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COMPLIANCE AUDIT PROGRAM

HILLGROVE MINE EXPLORATION DRILLING PROGRAMS

Hillgrove Mines Pty Ltd



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1. Introduction

1.1. Background

Exploration licence 3326 (EL3326) was granted to New England Antimony Mines NL on 22 August 1989. The licence was transferred to Antimony Resources Australia Pty Ltd in March 2003. The company name was changed to Hillgrove Mines Pty Ltd (Hillgrove Mines) in October 2011. The licence has been renewed several times, with the most recent application for renewal made by Hillgrove Mines in August 2020. This renewal is currently pending.

There have been no exploration drilling programs undertaken on EL3326 in the last five years. Exploration programs have been focussed on exploration within the 47 mining leases held by Hillgrove Mines. In May 2020, Hillgrove Mines was granted funding for a drilling program on Mining Lease 916 (ML916) under the NSW Government New Frontiers Co-operative Drilling Program.

As part of the NSW Resources Regulator's compliance audit program, an audit of the exploration activities associated with the Hillgrove Mine within EL3326 and the mining leases was undertaken on 18 May 2021.

1.2. Audit objectives

The objectives of the audit were to:

- undertake a compliance audit of the Hillgrove Mines exploration activities against the requirements of the *Mining Act 1992* and the conditions of the mining leases, exploration licence and activity approvals issued pursuant to that Act
- assess the operational performance of the exploration activities and the ability of the title holder to implement management systems and controls to provide for sustainable management of the operations.

1.3. Audit scope

The scope of the audit included:

- the exploration activities associated with the Hillgrove Mine including:
 - exploration activities within EL3326 including a selected sample of exploration drillholes

- exploration activities within the 47 mining leases that comprise the Hillgrove Mine
- borehole sealing and rehabilitation activities for selected drilling activities undertaken since April 2019.
- a review of documents and records pertaining to the exploration activities
- the assessment of compliance for the period commencing 18 May 2019 and ending 18 May 2021.

1.4. Audit criteria

The audit criteria against which compliance was assessed included:

- *Mining Act 1992*, specifically, Sections 5, 30, 140, 163C to 163E, 163G, 378D
- Mining Regulation 2016, specifically clauses 59 to 68
- conditions attached to EL3326 (granted 23 August 1989, last renewed 15 July 2015 with renewal currently pending)
- relevant conditions relating to exploration contained in the 47 mining leases that comprise the Hillgrove Mine
- *Exploration Code of Practice: Environmental Management* (Version 2, April 2017)
- *Exploration Code of Practice: Rehabilitation* (Version 2, April 2017)
- *Exploration Code of Practice: Community Consultation* (Version 1.1, May 2016)
- *Exploration Code of Practice: Produced Water Management, Storage and Transfer* (Version 2, April 2017)
- *Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales* (Version 2, March 2016)
- *Exploration Guideline: Annual activity reporting for prospecting titles* (Version 2a, April 2016) published by the (then) NSW Department of Industry, Skills and Regional Development, Division of Resources and Energy
- *ESG4: Guideline for Preparing an Environmental and Rehabilitation Compliance Report* (Version 2.3, March 2019) published by the NSW Resources Regulator.

1.5. Publishing and disclosure of information

This audit report will be published on the Regulator's website consistent with Section 365 of the *Mining Act 1992*.

This audit report may be publicly disclosed consistent with the *Government Information (Public Access) Act 2009*.

2. Audit methods

The audit process involved the interview of site personnel, a review of documentation and samples of records provided by the title holder and/or operator and a site inspection of the operations to determine the level of compliance of the operations and assess the status of the operational performance. The audit process and methodology are described in more detail in the sections below.

2.1. Opening meeting

The opening meeting was held onsite on 18 May 2021. The audit team was introduced, and the scope of their responsibilities was conveyed to the auditees. The objectives and scope of the audit were outlined. The methods to be used by the team to conduct the audit were explained, including interview of personnel, review of documentation, examination of records and a site inspection to assess specific compliance requirements.

2.2. Site interviews and inspections

2.2.1. Data collection and verification

Where possible, documents and data collected during the audit process were reviewed on site. Several documents were unable to be reviewed on site and were provided following the site visit.

