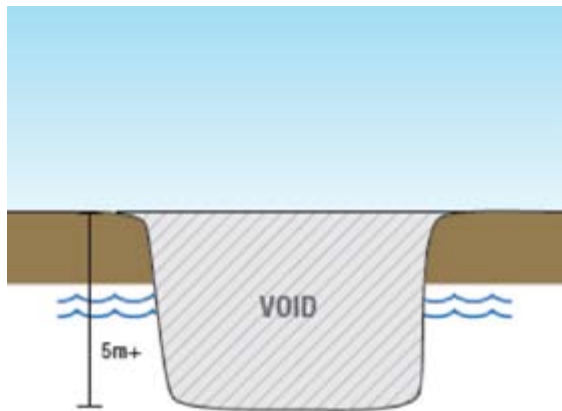
Surface excavations made as a result of mining operations that exceed five metres in depth from the surrounding levels. The mining void does not need to include the bund and area of land cleared between the bund and the mining void. These may belong under the category 'Land (other than land under rehabilitation or rehabilitated land) that is cleared of vegetation and is not otherwise described in this table'.

Mining voids are divided into two categories ('above' and 'below' ground-water level) that are dependent on the impact of the mining void upon the ground-water level. If the mining void reaches, and progresses below, the natural ground-water level, the void must be categorised as 'below ground-water level', regardless of whether the void has been dewatered and a cone of depression created. The depth is determined separately from the placement of the ground-water level in and around the void.

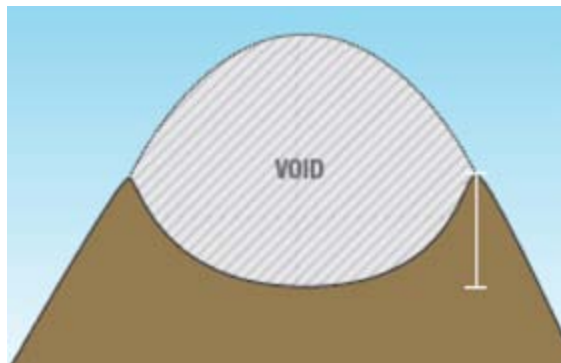
The depth of the void is to be measured from the highest point of the void's perimeter, as shown in the diagrams below.



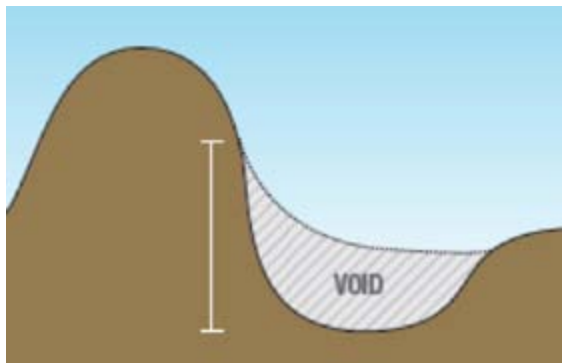
*Mining void (with a depth of at least 5 metres)
– above ground-water level*



Mining void (with a depth of at least 5 metres) – below ground-water level (illustrating the creation of a cone of depression)

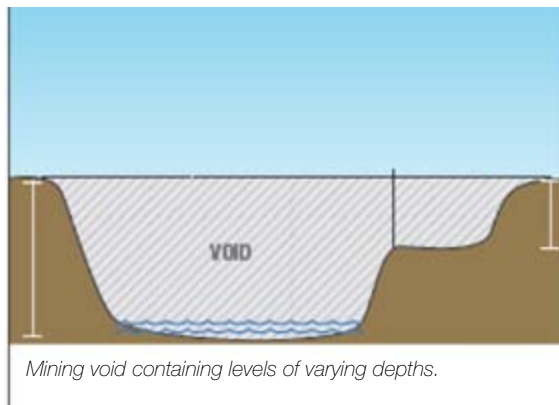


*Mining voids (with a depth of at least 5 metres) – above ground-water level
(measured from the highest point of the void's perimeter)*



If the depth of the mine is less than 5m, the disturbance may be a 'Borrow Pit or Shallow Surface Excavation'.

If a mining void contains levels of varying depths, the void can be divided into several categories to align with the different disturbance types. Such a division is made vertically up from the edge of the plateau of the shallower section. The outer perimeter of the second deeper mine is taken from the point at which the void starts to dip lower to the second depth (see diagram).



Plant Site

The area of land that is required for the operation of machinery and equipment associated with the processing of minerals.

A plant site may include (but is not limited to): mill, concentrator, crusher, processing tanks or vessels, or power station. Storage areas for toxic or hazardous processing chemicals should be included in the 'plant site' definition.

Processing equipment or stockpile associated with basic raw material extraction

All facilities for the crushing, screening or other processing of basic raw materials, along with the resulting stockpiles of processed or un-processed material.

Tailings and residue storage facilities

An area used to store and consolidate tailings.

As part of assigning the above land description, the class of the facility must also be considered. The disturbance classes are detailed in Schedule 1 of the Regulations, and explained in the 'classes of activities' section above.

Topsoil stockpiles

An area associated with the storage of growth material/topsoil. Growth material/topsoil is considered to be the upper, outermost layer or soil which contains the highest concentration of organic matter and microorganisms. In soil classification systems, topsoil is often referred to as the "A Horizon". Typically, this layer is usually 10cm to 20cm in depth from the surface, however this will vary with soil condition.

Transport or service infrastructure corridor

Includes roads (access and haulage), causeways, rail, pipelines and power lines. These types of infrastructure have been categorised together as they often occupy the same footprint.

Waste dump and overburden stockpiles

Waste dump and overburden stockpiles are defined as areas associated with the storage of unprocessed waste material resulting from a mining operation.

As part of assigning the above land description, the class of the facility must also be considered. The disturbance classes are set out Schedule 1 of the regulations, and explained in the 'classes of activities' section above.

Workshop

The area of land that is occupied by buildings for the maintenance and storage of plant, equipment and mine vehicles.

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