

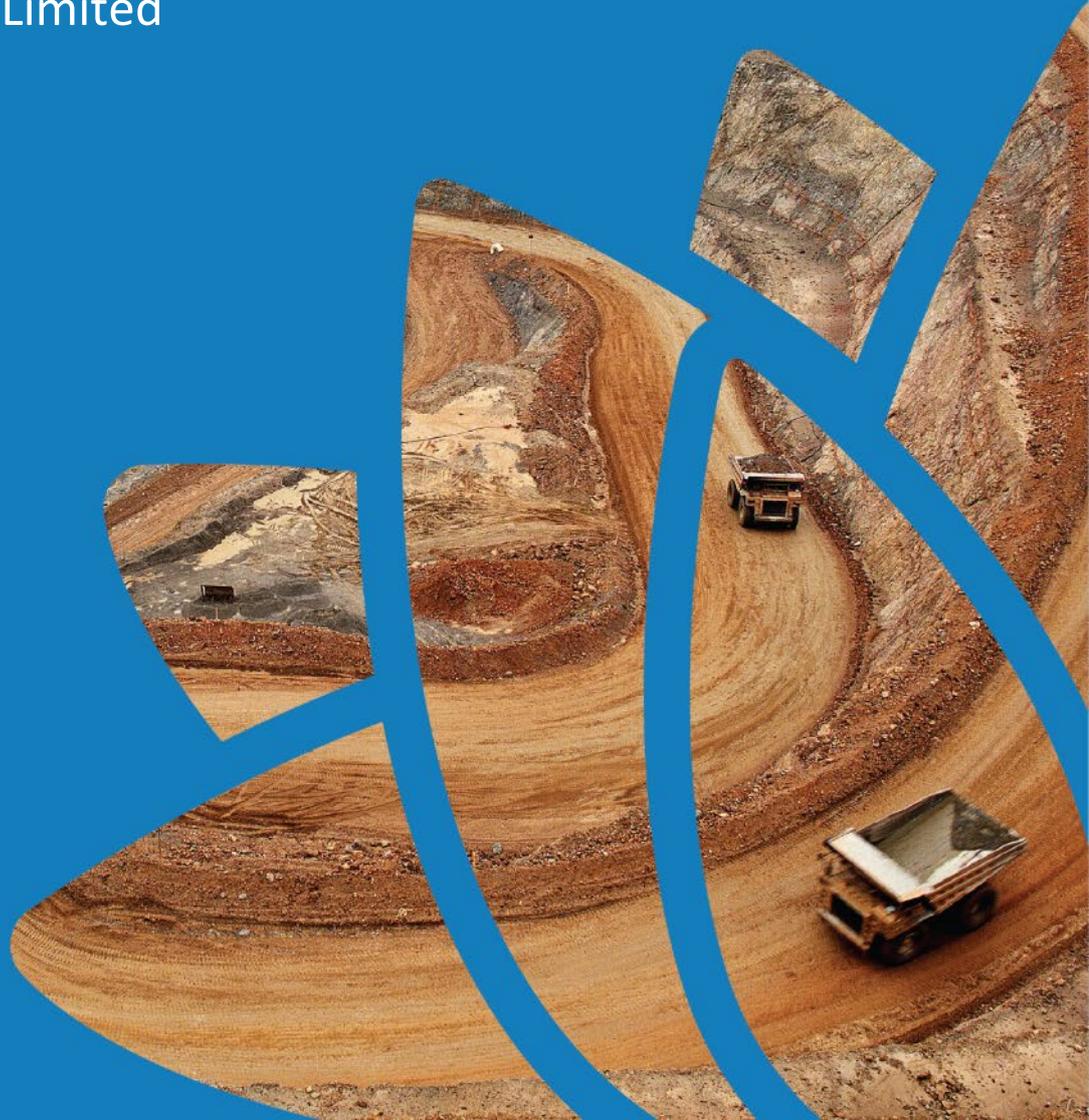


**NSW
Resources
Regulator**

COMPLIANCE AUDIT PROGRAM

EL6695 WAGGA TANK/SOUTHERN NIGHTS EXPLORATION DRILLING PROGRAM

Peel Mining Limited



Document control

Published by NSW Resources Regulator

Title: Compliance audit program: EL6695 Wagga Tank/Southern Nights exploration drilling program – Peel Mining Limited