All information obtained during the audit process was verified by the audit team, where possible. For example, statements made by site personnel were verified by viewing documentation and/or site inspections, where possible. When suitable verification could not be provided, this has been identified in the audit findings as not determined.

2.2.2. Site inspections

A site inspection was undertaken of the following areas:

- ML961
 - drill sites CUY007 and CUY009 – drilled from the same pad, both holes rehabilitated
 - drill site CUY005 – hole rehabilitated.
- Gold Lease 3980 (GL3980)

- ▣ drill sites ELG149 and ELG150 – drilled from the same pad, within active area of operations, minimal rehabilitation other than plugging and filling holes.
- ML391
 - ▣ drill sites ELG152, ELG153 and ELG154 – drilled from same pad, not yet rehabilitated, sediment controls remain in place.
- Gold Lease 5845 (GL5845)
 - ▣ drill sites ELG149, ELG150 and ELG151 – drilled from same pad, preliminary rehabilitation commenced, sediment controls remain in place.
- ML649
 - ▣ drill site ELG157 – drilling in progress.
- core yard and sample storage.

2.3. Closing meeting

The closing meeting was held onsite on 18 May 2021. The objectives of this meeting were to discuss any outstanding matters, present the preliminary findings and outline the process for finalising the audit report.

2.4. Compliance assessment definitions

The reporting of results from the compliance audit was determined based on the definitions presented below in Table 2.

Table 1. Audit assessment categories.

ASSESSMENT	CRITERIA
Compliance	Sufficient and appropriate evidence is available to demonstrate the particular requirement has been complied with.
Non-compliance	Clear evidence has been collected to demonstrate the particular requirement has not been complied with. There are three subcategories of non-compliance reflecting the severity and level of risk associated with the non-compliance:

ASSESSMENT	CRITERIA
<p>Observation of concern</p>	<p>NC1 – the absence of planning or implementation of a required operational element which has the potential to result in a significant risk.</p> <p>NC2 – an isolated lapse or absence of control in the implementation of an operational element which is unlikely to result in a significant risk.</p> <p>NC3 – an administrative or reporting non-compliance which does not have a direct environmental or safety significance.</p> <p>Note: The identification of a non-compliance in this audit may or may not constitute a breach of, or offence under, the <i>Mining Act 1992</i>. Non-compliances identified in this audit report may be further investigated by the Regulator and regulatory actions may be undertaken.</p> <p>Where an auditee may be compliant at the time of the audit but there are issues that exist that could result in the potential for future non-compliance if not addressed.</p> <p>Observation of concern was also used where an issue may not have particular compliance requirements, but which was not conducive to good management or best practice.</p>
<p>Suggestion for improvement</p>	<p>Where changes in processes or activities inspected or evaluated at the time of the audit could deliver improvement in relation to risk minimisation, sustainable outcomes and management practices.</p>
<p>Not determined</p>	<p>The necessary evidence has not been collected to enable an assessment of compliance to be made within the scope of the audit.</p> <p>Reasons why the audit team could not collect the required information include:</p> <ul style="list-style-type: none"> ■ insufficient information on the file relating to the period covered by the audit or insufficient evidence collected to reach a conclusion ■ the wording on the criteria (approval condition) meant that no evidence could be gathered, or it was too difficult to gather the evidence. <p>A ‘not determined’ assessment was also made where the condition was outside of the scope of the audit.</p>

ASSESSMENT	CRITERIA
Not applicable	<p>The circumstances of the authorisation or title holder have changed and are no longer relevant (e.g. no longer mining, mining equipment and plant has been removed).</p> <p>An invoking element in the criteria was not activated within the scope of the audit.</p>

2.5. Reporting

Following completion of the site audit, the audit checklists were completed, and audit notes were reviewed to compile a list of outstanding matters to be noted in the audit report. This report was prepared to provide an overview of the operational performance of the site in relation to the exploration activities and identify any non-compliances or observations of concern noted by the auditors during the documentation review and interviews.

The draft audit findings were forwarded to Hillgrove Mines for comment. Consideration was given to the representations made during the finalisation of the audit report as discussed in the audit findings.

