



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

GUIDELINES

Annual Environmental Report Guideline

Version 2.0
December 2022

Document Hierarchy for annual environmental reports under the *Mining Act 1978*

| | |
|---------------------|---|
| Legislation | <i>Mining Act 1978</i> |
| Statutory Documents | Statutory Guidelines for Mining Proposals Statutory Guidelines for Mine Closure Plans |
| Policy | Environmental Regulatory Strategy Environmental Objectives Policy for Mining |
| Guidelines | This Document Mining Proposal Guidance – How to prepare in accordance with Part 1 of the Statutory Guidelines for Mining Proposals Mine Closure Plan Guidance – How to Prepare Mine Closure Plans in accordance with Part 1 of the Statutory Guidelines for Mine Closure Plans |

Version History

| Version | Date | Changes |
|---------|---------------|---|
| 1.0 | March 2015 | Initial publication |
| 2.0 | December 2022 | Updated to reflect the simplification of the annual environmental report system to streamline the information requested from proponents and improve system performance. |

1. PURPOSE

The purpose of this document is to provide guidance and transparency on the information required by the Department of Mines, Industry Regulation and Safety (DMIRS) in an Annual Environmental Report (AER).

An AER is required for all mining projects that have an AER condition imposed under the *Mining Act 1978* (Mining Act). A condition requiring the submission of an AER is imposed on the tenement following the approval of a mining proposal. Failure to submit an AER is a breach of the tenement condition that renders the affected tenement(s) liable for forfeiture pursuant to sections 96(1) or 97(1) of the Mining Act.

AERs are submitted through DMIRS' Environmental Assessment and Regulatory System 2 (EARS2) system. This document provides an overview of the structure and information required when reporting on mining activities in Western Australia.

2. OBJECTIVES

The objectives of the AER are to:

- Document mining activities for the reporting year and proposed activities for the following year.
- Document environmental management and rehabilitation activities for the reporting year, and proposed activities and developments in the following year.
- Provide environmental monitoring results.
- Document analysis of monitoring data to report against the progress and status of achieving environmental outcomes and closure criteria for the site.
- Provide an assessment of compliance with conditions.
- This guideline sets out how to present the evidence to DMIRS for consideration.

3. SCOPE

This guideline specifically relates to the completion of AERs required under the Mining Act. Please note this guideline does not intend to provide a step-by-step guide on the use of EARS2. This information is contained within the Help section of EARS2 and is available through the system when submitting an AER.

4. GUIDELINE

The mandatory requirements of an AER are set out in the EARS2 system and are included under each section below for ease of reference.

1. Report Details

Report requirements:

- Environmental Group Site details (project code, project name, site code, site name)
- Report period (start and finish)
- Contact information

This section requires details regarding the Environmental Group Site, contact information, and the reporting period. The reporting period is defined as the 12 month period prior to the specified due date. For example, an AER due in November 2022 would be required to report on activities between 1 November 2021 and 31 October 2022. This will vary among AERs and is dependent upon the due date specified within the tenement conditions. The information provided in an AER needs to be relevant to the AER reporting period (Figure 1).

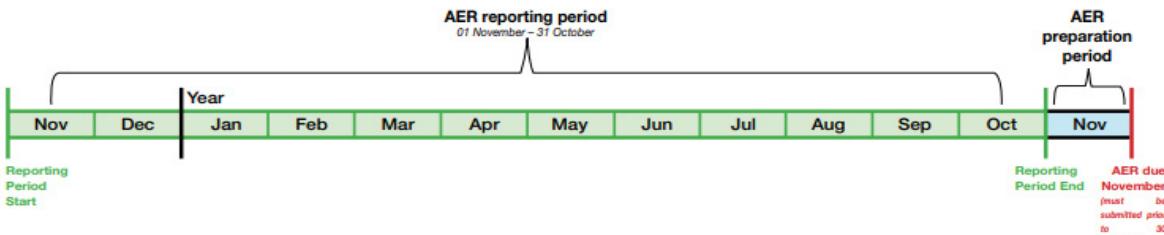


Figure 1 - AER Reporting Period

An extension to the AER submission due date can be requested from the General Manager, Mine Closure and Environmental Services at least 15 business days prior to the due date. This will be considered based on reasonable justification being provided in relation to the mitigating reasons the AER submission due date cannot be met.