First published: March 2021

Authorised by: Director Compliance

CM9 reference: DOC21/128090

AMENDMENT SCHEDULE

Date	Version	Amendment
March 2021	1.0	First published

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1. Introduction

1.1. Background

Exploration licence 6695 (EL6695) was granted to Golden Cross Operations Pty Ltd on 8 January 2007. The title was transferred to Peel Mining Limited in July 2016. The exploration area is 30 kilometres north west of Mount Hope in central NSW.

There have been several exploration drilling programs undertaken on EL6695 in the last five years. The four most recent programs are summarised in Table 1

Table 1 Summary of recent exploration drilling programs on EL8398

PROGRAM	ACTIVITIES
Wagga Tank Project (approved 8 September 2017)	■ 100 drill holes using a combination of drilling methods
Wagga Tank/Southern Nights prospects (approved 4 December 2018)	■ 70 RC/diamond holes
Siegals/MD2 prospect (approved 4 December 2018)	■ 16 RC drill holes
Fenceline Project (approved 6 December 2018)	■ 28 RC/diamond drill holes

These programs were approved by the NSW Resources Regulator within the Department of Regional NSW between September 2017 and December 2018. In May 2020, Peel Mining was granted funding under the NSW Government's New Frontiers Co-operative Drilling Grants program for the Double Peak/Siegals prospects on EL6695.

As part of the Regulator's compliance audit program, an audit of the exploration activities associated with the Wagga Tank/Southern Nights project within EL6695 was undertaken on 30 September 2020.

1.2. Audit objectives

The objectives of the audit were to:

- undertake a compliance audit of the Peel Mining Limited exploration activities against the requirements of the *Mining Act 1992* and the conditions of the exploration licence and activity approvals issued pursuant to that Act
- assess the operational performance of the exploration activities and the ability of the titleholder and/or its operator 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 Peel Mining Wagga Tank/Southern Nights exploration project including:
 - exploration activities within EL6695 including a selected sample of exploration drillholes
 - borehole sealing and rehabilitation activities for selected drilling activities undertaken since July 2017.
- a review of documents and records pertaining to the exploration activities
- the assessment of compliance for the period commencing 1 July 2019 and ending 30 September 2020.

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 EL6695 (granted 8 January 2007 and renewed 1 March 2017 and 1 September 2020)

- Exploration activities application (ESF4) and Review of Environmental Factors dated 28 July 2017 and associated approval dated 8 September 2017 (OUT17/36805)
- Exploration activities application (ESF4) and Review of Environmental Factors dated 29 October 2018 and associated approval dated 4 December 2018 (DOC18/867906)
- Exploration activities application (ESF4) and Review of Environmental Factors dated 31 October 2018 and associated approval dated 6 December 2018 (DOC18/876646)
- Exploration activities application (ESF4) and Review of Environmental Factors dated 19 October 2018 and associated approval dated 4 December 2018 (DOC18/828518)
- 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 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 titleholder 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 30 September 2020. 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, and examination of records 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. Where 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 drill sites:

- hole WTRCDD194 – drilling in progress
- hole WTRC195 – previous RC hole ready for diamond tail
- hole WTRCDD152 – collar still in place, casing stuck in hole
- hole WTRC0147 – hole plugged and rehabilitated

- core storage yard, including chip sample storage.

2.3. Closing meeting

The closing meeting was held on site on 30 September 2020. The objectives of this meeting were to discuss any outstanding matters, present 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 1.