3. Audit findings

3.1. Work program

Condition 1 of EL3326 requires the licence holder to carry out the operations described in the approved work program. Work program WP-EL3326-2015-2020 was approved by the (then) Division of Resources and Energy (DRE) on 15 July 2015 as part of the renewal of EL3326. Renewal of the title is currently pending and the work program for 2020 onwards has not yet been approved.

The Mining Operations Plan 2016-2022 Amendment B was prepared by Hillgrove Mines in July 2020 and approved by the Regulator in August 2020. Section 2.3.1 of the approved MOP describes the exploration program across the mining leases with exploration to focus on the Currys Block Prospect and the Metz Mining Centre.

A drilling program on the Currys Block Prospect within ML961 was completed in 2020. Exploration drilling was observed to be in progress within the mining area on ML391. Recent drilling was also observed to have been conducted on mining leases GL5845 and GL3980.

Exploration data is maintained by the Hillgrove Mines geologists and submitted to the Department's Mining Exploration and Geoscience (MEG) with the annual activity reports as required.

3.2. Access agreements

Section 140 of the *Mining Act 1992* states, 'the holder of a prospecting title must not carry out prospecting operations on any particular area of land except in accordance with an access arrangement or arrangements applying to that area of land'. The access arrangement is required to be agreed in writing between the holder of the prospecting title and each landholder of that area of land.

Access agreements were observed to be in place for the properties upon which drilling was undertaken, for example, a land access agreement was signed on 23 March 2021 for the Taabinga property, and on 18 March 2021 for the Boolimba property. Both access agreements were based on the standard Association of Mining and Exploration Companies (AMEC) template for land access agreements and it was noted that the agreements included maps and information on the exploration activities. Generally, access agreements are negotiated for a six-month period.

Land access agreements were also noted to be in place for areas of the mining leases where Hillgrove Mines was not the landowner.

3.3. Native title and exempted areas

Condition 2 of EL3326 requires the licence holder to obtain the prior written consent of the Minister before carrying out any activities on land on which native title has not been extinguished. Similarly, Section 30 of the *Mining Act 1992* requires the consent of the Minister before a licence holder undertakes any activities within an exempted area.

A review of departmental records identified that the renewal of the mining leases and EL3326 was currently on hold due to issues with the application of native title to the titles. It was noted that no exploration activities have been conducted in EL3326 for several years. Exploration operations were in progress on the mining leases.

Given the hold on renewals for Hillgrove Mines, compliance with the native title provisions was not determined during the audit.

Exempted areas within the exploration licence areas have been mapped and Hillgrove Mines advised that exploration activities are to be avoided in these areas wherever possible. It was noted that no exploration activities have been conducted within EL3326 during the audit scope period.

3.4. Community consultation

Condition 3 of EL3326 requires the licence holder to carry out community consultation in relation to the planning and conduct of exploration activities. Community consultation is required to be carried out in accordance with the requirements of *Exploration Code of Practice: Community Consultation*.

An assessment against the mandatory requirements of the code of practice was undertaken as documented in the following sections.

It was noted that no exploration activities have been undertaken on EL3226 in the last three years. The code of practice does not apply to exploration works done on the mining leases.

3.4.1. Risk assessment

Mandatory requirement 1 of the code of practice requires the title holder to conduct a risk assessment, before commencing any activity authorised by the prospecting title, to identify and consider the range of opportunities and potential threats associated with community consultation and engagement.

Hillgrove Mines has not undertaken surface disturbing activities on EL3326 since 2015. A formal documented risk assessment has not been undertaken but will be required prior to any future exploration activities on the EL area.

3.4.2. Community consultation strategy

Mandatory requirement 2 requires the preparation of a community consultation strategy to manage the risks identified in the risk assessment. Mandatory requirement 3 sets out the requirements for preparation of the community consultation strategy.

Given that there have been no exploration activities on EL3326 since 2015, a specific community consultation strategy has not been prepared. The mine has a community consultation strategy and a community consultative committee, but these are not exploration specific.

An exploration specific community consultation strategy, prepared in accordance with mandatory requirement 3, will be required before any future exploration activities are undertaken on EL3326.

