

GUIDELINE

REHABILITATION RECORDS



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Contents

Purpose of this guideline3

Role of the lease holder.....3

 Large mines3

 Small mines6

Glossary.....8

Department guidance11

Purpose of this guideline

Conditions of a mining lease granted under the *Mining Act 1992* require the lease holder to keep and maintain records in relation to the mining lease. The purpose of this guideline is to assist lease holders to identify the types of rehabilitation records that should be kept and maintained. This includes records relating to all rehabilitation risk assessments, rehabilitation management plans, annual rehabilitation reports, forward programs and progressive rehabilitation implementation.

This guideline will help lease holders:

- achieve compliance with the mining lease conditions relating to records
- implement best practice methods for keeping records relating to rehabilitation performance outcomes
- understand the provisions of sections 163D and 163E of the *Mining Act 1992*, which require any record required to be created and maintained under the Act, the Regulations, or a condition of a mining lease to be kept in a legible form for at least four years following the expiry or cancellation of the mining lease.

Role of the lease holder

This section sets out the types of rehabilitation records that the lease holder should keep and maintain in relation to both small and large mines to facilitate compliance with clause 17 of Schedule 8A of the Mining Regulation 2016.

Large mines

A large mine is defined as a mine that requires an environment protection licence under the *Protection of the Environment Operations Act 1997*. The lease holder of a large mine must keep and maintain records that document all activities and actions undertaken to achieve compliance with the mining lease conditions.

Typical records that lease holders may require to demonstrate compliance with lease conditions are listed in Table 1. Large mine lease holders may also be required to maintain additional records based on site-specific environmental characteristics or mining activities.

Table 1: Records for large mines

AREA	TYPES OF RECORDS
Rehabilitation risk assessment	<ul style="list-style-type: none"> ■ All rehabilitation risk assessments. ■ Any updates to rehabilitation risk assessments. ■ All records associated with a rehabilitation risk assessment. ■ All records on the effectiveness of control measures implemented to remove or minimise a risk.
Rehabilitation management plan	<ul style="list-style-type: none"> ■ All rehabilitation management plans. ■ All records associated with a rehabilitation management plan.
Annual rehabilitation report and forward program	<ul style="list-style-type: none"> ■ All annual rehabilitation reports and forward programs. ■ All records associated with an annual rehabilitation report and forward program.
Progressive rehabilitation	<ul style="list-style-type: none"> ■ Photographs of: <ul style="list-style-type: none"> □ the baseline conditions of disturbed areas □ disturbance caused by mining operations □ progressive rehabilitation □ completed rehabilitation works. ■ Records of baseline environmental surveys, and any analysis against reference sites and benchmark values. ■ Records of the salvage of all rehabilitation resources including suitable capping materials, topsoils / subsoils, seeds, habitat structures (e.g. tree hollows and rocks) for use in rehabilitation. ■ Life of mine rehabilitation material balances, for all materials such as capping materials, soils and habitat resources. ■ Records of geotechnical and geochemical investigations. ■ Settlement and stability measurements. ■ Measures for erosional stability.

AREA	TYPES OF RECORDS
	<ul style="list-style-type: none"> ■ Register of contaminated sites including bioremediation areas. ■ Records of identification and management of actual acid forming, potentially acid forming (PAF) and non-acid forming (NAF) material and ongoing monitoring. ■ Records of any geochemical hazardous material, production wastes and other waste streams and where they are located on site. ■ Registers of topsoil and or soil substitute stockpiles (e.g. biosolids), including management records such as stripping / stockpiling dates, weed control, inoculation with microbes). ■ Records of material characterisation analysis (e.g. overburden, interburden, reject material, subsoils and topsoils). ■ Subsidence monitoring records. ■ Records of methodologies used to rehabilitate the site (e.g. species utilised, how they were applied (i.e. as seed or plant), fertiliser rate, details of ripping and scarifying, timing of sowing, sowing rates, seedling planting density, origin of seed, rainfall). ■ Records of rehabilitation trials and research outcomes. ■ Quality assurance records for progressive rehabilitation such as 'as-constructed' drawings and inspection and test plans/hold point inspection records. ■ Environmental incident reports, including records of any corrective or preventative action taken. ■ Records of maintenance activities undertaken on rehabilitation areas. ■ Rehabilitation inspections and monitoring programs, including outcomes such as specialist recommendations. ■ Assessments of rehabilitation performance against the rehabilitation objectives and rehabilitation completion criteria. ■ Outcomes of relevant stakeholder consultation programs, specifically in relation to outcomes of discussions pertaining to rehabilitation objectives, final land use and final landform.

AREA	TYPES OF RECORDS
	<ul style="list-style-type: none"> Records of any Stewardship Agreements or Conservation Agreements (or similar mechanisms) where the rehabilitation is part of a biodiversity offset on the lease area. Monitoring data on the progress towards achieving the rehabilitation objectives and rehabilitation completion criteria for these areas/domains. Details of specific requirements for rehabilitation on State-owned land. Records of access agreements to confirm post mining land use outcomes relevant to the State government agency that has ownership of the land.

Small mines

A small mine is defined as a mine that does not require an environment protection licence under the *Protection of the Environment Operations Act 1997*. The lease holder of a small mine must keep and maintain records that document all activities and actions undertaken to achieve compliance with the mining lease conditions.

Typical records that small mine lease holders may use to demonstrate compliance with lease conditions are listed in Table 2. Small mine lease holders may also be required to maintain additional records based on site-specific environmental characteristics or mining activities.