Table 2 Audit assessment categories

ASSESSMENT	CRITERIA
Compliance	Sufficient and appropriate evidence is available to demonstrate the particular requirement has been complied with.
Non-compliance	<p>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:</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>
Observation of concern	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.

ASSESSMENT	CRITERIA
	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.
Suggestion for improvement	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.
Not determined	<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>
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 Peel Mining 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 EL6695 requires the licence holder to carry out the operations described in the approved work program.

Work program WP-EL6695-2017-2020 was approved by the (then) Department of Industry – Resources and Energy on 1 March 2017 as part of the renewal of EL6695. 2019 was year three of this work program with intended activities including:

- portable XRF soil sampling and geological mapping at the Salt Creek prospect
- RC and/or diamond drilling at the Fenceline and BMW prospects.

Review of the 2019 annual geological report showed that RC drilling and an IP survey were undertaken at the Fenceline prospect in year 2 (2018) ahead of schedule. No further field activities were undertaken at Fenceline or BMW in 2019. The 2019 annual report states that no soil sampling was conducted in the 2019 reporting period.

Work program WP-EL6695-2020-2026 was approved by the (then) Department of Industry – Resources and Energy on 1 September 2020 as part of a further renewal of EL6695. Peel Mining was in year one of this work program. Exploration activities proposed for year one included:

- resource definition at Southern Nights
- MLEM over Southern Nights
- exploration drilling at The Bird and Fenceline prospects
- drill Siegals prospect
- geological mapping north and south of Siegals.

Resource definition drilling was observed to be in progress at Southern Nights and approvals have been granted for the drilling at Siegals prospect. Peel Mining was granted funding under the NSW Government's New Frontiers Cooperative Drilling Grants Program Round 3 for the Siegals drilling.

Evidence was available to confirm that the approved work programs are generally progressing as planned.

Exploration data is maintained by the Peel Mining 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.

Evidence was available to demonstrate that access agreements were in place for properties upon which exploration activities were taking place. Some of the agreements were in writing, but it was noted that there were several listed as verbal agreements. As observation of concern no. 1, it is recommended that Peel Mining negotiate written land access agreements with all land holders whose properties are impacted by exploration activities.

3.3. Native title and exempted areas

Condition 2 of EL6695 requires the licence holder to obtain the prior written consent of the Minister before carrying out any activities on land on which native title had not been extinguished. Similarly, Section 30 of the *Mining Act 1992* requires the consent of the Minister before a licence holder undertook any activities within an exempted area.

Land tenure mapping shows that there are several travelling stock reserves, crown roads, and other areas of crown reserves within EL6695. These areas fall within the definition of exempted areas under Section 30 of the *Mining Act 1992* and are areas on which native title may not be extinguished. It was noted that Ngemba, Ngiyampaa, Wangaaypuwan and Wayilwan native title determination application (NC2012/001) exists over the area of EL6695.

Mapping of exploration drilling showed that activities have not been carried out in the areas to which native title would apply. It was noted that Peel Mining has applied to commence the right to negotiate process to seek approval to prospect in these areas under Condition 2 of EL6695 and Section 30 of the *Mining Act 1992*.

3.4. Community consultation

Condition 3 of EL6695 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.

3.4.1. Risk assessment

Mandatory requirement 1 of the code of practice requires the title holder to conduct a risk assessment to identify and consider the range of opportunities and potential threats associated with community consultation and engagement.

A community consultation risk assessment was documented as part of the review of environmental factors (REF) prepared to support the application for exploration activity approval. This assessment showed that the assessed activity impact level was low. The auditor concurs with this assessment.

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.

There was no evidence provided to demonstrate that Peel Mining has prepared a community consultation strategy in accordance with the mandatory requirements of the code. This is raised as non-compliance no. 1 because a documented community consultation strategy is a mandatory record required by mandatory requirement 5 of the code. Peel Mining were issued an official caution on 22 February 2021 for the failure to prepare a community consultation strategy.