3.4.3. Implementation and reporting

Mandatory requirement 4 requires the licence holder to implement, monitor and report annually on the community consultation strategy.

Although Hillgrove Mines does not have an exploration specific community consultation strategy, evidence was available to demonstrate that community consultation is occurring as part of the mining operations. Consultation activities have included:

- land access negotiations with landholders
- regular town meetings.

Reduced community consultation reports for the 2018-2019 and 2019-2020 reporting years were submitted as part of the annual activity reporting required by condition 8 of EL3326. The 2018-2019 report was reviewed by MEG and was found to be adequate. The 2019-2020 report was reviewed by the auditor and found to be generally consistent with the reporting guidance provided in Appendix 1 of the code of practice.

3.5. Exploration activity approvals

Section 23A of the *Mining Act 1992* requires the holder of an exploration licence to obtain an activity approval prior to carrying out assessable prospecting operations.

No drilling programs have been completed on EL3326 during the audit scope period, so no exploration activity approvals have been required.

Exploration within the mining leases is managed under the mining operations plan. Further approvals for exploration within the mining leases is not required.

3.6. Environmental management

Condition 4 of EL3326 requires the licence holder to prevent or minimise, so far as is reasonably practicable, any harm to the environment arising from the activities carried out under the licence. Condition 2 of the exploration activity approval requires the licence holder to carry out the activity in compliance with Part B of the *Exploration Code of Practice: Environmental Management*.

No exploration works have been undertaken on EL3326 during the audit scope period. Therefore, an assessment against the mandatory requirements of the *Exploration Code of Practice: Environmental Management* was not undertaken. However, the code of practice was used as a guide for the assessment of exploration activities within the mining leases.

No evidence of environmental harm beyond that approved in the MOP was observed at the sites visited during the site inspection. A Centurion Drilling rig was set up on site ELG157 at the time of the audit. The exploration drilling was observed to be generally undertaken in accordance with the *Exploration Code of Practice: Environmental Management* as documented in the following sections.

3.6.1. Use of chemicals, fuels and lubricants

Mandatory requirements 1.1 to 1.4 identify the requirements for the management of chemicals, fuels and lubricants used during exploration activities.

It was observed that Centurion Drilling had stored chemicals, fuels and oils in a cutdown intermediate bulk container (IBC) (Figure 1). This provided secondary containment in the event of a leak in one of the containers. A spill kit was observed adjacent to the drill rig (Figure 2).

Hillgrove Mines' staff undertake inspections of each drill site. It was noted that the surface drill site checklist includes checking chemical management at the drill site, with these checks addressing the mandatory requirements of the code of practice.

Hillgrove Mines advised that a small oil spill occurred at drill site ELG149, 150 and 151. Approximately 40 litres of hydraulic fluid leaked onto the ground when a hydraulic hose burst. The spill was contained, and the contaminated soil removed for bioremediation. As the spill did not result in the potential for significant environmental harm, it was not required to be reported to the Regulator.

Figure 1. Secondary containment for chemicals, fuels and oils at site ELG157.



Figure 2. Spill kit adjacent to Centurion Drilling rig at site ELG157.



3.6.2. Water

Mandatory requirements 2.1 and 2.2 require the licence holder to implement all measures to prevent, so far as reasonably practicable, causing adverse impacts on water quality and quantity, including groundwater levels and pressure.

Water for drilling activities is sourced from mine water dams on site. An above ground sump was observed in place for the drilling being conducted at site ELG157 (Figure 3). Dirty water and drill cuttings are removed from the sump as required and are disposed of within the tailings storage facility (TSF2) on site.

Figure 3. Aboveground sump being used to recirculate water for drilling.



3.6.3. Noise and vibration

Mandatory requirement 3.1 requires the licence holder to implement all practicable noise management measures to ensure that noise levels meet acceptable noise criteria for sensitive receivers.

Exploration drilling is being undertaken within the mine site so there are no sensitive receptors in close proximity. The nearest sensitive receptors are isolated residents within the village of Hillgrove. It was observed that the exploration drilling in progress on the mining leases was not audible by the auditors within the village. Noise within the mine site is managed through the mine's noise and vibration management plan. It was noted that noise and vibration was identified as low risk in the risk assessment documented in the MOP.