Table 2: Records for small mines

AREA	TYPES OF RECORDS
Rehabilitation risk assessment	<ul style="list-style-type: none"> All rehabilitation risk assessments. Any updates to rehabilitation risk assessments. All records on the effectiveness of control measures implemented to remove or minimise a risk.
Rehabilitation management plan	<ul style="list-style-type: none"> All rehabilitation management plans.
Annual rehabilitation report and forward program	<ul style="list-style-type: none"> All annual rehabilitation reports and forward programs.

AREA	TYPES OF RECORDS
Progressive rehabilitation	<ul style="list-style-type: none"> ■ Photographs of: <ul style="list-style-type: none"> ▣ the baseline conditions of disturbed areas (i.e. pre-disturbance photographs) ▣ disturbance caused by mining operations ▣ progressive rehabilitation ▣ completed rehabilitation works. ■ Records of the salvage of all rehabilitation resources including suitable capping materials, topsoils/subsoils, seeds, habitat structures (e.g. tree hollows and rocks) for use in rehabilitation. ■ Register of contaminated sites including bioremediation areas. ■ Records of methodologies used to rehabilitate the site (e.g. species utilised, how they were applied (e.g. as seed or plant), fertiliser rate, details of ripping and scarifying, timing of sowing, sowing rates, seedling planting density, origin of seed, rainfall). ■ Environmental incident reports, including any corrective or preventative action taken. ■ Records of maintenance activities undertaken on rehabilitation areas. ■ Assessments of rehabilitation performance against the rehabilitation objectives and rehabilitation completion criteria. ■ Outcomes of relevant stakeholder consultation programs, specifically in relation to outcomes of discussions pertaining to rehabilitation objectives, final land use and final landform. ■ Details of specific requirements for rehabilitation on State-owned land. Records of any access agreements to confirm post mining land use outcomes relevant to the State government agency that has ownership of the land.

Glossary

TERM	DEFINITION
Annual rehabilitation report	As outlined in the Mining Regulation 2016.
Department	Department of Regional NSW.
Final landform and rehabilitation plan	As defined in the Mining Regulation 2016.
Final land use	As defined in the Mining Regulation 2016.
Forward program	As defined in the Mining Regulation 2016.
Land	As defined in the <i>Mining Act 1992</i> .
Large mine	As defined in the Mining Regulation 2016.
Lease holder	The holder of a mining lease.
Life of mine	The timeframe of how long a mine is approved to mine, from commencement to closure.
Mining lease	As defined in the <i>Mining Act 1992</i> .
Phases of rehabilitation	<p>The stages and sequences of actions required to rehabilitate disturbed land to achieve the final land use. The phases of rehabilitation are:</p> <ul style="list-style-type: none"> ■ active mining ■ decommissioning ■ landform establishment ■ growth medium development ■ ecosystem and land use establishment ■ ecosystem and land use development ■ rehabilitation completion (sign-off).
Progressive rehabilitation	<p>The progress of rehabilitation towards achieving the approved or, if not yet approved, the proposed:</p> <ul style="list-style-type: none"> ■ rehabilitation objectives, and

TERM	DEFINITION
	<ul style="list-style-type: none"> ■ rehabilitation completion criteria, and ■ for large mines – final landform and rehabilitation plan. <p>This may be described in terms of domains, phases, performance indicators and rehabilitation completion criteria.</p>
Rehabilitation	As defined in the <i>Mining Act 1992</i> .
Rehabilitation completion	<p>The final phase of rehabilitation when a rehabilitation area has achieved the final land use for the mining area:</p> <ul style="list-style-type: none"> ■ as stated in the approved rehabilitation objectives and the approved rehabilitation completion criteria, and ■ for large mines – as spatially depicted in the approved final landform and rehabilitation plan. <p>Rehabilitation areas may be classified as complete when the NSW Resources Regulator has determined in writing that rehabilitation has achieved the final land use following submission the relevant application by the lease holder.</p>
Rehabilitation completion criteria	Rehabilitation completion criteria set out the criteria the achievement of which will demonstrate the achievement of the rehabilitation objectives.
Rehabilitation management plan	As defined in the Mining Regulation 2016.
Rehabilitation objectives	Means the rehabilitation objectives required to achieve the final land use for the mining area.
Rehabilitation risk assessment	As defined in the Mining Regulation 2016.
Risk	The effect of uncertainty on objectives. It is measured in terms of consequences and likelihood (AS/NZS ISO 31000:2018).
Small mine	As defined in the Mining Regulation 2016.
State significant development (SSD)	Has the same meaning as that term under the <i>Environmental Planning and Assessment Act 1979</i> .

TERM	DEFINITION
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Note: Schedules 1 and 2 of *State Environmental Planning Policy (State and Regional Development) 2011* provide a full list of SSD types and identified sites. Large mining and extraction operations (including all coal mines) are identified as SSD.

Department guidance

- Form and way: Rehabilitation objectives and rehabilitation completion criteria for small mines
- Form and way: Rehabilitation objectives, rehabilitation completion criteria and final landform and rehabilitation plan for large mines
- Form and way: Rehabilitation management plan for large mines
- Form and way: Annual rehabilitation report and forward program for small mines
- Form and way: Annual rehabilitation report and forward program for large mines
- Guideline: Rehabilitation risk assessment
- Guideline: Rehabilitation records
- Guideline: Rehabilitation controls
- Guideline: Mine rehabilitation portal
- Guideline: Rehabilitation objectives and rehabilitation completion criteria
- Guideline: Achieving rehabilitation completion (sign-off)

The above resources are located on our [website](#).