It is recommended that Peel Mining prepare a community consultation strategy that:

- clearly identifies all key stakeholders including the landowner, native title groups, and the general community
- describes how community consultation will be undertaken for each of the stakeholder groups, including how community consultation feedback will be monitored and responded to
- sets out mechanisms for revising the strategy where required.

3.4.3. Implementation and reporting

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

Although Peel Mining has not prepared a documented community consultation strategy (refer to section 3.4.2), evidence was available to demonstrate that Peel Mining has generally implemented community consultation for the project. For example:

- stakeholder and land holder engagement records, documented in Flowdoc

- land access agreements
- community consultation reporting.

A community consultation report for the 2019 reporting year was submitted as part of the annual activity reporting required by condition 8 of EL6695. The report was reviewed by MEG and was found to be adequate. The 2019 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.

Several drilling programs have been undertaken on EL6695 over the last three years, with exploration activity approvals sought and granted for each program. The audit focussed on four of the most recent approvals as follows:

- Exploration activities application (ESF4) and Review of Environmental Factors dated 28 July 2017 and associated approval dated 8 September 2017 (OUT17/36805)
- Exploration activities application (ESF4) and Review of Environmental Factors dated 29 October 2018 and associated approval dated 4 December 2018 (DOC18/867906)
- Exploration activities application (ESF4) and Review of Environmental Factors dated 31 October 2018 and associated approval dated 6 December 2018 (DOC18/876646)
- Exploration activities application (ESF4) and Review of Environmental Factors dated 19 October 2018 and associated approval dated 4 December 2018 (DOC18/828518).

Generally, evidence was available to confirm that activities were being carried out in accordance with the exploration activity approvals and the codes of practice as documented in the following sections.

3.6. Environmental management

Condition 4 of EL6695 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 evidence of environmental harm beyond that approved in the exploration activity approvals was observed at the sites visited during the site inspection. A DDH1 drilling rig was set up on site

WTRCDD194 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 identifies the requirements for the management of chemicals, fuels and lubricants used during exploration activities.

Section 7.2 of the *Peel Mining Environmental Guidelines* was noted to include specific requirements for the management of hydrocarbons and other chemicals including:

- Maintain a clean work area and clean-up spills immediately (if safe to do so). This includes vehicle maintenance.
- Have spill kits and Material Safety Data Sheets easily available.
- Waste material containing hydrocarbons or other chemicals, such as oily rags, must be collected and disposed of at an approved and licensed facility. This includes contaminated soil, which must be bagged and transported to the waste management facility.
- Ensure all items containing hydrocarbons and other chemicals are suitably banded or contained on banded pallets which are compliant with Australian Standard 1940-2004.
- Design storage areas to direct surface water away from hydrocarbon storage.
- Regularly check hydrocarbon use and storage through inspections and monitoring.

Discussions with the drill operators determined they had a good working knowledge of the management requirements for hydrocarbons and other chemicals. DDH1 advised that all drillers had completed spill training and a fully stocked spill kit was observed adjacent to the drill rig (Figure 1).

Material safety data sheets (MSDS) were available for the chemicals, fuels and lubricants observed on site. Chemicals were observed to be stored in a dangerous goods cabinet in the driller's trailer (Figure 2). Fuels and a generator were observed appropriately stored on a self-banded pallet adjacent to the inground sumps (Figure 3). A rig nappy was observed to be in place under the drill rig to catch any oil or fuel leaks from the rig (Figure 4).

During the audit, the driller advised that in the event of any spill that is not caught by the rig nappy, it is soaked up with material from a spill kit, double bagged and placed in the red hydrocarbon waste bin (Figure 1) for disposal. It was noted that there had not been any spills recorded on the current drilling program.

Peel Mining were issued a penalty notice by the Regulator in February 2019 following non-compliances identified in a compliance audit undertaken by the Regulator in February 2018. The non-compliances identified that hydrocarbons and drilling additives were not always stored on self-bunded pallets or in containers that comply with relevant standards. It was noted that chemical management has been improved since the last audit and no significant issues of concern were identified during the audit.