3.6.4. Air quality

Mandatory requirement 4.1 requires the licence holder to implement all measures to prevent, so far as practicable, pollution caused by dust and other air pollutants.

Given the location of the drilling program within the mine site, air quality from exploration works was not identified as a significant issue in the risk assessment documented in the MOP. No specific controls were required.

3.6.5. Waste management

Mandatory requirement 5.1 requires the licence holder to manage all waste in a manner which does not, as far as practicable, cause harm to the environment.

It was observed that Centurion Drilling had waste bags available on site and no evidence of litter, or other wastes, was observed at any of the sites inspected. The mine has a policy of segregating waste, which applies to the exploration activities as well as the mining operations. Scrap steel bins were observed on site.

3.6.6. Vegetation clearance and surface disturbance

Mandatory requirements 6.1 to 6.4 require the licence holder to:

- minimise the extent of any vegetation clearing and surface disturbance to as low as practicable
- implement all measures to prevent, so far as practicable:
 - adverse impacts to fauna caused by vegetation clearing or surface disturbance

- causing any land degradation or pollution of land and water
- harm to the environment when disturbing land in areas of potential or actual acid sulphate soils.

Exploration boreholes inspected on ML961 were observed to have been drilled in cleared paddock areas. No trees were observed to have been removed and Hillgrove Mines staff advised that only slashing of the grass had been undertaken. Figure 4 and Figure 5 show examples of the holes drilled on ML961.

Figure 4. Drill sites CUY007 and CUY009 drilled from the same pad.



Figure 5. Site CUY005 drilled in September 2020.



For the exploration undertaken within the existing Hillgrove Mine site, some minor tree clearing was observed to have been undertaken. Where drill pads had been required, it was observed that sediment fencing was established around the drill pad site (for example, Figure 6 and Figure 7). No evidence of erosion or sedimentation was observed at the sites inspected.

Figure 6. Sites ELG152, 153 and 154I drilled from the same pad.



Figure 7. Sites ELG149, 150 and 151 drilled from the same pad.



3.6.7. Roads and tracks

Mandatory requirements 7.1 to 7.5 require the licence holder to:

- consult with relevant landholders prior to establishing any new roads or tracks
- plan, design, construct and use roads and tracks in a manner which minimises the area and duration of disturbance
- construct any crossing of rivers, permanent and intermittent water lands and wetlands to prevent impacts on fish habitats
- refrain from using any unsealed road or track during wet conditions to prevent damage to that road or track
- repair all damage to existing roads and tracks resulting from exploration activities.

Hillgrove Mines advised that access was mainly using existing farm or mine access tracks. Where additional access tracks were required, these were discussed with the landholder before construction and were included as part of the land access agreement.

The access tracks inspected during the audit were observed to be maintained in good condition. No damage to roads and tracks was observed during the audit.

3.6.8. Weeds, pest animals and disease

Mandatory requirement 8.1 requires the licence holder to implement all practicable measures to prevent the introduction and spread of weeds, pest animals and animal and plant diseases.

Planning for exploration drilling was noted to include completion of the Hillgrove Mines' surface drill planning site checklist. This checklist includes consideration of the potential for weed contamination. For site CUY009, the control for weed contamination was listed as 'Rig will be washed down before and after mobilisation'. It was noted that whether a drill rig was washed down, or not, was not recorded by Hillgrove Mines. Washdown of the rig may sometimes be documented on the driller's plods. As suggestion for improvement no. 1, where washdown of the drill rig is a required control, Hillgrove Mines should consider the development and implementation of a process to verify that washdowns are occurring and are documented.

No significant weed infestations were observed at any of the sites inspected during the audit. Evidence that weed spraying had been undertaken was observed.

3.6.9. Livestock protection

Mandatory requirement 9.1 requires the licence holder to implement all measures to prevent, as far as practicable, causing adverse impacts to livestock.