If the AER reporting month as stated in the tenement condition is not suitable, the tenement holder can formally request to the General Manager, Mine Closure and Environmental Services that the tenement condition be updated to a preferable month to align with the requirements of the operator.

2. Review Tenements

Report requirements:

- AER lodgement requires you to report against the following list of tenements (generated by the EARS2 System). If you believe the list of tenements is incorrect, please raise a query to advise DMIRS through the Related Communications. (See Help in the EARS2 System for detailed instruction on raising queries using Related Communications.)

This section requires the user to review the tenements for which the AER is being prepared. The tenements shown within this step automatically populate based on DMIRS' environmental tenement groupings (project, Environmental Group Site).

It is important to note that not all tenements associated with an Environmental Group Site are displayed within this step. Only those tenements that are required to submit an AER (tenement condition requirement) will be displayed; all other tenements associated with the Environmental Group Site are hidden from view.

3. Environmental Group Site

3.1 Site Activity Summary

Report requirements:

This section requires a summary of the following for the AER reporting period:

- The status of the site (Active/Care and Maintenance/Construction etc.)
- Exploration activities
- Operational mining activities
- Rehabilitation activities
- Progress towards mine closure (e.g. Research/trials undertaken, progress with closure plan)
- Progress against the care and maintenance plan (if applicable¹)

The purpose of this section is to provide a concise overview of the type of operation and the activities being undertaken. Supporting information should be attached in the Attach Document section of the AER.

3.2 Site Summary Table

Report requirements:

- Provide a concise overview of the operations and the progress of closure planning for the Environmental Group Site.

¹ Sites on care and maintenance require a care and maintenance plan. For more information, refer to section 88 of the *Mine Safety and Inspection Act 1994* and the [Environmental Note – Care and Maintenance \(2009\)](#).

The purpose of this section is to provide a concise overview of the operations and the progress of closure planning for the Environmental Group Site. This section includes details regarding the current status of the site, the project commodity, year the site commenced and estimated remaining life of mine.

This section also includes a materials balance table that is intended to provide an overview of the total volumes of material since the commencement of mining, as opposed to being for the reporting period only.

This section also requires details regarding whether a Mine Closure Plan has been prepared and submitted for the site.

3.3 Site Plan

Report requirements:

A Site Plan that clearly and accurately reflects the information provided in the AER must be attached. The minimum requirements for the Site Plan are:

- All operations and areas disturbed should be drawn on the plan with the scale and legend clearly shown.
- All tenements and their boundaries indicated.
- Include topographical, mine-site infrastructure details and cadastral information.
- Include areas rehabilitated to date with year completed and rehabilitation stage.
- Show areas disturbed during the reporting period.
- Show areas proposed for disturbance during the following reporting period.

The Site Plan(s) is a key element of the report and must clearly and accurately reflect the disturbance and rehabilitation information provided within the submission. It is essential that the Site Plan(s) is relevant to the reporting period, consistent with the activity details date, and provides sufficient detail to allow the department to review the extent of site disturbance.

At least one Site Plan must be made publically available by selecting the Available for Public Viewing option when uploading a plan to the system.

3.4 Area of Activity

Report requirements:

All mining related disturbance and rehabilitation activity present at the end of the AER reporting period needs to be reported.

Enter a summary of how the area data was verified (e.g. orthophotography, surveying), click the Save Form button, and then review and update the activities, disturbance and rehabilitation data for each tenement.

The EARS2 system provides the functionality for information to be ‘copied forward’ as part of other departmental reporting requirements (i.e. previous AER submissions, Mining Rehabilitation Fund reports etc.). Detailed guidance regarding this functionality is provided within the Help section of EARS2 and is available when submitting an AER.

AERs must report the area of land under Stage 1 or Stage 2 rehabilitation in the tenement activity tables. See the Glossary for definitions.

Reporting on Overlapping Mining Activities

AERs must list all activities that exist on ground however the areas of any activities that overlap do not need to be reported twice.