Figure 1 Spill kit and hydrocarbon waste bin at WTRCDD194



Figure 2 Dangerous goods cabinet inside the driller's trailer



Figure 3 Fuel and generator on self-bunded pallet



Figure 4 Rig nappy in place under the drill rig



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.

Section 8.1 of the *Peel Mining Environmental Guidelines* includes requirements for surface and groundwater management including:

- Ensure vegetation associated or dependant on surface water will not be affected by your proposed activities:
 - do not plan drilling near, or damage fragile riparian vegetation
 - do not construct roads or other infrastructure that may interfere with the natural flow of surface water without prior approval.
- Do not release drilling fluids, wastewater into waterways.
- All drillholes are temporarily capped immediately once drilling is complete.
- Hydrocarbons and other chemicals are stored and managed to prevent soil and water contamination.
- Drilling discharge water must be contained in a sump. In rare circumstances and with approval, managed discharge may occur.
- Where drill holes intersect multiple aquifers, it is necessary to install grout plugs to seal the interface between the two aquifers to prevent intermixing and contamination of the groundwater.

Section 4.3.1 of the *Peel Mining Environmental Guidelines* includes requirements for construction of sumps. Whilst aboveground sumps were noted to be preferred, Peel Mining was using inground sumps for drilling return water (Figure 5). Peel Mining used water quality testing to determine that there was a low risk of contamination and sump liners were not required. Generally, the water was suitable for use for stock watering. Sumps were constructed with a slope on one side to facilitate fauna egress.

Drill holes that had been completed but not rehabilitated were observed to be capped (Figure 6) and there was no evidence of groundwater leakage observed at any of the holes inspected. Peel Mining staff advised that no significant groundwater was intersected during drilling operations.

Figure 5 Inground sumps at WTRCDD194



Figure 6 Drill hole capped at WTRC195



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.

Diamond drilling is undertaken 24 hours per day, seven days per week. Given the remote location, the nearest sensitive receptor is Mount Hope Station, more than five kilometres from the Southern Nights prospect. Noise was not identified as an issue in the risk assessment completed for the program and no specific controls were required.

Drilling was in progress at the time of the audit site inspection and noise was not observed to be an issue. Very little noise from the drilling rig could be heard about 300 metres from the rig.

3.6.4. Air quality

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

Given the remote location of the drilling program, air quality was not identified as a significant issue in the risk assessment undertaken for the project. Diamond drilling uses water during the drilling process and dust was not considered to be an issue for this type of drilling. Cyclones were reported to be used on the drilling rig when RC drilling to minimise dust generation.

No dust was observed during the audit site inspection.

3.6.5. Waste management

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

Section 7 of the Peel Mining Environmental Guidelines includes requirements for waste management at exploration sites. These include:

- Placing litter in the appropriate receptacles.
- Providing sites with bins for rubbish and/or recycling in offices, rooms and communal areas.
- Arranging for waste transfer at regular intervals (e.g. weekly) to an approved and licensed waste facility. Land fill facilities are generally not acceptable without prior authority.
- Conducting regular camp/site environmental audits that include litter.

Waste bins were observed at the DDH1 drill site at WTRCDD194, including a bin specifically for hydrocarbon wastes such as oil filters and oily rags. There was no evidence of litter at any of the drill sites inspected.

3.6.6. Vegetation clearance and surface disturbance

Mandatory requirements 6.1 to 6.4 requires the title 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 sulfate soils.

Controls for vegetation clearance and surface disturbance were documented in Sections 4.1, 4.2 and 4.3 of the *Peel Mining Environmental Guidelines*. Generally, vegetation clearance has been restricted to sparse ground cover. Drilling has generally been planned to avoid large trees. In most cases, drill pad construction has not been required with the drill rig driving up to each site (Figure 7). Excavations have been undertaken for inground sumps, but the surface area of these sumps is small. It was observed that topsoil was stripped and stockpiled adjacent to the sumps (Figure 8).