Hillgrove Mines advised that it maintained liaison with landowners during the exploration activities. Generally, livestock was moved from paddocks where drilling was taking place. Occasionally, sheep and cattle remain in the paddocks during drilling. As a control to minimise impacts to livestock, Hillgrove Mines are not using inground sumps, instead using aboveground sumps for the drilling programs.

3.6.10. Cultural heritage

Mandatory requirement 10.1 requires the licence holder to implement all measures to prevent, so far as practicable, harm to Aboriginal cultural heritage and non-indigenous cultural heritage.

Searches of the Office of Environment and Heritage's Aboriginal Heritage Information Management System (AHIMS) database have been undertaken during the environmental studies for the mine. Heritage studies have also been conducted across the sites as part of those environmental studies. These searches and studies have documented known sites which Hillgrove Mines advised have been demarcated on site. Given the mining history of the Hillgrove area, heritage sites are primarily non-indigenous heritage.

3.6.11. Fire prevention

Mandatory requirement 11.1 requires the licence holder to implement all measures to prevent, as far as practicable, the ignition and spread of fire.

Hillgrove Mines advised that fire suppression equipment was located on the drill rig. Fire suppression equipment, including fire extinguishers, was noted to be included on the surface drill site checklist. Fire extinguishers were observed at the Centurion Drilling drill site.

3.6.12. Risk assessment

Mandatory requirement 12.1 requires the licence holder to monitor the risks associated with activities and, if the risk associated with an activity changes, implement revised environmental management controls.

An environmental risk assessment was documented in section 3.1 of the approved MOP. This risk assessment included risks associated with the exploration activities within the mining leases. Risks assessed included:

- erosion and sedimentation
- feral animals and weeds
- heritage – Aboriginal and European
- hydrocarbons and chemicals
- waste
- surface and groundwater.

All risks related to exploration activities were assessed as low.

3.7. Security deposit

Condition 5 of EL3326 requires the licence holder to provide a security deposit to secure funding for the fulfilment of obligations under the licence.

The security amount required is \$10,000, which departmental records confirm is held. There have been no exploration activities undertaken on EL3326 that would necessitate an increase in security.

Exploration within the mining leases is covered by a joint security of \$4,310,000 held across the 47 mining titles.

3.8. Rehabilitation

Condition 6 of EL3326 requires the licence holder to carry out rehabilitation of all disturbance caused by activities carried out under the licence in accordance with the requirements of the *Exploration Code of Practice: Rehabilitation*.

Exploration activities have not been undertaken on EL3325 since 2016. Rehabilitation of previous exploration activities has been completed and signed off

The code is not applicable to exploration drilling on the mining leases, however the requirements of the code were used as a guide for the assessment of rehabilitation of exploration activities within the mining leases.

3.8.1. Risk assessment

Mandatory requirement 1 requires the licence holder to conduct a risk assessment to evaluate the range of potential threats and opportunities associated with rehabilitating disturbed areas to a condition that could support the intended final land use.

The environmental risk assessment documented in section 3.1 of the approved MOP includes risks specific to rehabilitation activities.

3.8.2. Rehabilitation objectives and completion criteria

Mandatory requirement 2 requires the licence holder, no later than 14 days prior to the commencement of surface disturbing activities, to provide to the Secretary a copy of clear, measurable, achievable, realistic and time-bound rehabilitation objectives and completion criteria. For higher risk prospecting operations, a rehabilitation management plan is required to be prepared and submitted with the rehabilitation objectives and completion criteria.

The last exploration drilling on EL3326 was undertaken before the requirements for objectives and completion criteria were introduced. No rehabilitation objectives and completion criteria have been required for EL3326.

Rehabilitation objectives and completion criteria for the mining operations were noted to be documented in sections 4.3, 5.2 and 6 of the approved MOP. Although these were primarily related to the rehabilitation of mining activities, the objectives and completion criteria are applicable to the exploration works within the mine site.

3.8.3. Rehabilitation program

Mandatory requirement 3 requires that the title holder develop, implement and complete a rehabilitation program (which includes a monitoring program) to rehabilitate disturbed areas to a condition that can support the intended final land use. Mandatory requirement 4 requires that the title holder commence rehabilitation of a site, as soon as reasonably practicable, following the completion of activities on that site.