To avoid duplication, the tenement holder will need to choose the hectares to assign to each overlapping mine activity type within the AER. This decision should be informed by the combined closure liability of the overlapping activity types. Unless the tenement holder can provide justification that the combination of activities has resulted in a reduction in closure liability, the overlap area should be reported as the highest rehabilitation liability category of the activity types (as per the Mining Rehabilitation Fund category rates).

If there is an overlap between an Other Mine Activity and a Key Mine Activity, the area should always be reported as the Key Mine Activity.

All Key Mine Activities must be included in the AER, even if they have a 100 per cent overlap with another activity type (and therefore one activity has a reported area of zero hectares). For example an in pit tailings storage facility.

If the activity type has an associated environmental datasheet (waste dumps and tailings storage facility), the full area of the activity type must be listed in the datasheet.

Tenement holders must retain information and records to justify the reporting decisions in relation to areas of activity overlap. It is recommended that an explanation of the overlap, and any decisions relating to the reporting of the overlap, is attached to the AER as additional information.

In many circumstances, an overlap in activity types is conducted with the specific intention of reducing or mitigating the closure liability of the combined activity types (such as backfilling a pit with erosive waste). Where an approved Mining Proposal or Mine Closure Plan details that combining activities reduces the closure risk, reference to that approval can be provided in the AER as justification for the reporting decision.

Proponents should seek advice from DMIRS prior to submitting an AER if they have any specific reporting queries or are unsure about how to report.

3.5 Landform Datasheets

Report requirements:

Datasheets are required for all waste dumps and tailings storage facilities.

The purpose of the datasheets is to confirm the design and management criteria for each waste dump/tailing storage facility to ensure long-term stability and successful rehabilitation.

The Waste Dumps and Tailings Storage Facilities recorded in the Area of Activity section are listed on this screen by Mine Activity Reference. If the list of disturbances on this page appears incorrect, the Area of Activity section should be reviewed and any necessary changes made.

3.6 Rehabilitation and Closure Planning

Report requirements:

The Statutory Guidelines for Mine Closure Plans – March 2020 and supporting *Mine Closure Plan Guidance - how to prepare in accordance with the Statutory Guidelines - March 2020* detail the requirements for mine closure planning.

Provide a summary of the following in this section:

- Changes to the operation since the last submitted AER that will affect closure (e.g. increased disturbance footprints, results of trials or studies aimed at closing knowledge gaps).
- Any consultation with stakeholders regarding mine closure.
- Progress towards finalising completion criteria (development of completion criteria provides direction and focus for research and trials).

Attach supporting information in the Attach Documents section.

3.7 Research and Trials

Report requirements:

Describe the research you have planned or implemented to verify the potential success of rehabilitation activities outlined in your mine closure plan or address any knowledge gaps identified in your mine closure plan.

Include a brief summary of what has been carried out, the methods used and a concise interpretation of the results (e.g. include graphs highlighting trends in vegetation cover rather than presenting tables of raw data).

Include the following in your description of the rehabilitation trial outcomes:

- Information on how the rehabilitation success was monitored
- The monitoring period (ensure that adequate time for monitoring has been factored in to meet closure commitments)
- Actual results and comparisons to baseline/analogue information or control plots
- Photographs of the rehabilitation trials

Attach supporting information in the Attach Documents section.

This section describes the research planned or implemented to verify the potential success of rehabilitation activities outlined in the site's Mine Closure Plan or address any knowledge gaps identified in the Mine Closure Plan.

Include a brief summary of what has been carried out, the methods used and a concise interpretation of the results (e.g. include graphs highlighting trends in vegetation cover rather than presenting tables of raw data).

The following should be included in the description of the rehabilitation trial outcomes:

- Rehabilitation methodology, including dates of treatments and information such as topsoil application, scarification depth, seeding or mulching
- Information on how the rehabilitation success was monitored
- The monitoring period (ensure that adequate time for monitoring has been factored in to meet closure commitments)
- Actual results and comparisons to baseline/analogue information or control plots
- Photographs of the rehabilitation trials

Attach supporting information in the Attach Documents section.