Figure 7 Drilling rig at WTRCDD194



Figure 8 Topsoil from sump excavation stockpiled at WTRC195



Controls for surface disturbance and vegetation clearance were noted to be monitored during routine inspections and documented on the environmental inspection checklists.

3.6.7. Roads and tracks

Mandatory requirements 7.1 to 7.5 require the title 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.

Peel Mining staff advised that generally, tracks used to access drill sites were existing farm tracks. Management measures for roads and tracks were noted to be included in the environmental checklist including:

- consult landholders regarding building of exploration access roads, and route these roads to avoid sensitive areas
- fit new roads to the landform, and wind the road around patches of vegetation; don't build long straight 'speedway' roads
- inspect access roads after periods of heavy rainfall, and repair any boggy or eroded sections as soon as possible
- minimise use of roads in wet weather.

The roads and tracks traversed during the audit site inspection were noted to be maintained in a reasonable condition despite heavy rainfall in the weeks before the audit. Roads and tracks appeared to be planned to avoid significant vegetation stands.

3.6.8. Weeds, pest animals and disease

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

Section 6.1.1 of the *Peel Mining Environmental Guidelines* includes procedures for weed management including:

- ensure operators, including contractors undertake 'weed hygiene', such as vehicle and equipment clean down procedures
- where necessary, undertake weed eradication programs.

No significant weed infestations were observed during the audit site inspection. Peel Mining staff advised that staff and contractors are required to clean down plant and equipment prior to mobilising to site or moving between sites. This requirement was noted to be included in the daily pre-start meeting as a reminder to all staff.

3.6.9. Livestock protection

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

Peel Mining advised that there was no livestock within the drilling area and no livestock were observed during the site inspection. No specific controls were required.

3.6.10. Cultural heritage

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

Peel Mining undertook searches of the Office of Environment and Heritage's Aboriginal Heritage Information Management System as part of the preparation of its application for exploration activity approval. These searches identified four sites within EL6695. No disturbance was proposed by Peel Mining near any of the identified sites and no specific controls were required.

3.6.11. Fire prevention

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

Preventing ignition was noted to be the primary strategy for Peel Mining as documented in Section 9.1 of the *Peel Mining Environmental Guidelines*. Maintaining equipment in good working order, ensuring clear ground around hot work areas, and appropriate disposal of cigarette butts were listed as control measures.

During the audit site inspection, no cigarette butts were observed at the drill sites inspected, and the drilling rig and associated plant were noted to be in relatively cleared areas. The DDH1 drilling supervisor advised that pre-start checks were conducted prior to drilling each day and any defects were recorded and repaired where possible. Examples of completed pre-start checklists were reviewed by the auditor to confirm implementation.

3.6.12. Risk assessment

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

Peel Mining has documented an environmental risk assessment in Appendix 1 of its environmental guidelines. Monitoring of risks is undertaken through routine inspections which are documented on the *Peel Mining Environmental Checklist*. Evidence was sighted to confirm that environmental inspections are completed.

3.7. Security deposit

Condition 5 of EL6695 requires the licence holder to provide a security deposit to secure funding for the fulfilment of obligations under the licence.

The security amount required was \$86,000 which departmental records confirm is held. Exploration drilling programs since 2017 have increased the security required from \$20,000 to the current \$86,000. An application for rehabilitation signoff and a decrease in the security required has been submitted by Peel Mining for some of the holes drilled and this is currently under consideration by the Regulator.

3.8. Rehabilitation

Condition 6 of EL6695 requires the title 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*.

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

3.8.1. Risk assessment

Mandatory requirement 1 requires the title 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.

A comprehensive rehabilitation risk assessment was prepared and documented as part of the development of a rehabilitation management plan for the exploration activities. Risks identified included:

- poor management of topsoil
- topsoil deficit for rehabilitation activities
- establishment of pest species
- poor quality and connectivity of revegetation.