The holes drilled on ML961 in 2021 have been sealed and rehabilitated. Initial clean-up has commenced on holes drilled within the main Hillgrove Mine area (including ML391, ML649, GL3980 and GL5845) in 2021.

Rehabilitation of drill sites includes:

- grouting or backfilling of holes
- removal of all plant, equipment, and wastes
- drill site levelled (if required)
- topsoil and/or vegetation pulled back over drill pad area (where required).

Hillgrove Mines maintains a photographic database of pre-drilling and post-drilling photos. A surface diamond drilling leaving site checklist is completed for each drill site. This checklist documents the grouting or filling of holes, the site clean-up, and any other issues associated with completion of drilling and the commencement of rehabilitation.

Examples of completed initial rehabilitation of holes drilled in the 2021 programs are shown in Figure 8 and Figure 9.

Figure 8. Rehabilitation of sites CUY007 and CUY009.



Figure 9. Rehabilitation of site CUY005.



3.9. Annual activity reporting

Section 163C of the *Mining Act 1992*, clause 59 of the Mining Regulation 2016 and condition 8 of EL3326 require the licence holder to submit an activity report annually within one calendar month following grant anniversary date. Annual activity reports are required to be prepared in accordance with the *Exploration guideline: Annual activity reporting for prospecting titles*.

During the audit scope period, Hillgrove Mines had been submitting annual activity reports for EL3326 comprising:

- annual geological report
- revised work program (not required after December 2020)
- environmental rehabilitation and compliance report
- community consultation report.

Reports for the 2020 reporting year were reviewed during the audit:

- Annual report EL3326 23 August 2019 to 22 August 2020
- EL3326 Prospecting Title Work Program, year 5 submission
- Environmental and Rehabilitation Compliance Report for EL3326, Submission date 30 August 2020
- Community Consultation Report for EL3326, 23 August 2019 to 22 August 2020.

Exploration within the mining leases is documented in a combined annual exploration report covering all the mining leases within the Hillgrove Mine holdings. The 2020 combined annual report for the mining leases was reviewed during the audit.

Generally, reports were found to be in accordance with the MEG and/or Regulator templates and guidance material. MEG has reviewed the annual exploration reports, and the community consultation reports, and assessed these reports as satisfactory.

3.10. Core and sample storage

Clause 65 of the Mining Regulation 2016 requires the holder of an authority to, so far as is reasonably practicable, collect, retain and preserve:

- all drill cores remaining after sampling

- characteristic samples of the rock or strata encountered in any drill holes.

All core and samples collected are required to be labelled, stored and managed in a manner that preserves the integrity of the core or samples.

Both cores and samples have been collected from the exploration drilling programs on EL3326 and within the mining leases, with these being stored at the Hillgrove core yard. Core and sample storage were inspected during the audit.

Cores were observed to be stored in modular plastic or metal core trays, stacked by hole number on plastic pallets (Figure 10). Each tray was observed to be labelled with hole number, tray number, and depth. An example of core in a core tray is shown in Figure 11.

Chip samples were observed to be stored in modular plastic chip trays, stored by hole number in a well organised shipping container (Figure 12). Each chip tray was labelled with the hole number and depth.

Figure 10. Core trays stacked by hole number on wooden pallets.



Figure 11. Example of core stored in modular plastic core trays.



Figure 12. Chip samples stored in plastic chip trays.



3.11. Record keeping

Sections 163D and 163E of the *Mining Act 1992* relate to the creation and maintenance of records required under the *Mining Act 1992*, the regulations, or a condition of title. Records must be kept in a legible form for production to any inspector and must be maintained for a period of four years after the expiry or cancellation of the title. Specific requirements for the types of records to be maintained for exploration activities are detailed in the mandatory requirements of the exploration codes of practice as follows:

- mandatory requirement 6 of the rehabilitation code of practice

- mandatory requirement 13.1 of the environmental management code of practice
- mandatory requirement 5 of the community consultation code of practice.