3.8 Future Work Programme

Report requirements:

Include a description of the mining, environmental management and rehabilitation proposed for the following year.

Describe in broad terms any upcoming expansion of operations that will need to seek approval, research or development projects, or the introduction of new techniques.

Attach supporting information in the Attach Documents section.

4. Compliance

4.1 Environmental & Closure Outcomes

Report requirements:

For activities approved under the *Mining Proposal Guidelines (2016)* or [*Statutory Guidelines for Mining Proposals \(2020\)*](#), this section requires detail on performance against approved environmental and closure outcomes and performance criteria.

For activities approved under the *Guidelines for Mining Proposals in Western Australia (2006)*, or earlier mining proposal submissions, this section requires detail on progress towards achieving completion criteria in the latest approved Mine Closure Plan.

An example of how this can be reported can be found [here](#).

For activities approved under Part 2 of the *Statutory Guidelines for Mining Proposals (2020)*, or previous small operator pro-forma, this section requires evidence (e.g. photographs from the reporting period) to demonstrate compliance with environmental tenement conditions.

4.2 Environmental Monitoring

Report requirements:

Provide monitoring data to verify whether the performance criteria and environmental outcomes are being achieved, and to show progress against closure completion criteria.

An analysis of results must be provided, including interpretation of trends, with specific data attached.

An assessment of what the trends mean for the compliance status with the environmental outcomes is also required.

4.3 Conditions

Report requirements:

The purpose of this section is to demonstrate compliance with tenement conditions.

A summary of tenements is provided below. Select any conditions with non-compliances and provide an explanation for the non-compliance and how it was rectified to prevent future non-compliance.

4.4 Incidents

Report requirements:

The purpose of this section is to document any reportable Environmental Incidents relevant to tenement condition requirements that have occurred during the reporting period, and provide an update on the associated monitoring, environmental outcomes and system improvements to prevent reoccurrence.

If you have incidents to report on, use the Add Incident button to report on each incident.

Please note that reporting non-compliance via annual reports and approval documents is not considered self-reporting. For information on how to report a non-compliance or incident, please refer to the Resource and Environmental Compliance Division's [*Guidance Note for Non-compliances and Incidents*](#).

5. Other Information

Any additional information relevant to the site should be described in this section and appended to the AER as required. The use of the Attach Documents section is optional, but can be used to attach supporting information, such as colour photographs and/or aerial imagery which can provide a time record of the operation for comparative purposes.

6. Review

A Review step is included within the AER to ensure the report meets the requirements of these guidelines. Each section must be reviewed by the user to ensure all requirements have been appropriately addressed. In instances where compulsory data has not been entered consistent with EARS2 requirements, an error message will notify the user to return to that section and make the necessary corrections.

7. Corporate Endorsement

The AER needs to be corporately endorsed by a senior person within the operating company (e.g. the registered Mine Manager). The person acting as the Corporate Endorser will need to be assigned the Corporate Endorser role by the Company Administrator via the Administration menu.

8. Confidentiality

The following information is available to the public on the Department's EARS2 [webpage](#):

- Report Details
- Environmental Group Site – Site Summary
- Environmental Group Site – Site Summary Table
- Environmental Group Site – Site Plan and
- Environmental Group Site – Area of Activity

All other information contained within an AER is not available to the public through the EARS2 system, though may be made available to the public pursuant to the *Freedom of Information Act 1992*.