Controls were proposed for each risk identified and monitoring of controls was undertaken through the routine inspections which are documented on the *Peel Mining Environmental Checklist*. Evidence was sighted to confirm that environmental inspections are completed.

3.8.2. Rehabilitation objectives and completion criteria

Mandatory requirement 2 requires the title holder, no later than 14 days prior to the commencement of surface disturbing activities, to provide to the Secretary a copy of specific, 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 exploration activity approval applications lodged by Peel Mining indicated that the total surface disturbance area was less than five hectares for each program individually. The individual drilling programs did not fall within the definition of a higher risk activity under the code of practice and a rehabilitation management plan was not required to be developed for each program.

It was noted that rehabilitation objectives and completion criteria had not been submitted to the Regulator for each approved drilling program. The failure to submit rehabilitation objectives and completion criteria in relation to the September 2017 exploration activity approval (OUT17/36805) was raised as a non-compliance in a compliance audit undertaken by the Regulator in February 2018. Peel Mining received an official caution for the non-compliance in February 2019.

The December 2018 exploration activity approvals were issued after the February 2018 audit but there was no evidence that rehabilitation objectives and completion criteria were developed and submitted for those programs. This issue is raised as non-compliance no. 2. Peel Mining should ensure that rehabilitation objectives and completion criteria are developed and submitted to the Regulator at least 14 days before the start of future drilling programs. The Regulator considered the previous non-compliance in 2016 for the failure to submit rehabilitation objectives and completion criteria, and Peel Mining were issued a penalty infringement notice on 22 February 2021 for the failure to submit rehabilitation objectives and completion criteria for the December 2018 exploration drilling program.

The cumulative surface disturbance for the four programs combined was more than five hectares and, as such, Peel Mining prepared the document *Rehabilitation Management Plan 2019* for the exploration activities but there was no evidence this was submitted to the Regulator for approval.

It was noted that comprehensive rehabilitation objectives and completion criteria were documented in the rehabilitation management plan prepared by Peel Mining.

3.8.3. Rehabilitation program

Mandatory requirement 3 requires that the title holder must 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 the title holder to commence rehabilitation of a site as soon as reasonably practicable following the completion of activities on that site.

It was noted that Peel Mining has prepared a rehabilitation management plan to guide the rehabilitation activities. Further guidance is provided in Peel Mining procedure OHS.03.03.02 *Drilling and Clearing Rehabilitation Guideline*. These guidelines describe the rehabilitation activities to be undertaken

immediately after drilling and within six months after completion of drilling. Rehabilitation activities include:

- permanent capping of drill holes
- disposal of drill samples
- backfilling of sumps and excavations
- rehabilitation of drill pads and laydown areas
- rehabilitation of tracks.

Section 4 of the drilling and clearing rehabilitation guideline describes the development of a rehabilitation monitoring program based on regular inspections and photographic records. Rehabilitation monitoring data was observed to be maintained on a rehabilitation completion checklist using an excel spreadsheet.

An area of rehabilitated drill holes was inspected during the audit. No issues of concern were identified. Figure 9 and Figure 10 show an area of rehabilitation inspected during the audit.

Figure 9 Rehabilitation of the area around WTRC147



Figure 10 Rehabilitation around the area of WTRC147



Peel Mining submitted an application to the Regulator for rehabilitation completion and a review of the rehabilitation cost estimate (Form ESF2) for 119 of the 293 holes drilled on EL6695 since 2016. Rehabilitation of the 119 holes was accepted as satisfactory by the Regulator in October 2020.

3.9. Annual activity reporting

Section 163C of the *Mining Act 1992*, clause 59 of the *Mining Regulation 2016* and condition 8 of EL6695 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, Peel Mining had been submitting annual activity reports comprising:

- annual geological report
- revised work program
- environmental rehabilitation and compliance report
- community consultation report.