Records reviewed during the audit demonstrated that Hillgrove Mines has generally maintained records as required by the licence conditions and the exploration codes of practice. Records were observed to be well organised in either electronic or hard copy format, and readily retrievable when requested during the audit. Examples of records reviewed included:

- land access agreements
- drilling registers
- risk assessment for environmental management (including rehabilitation) and community consultation
- AHIMS searches
- surface drill planning site checklists
- surface drill site checklists
- surface diamond drilling leaving site checklists
- photographic records
- community consultation log
- community consultation strategy
- annual activity reporting.

3.12. Other compliance requirements

The mining leases include a requirement to notify the regional hydrologist at DPI-Water prior to commencing drilling. Hillgrove Mines staff advised that this is completed using the online Water Actions Management System portal developed by the Department of Planning, Industry and Environment. It was noted that this requirement has been removed from EL3326 and only applies to the exploration drilling within the mining leases.

4. Compliance management

4.1. Identifying compliance obligations

Identifying compliance obligations is a critical step in the development of an effective compliance management system. Compliance obligations for an exploration project can include:

- regulatory requirements (e.g. the *Mining Act 1992*)
- conditions imposed on the grant, renewal, or transfer of exploration licences
- exploration activity approvals
- exploration codes of practice
- specific commitments made by the organisation (e.g. commitments made in the approved exploration activity application).

Once identified, compliance obligations should be reviewed periodically to identify any changes in those obligations (e.g. changes in legislation).

Generally, evidence was available to confirm that compliance obligations have been identified and understood. The Hillgrove Mines staff interviewed during the audit were conversant with the exploration codes of practice and the requirements for exploration on mining leases. The company had established systems to track compliance with these requirements.

4.2. Subcontractor management

Contractors are often used to undertake specialist tasks, for example, exploration drilling. While the responsibility for compliance or the implementation of environmental controls is often passed to the contractor, the licence holder will retain accountability for compliance with its licence conditions and other compliance obligations. It is important that the licence holder exercises management control of its contractors by specifying contract requirements, providing oversight of contracted works, and evaluating the performance of the contractor during the contracted works.

Hillgrove Mines were using a contract driller for the drilling program. Monitoring of the drilling works was completed by the Hillgrove Mines geologists while on site.

4.3. Inspections, monitoring and evaluation

An effective inspection, monitoring and evaluation process is required to:

- monitor the implementation of the risk controls
- evaluate the effectiveness of those controls based on an assessment of inspection and monitoring data
- implement an adaptive management approach if monitoring shows that controls may be ineffective.

Evidence was available to demonstrate that a robust monitoring and inspection program has been developed and implemented by Hillgrove Mines. This program includes:

- the surface drill planning site checklist – used to identify compliance requirements and controls prior to drilling each hole
- surface drill site checklists – completed at least once for each hole with further inspections completed depending on the length of time taken to drill each hole
- surface diamond drilling leaving site checklist – used when drilling has been completed at each hole and the rig is demobilising.

Where issues are identified, actions are recorded and tracked in an INX software system.

4.4. Title holder response to draft audit findings

Hillgrove Mines was provided with a copy of the draft audit report and invited to submit a response to the draft audit findings. Hillgrove Mines did not submit a response.

5. Audit conclusions

From the evidence reviewed during the audit, it was concluded that Hillgrove Mines is generally compliant with the requirements for exploration drilling contained in the mining leases, EL3326, and the exploration codes of practice.

The Hillgrove Mines staff have a good knowledge of the environmental issues and controls associated with the drilling activities. Evidence was generally available to confirm implementation of the controls. Drill holes have been progressively rehabilitated, and evidence was available to demonstrate a visual monitoring program has been implemented with a photographic record maintained. Robust and comprehensive inspection and monitoring systems have been developed, with these inspections being documented on inspection checklists.

No non-compliances were identified during the audit. One suggestion for improvement was identified during the audit as summarised in Table 4.

Table 2. Summary of observations of concern.

SUGGESTION FOR IMPROVEMENT NO.	DESCRIPTION OF ISSUE
1	It was noted that whether a drill rig was washed down, or not, was not recorded by Hillgrove Mines. Washdown of the rig may sometimes be documented on the driller's plods. As suggestion for improvement no. 1, where washdown of the drill rig is a required control, Hillgrove Mines should consider the development and implementation of a process to verify that washdowns are occurring and are documented.