GLOSSARY

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| Activity | Elements of the organisation's activities, products or services that can interact with the environment. These include routine and non-routine activities. |
| Assessment Date | Date at which the Mine Activity Areas were determined, which needs to be relevant to the reporting period. |
| Care and Maintenance | All mining operations suspended, site being maintained and monitored. |
| Disturbed | Area where vegetation has been cleared and/or topsoil or surface cover removed. Disturbed areas include those indirectly or directly altered, or where environmental conditions have been changed by mining. |
| Disturbance | Total area of mining activities not considered land under rehabilitation. |
| Closure Obligations | Commitments, outcomes, criteria, conditions or obligations relating to closure that apply to the mining disturbances whether under a tenement condition, Mining Proposal, Mine Closure Plan or otherwise. |
| Closure Outcomes | Required outcome for each aspect that will allow return of disturbed land to a safe, stable, non-polluting/non-contaminating landform in an ecologically sustainable manner that is productive and/or self-sustaining and is consistent with the agreed post-mining land use. |
| Completion Criteria | Set of criteria outlined in the approved Mine Closure Plan that provide the basis on which successful rehabilitation and mine closure are determined. |
| DMIRS Closure Objective | "Mining activities are rehabilitated and closed in a manner to make them physically safe to humans and animals, geo-technically stable, geo-chemically non-polluting/non-contaminating, and capable of sustaining an agreed post-mining land use, and without unacceptable liability to the State." |
| DMIRS Environmental Objectives | The related environmental objective for each environmental factor is the desired goal that, if met, will indicate that the proposed activities are not expected to have a significant impact on that factor of the environment. These objectives are identified in the <i>Environmental Objectives Policy for Mining (2020)</i> . |
| EARS2 System | EARS2 is a DMIRS online system for submitting environmental compliance reporting. EARS2 allows online lodgement and tracking of Annual Environmental Reports (AER) and Mining Rehabilitation Fund (MRF) reports. |
| Environmental conditions | Refers to conditions that may be imposed upon the grant of a mining tenement or at any subsequent time for the purpose of preventing or reducing, or making good, injury to the land in respect of which the tenement was granted, or injury to anything on or below the natural surface of that land or consequential damage to other land. |
| Environmental Group Site (EGS) | A grouping of individual tenements for the purposes of further distinguishing the operations that make up a particular project. Multiple Environmental Group Sites can be created within one project. Each Environmental Group Site will contain a separate set of tenements that collectively will make up all the tenements for the project. |

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| Environmental Outcome | Environmental outcome is the acceptable level of impact that must not be exceeded, or a level of protection/performance/result that must be achieved, for the mine site to be considered compliant. |
| 'EX' Account | Account required to access departmental systems. |
| Land Under Rehabilitation – Stage 1 | Area of Mine Activities on which all rehabilitation earthworks have been completed in accordance with mine closure obligations. |
| Land Under Rehabilitation – Stage 2 | Area of rehabilitated Mine Activities which have demonstrated progress from earthworks (Stage 1) towards the agreed post-mining land use. Monitoring data which demonstrates rehabilitation progress must be retained to verify a Stage 2 classification. |
| Life of Mine | Expected duration of mining and processing operations. |
| Mine Activity Reference | Site-specific reference to further distinguish between Mine Activity Types. |
| Mine Activity Type | A feature created during mining or exploration activity (e.g. waste dumps, haul roads, access roads, ROM, plant site, TSF, borrow pits, drill pads, stockpiles, office blocks, accommodation village, etc.) |
| Mine Closure Plan | A document in the form and content as required by the <i>Statutory Guidelines for Mine Closure Plans</i> . |
| Mining Proposal | A document in the form and content as required by the <i>Statutory Guidelines for Mining Proposals</i> . |
| Project | The total integrated mining operations in which a number of sites contribute to the overall operation to supply ore, processing facilities and disposal of waste products. |
| Rehabilitation | The return of disturbed land to a safe, stable, non-polluting/non-contaminating landform in an ecologically sustainable manner that is productive and/or self-sustaining consistent with the agreed post-mining land use. |
| Rehabilitation obligations | Commitments, objectives, criteria, conditions or obligations relating to rehabilitation that apply to the mining disturbances whether under a tenement condition, Mining Proposal, Mine Closure Plan or otherwise. |
| Reporting period | Twelve month period prior to the reporting month as specified in the tenement conditions (e.g. if reporting month is June 2021, reporting period would be June 2020 to May 2021). |
| Unconditional Performance Bond (UPB) | The form of mining security required by the Minister (or their delegate). An unconditional performance bond is a guarantee issued by a financial institution in favour of the Minister that may be requested by the Minister at will. The Minister is not obligated to discharge an unconditional performance bond. |

Government of Western Australia

**Department of Mines, Industry Regulation
and Safety**

8.30am – 4.30pm

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