Reports for the 2019-2020 reporting year were reviewed during the audit:

- Annual Activity Report, EL6695: Reporting period 9 January 2019 to 8 January 2020
- EL6695 Prospecting Title Work Program, year 1 submission with renewal
- Exploration Licence No. 6695 'Wagga Tank' Environmental and Rehabilitation Compliance Report, Submission date February 2020
- EL6695 'Wagga Tank' Community Consultation Report, year ending 8 January 2020.

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 were required to be labelled, stored and managed in a manner that preserved the integrity of the core or samples.

Both core and samples have been collected from the drilling programs undertaken by Peel Mining on EL6695. These were observed to be stored at the Peel Mining core yard on a property near Gilgunnia. Core and sample storage was inspected during the audit.

Cores were observed to be stored in modular plastic core trays, stacked by hole number on plastic pallets and covered with lids (Figure 11). 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 12.

Chip samples were observed to be stored in modular plastic chip trays, stored by hole number in a well organised shipping container (Figure 13). Each chip tray was labelled with the hole number and depth (Figure 14).

Figure 11 Core tray storage in the core yard



Figure 13 Shipping container for chip sample storage



Figure 12 Example of core in the core tray



Figure 14 Example of chip sample labelling



3.11. Record keeping

Sections 163D and 163E of the *Mining Act 1992* relate to the creation and maintenance of records required under the Act, 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 Peel Mining has generally maintained records as required by the licence conditions and the exploration codes of practice. Examples of records reviewed included:

- daily pre-start meeting minutes
- environmental checklists
- risk assessments
- rehabilitation management plan
- rehabilitation completion checklists
- photographic records of rehabilitation at each site
- environmental guidelines and procedures
- records of community consultation on Flowdoc
- daily drill rig inspection checklists
- drill hole register
- toolbox meeting minutes
- annual reporting.

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 (for example, 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 (for example, commitments made in the approved exploration activity application).

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

Peel Mining has identified some of the compliance requirements for exploration activities, but non-compliances were identified during the audit. A more robust identification of compliance requirements and tracking of completion status may assist in preventing future non-compliances. As suggestion for improvement no. 1, Peel Mining should consider using tools such as the Regulator's self-audit checklist for explorers, to increase familiarity with the compliance obligations and undertake its own compliance assessment.

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.

Peel Mining were using a contract driller for the drilling program in progress. Peel Mining geologists are on site daily to supervise and monitor the drilling activity. An interview with the DDH1 drilling supervisor confirmed he was aware of the environmental management requirements for exploration drilling and had implemented the required controls on the drill site. Peel Mining geologists conduct daily inspections of the drill rig which are documented on the *Daily Drill Rig Inspection Checklist*. It was noted that the checklist includes consideration of:

- no hydrocarbon leaks
- no excessive vegetation damage
- sumps/water containment in good condition and adequate for use.

Examples of the completed checklists were reviewed to confirm that the drill rig inspection regime is implemented.

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 indicate that Peel Mining has developed and implemented a comprehensive and robust inspection and monitoring process for the exploration activities. Inspections are documented on inspection checklists, examples of which were reviewed to confirm implementation of the inspection process. Inspection checklists reviewed included:

- rehabilitation completion checklist
- environmental checklist
- daily drill rig inspection checklist.

4.4. Title holder response to draft audit findings

Peel Mining was provided with a copy of the draft audit report and invited to submit a response to the draft audit findings.

The response from Peel Mining did not dispute the audit findings but provided details of corrective actions that have been put in place to address the issues raised during the audit.

5. Audit conclusions

From the evidence reviewed during the audit, it was concluded that Peel Mining has achieved a moderate level of compliance with the requirements of the exploration licence, exploration activity approvals and the exploration codes of practice, for the elements reviewed during the audit.

The Peel Mining staff had a good knowledge of the environmental issues and controls associated with the drilling activities. Evidence was generally available to confirm implementation of the controls. Robust and comprehensive inspection and monitoring systems have been developed, with these inspections being documented on inspection checklists.

Two non-compliances, both ranked NC3, were identified during the audit as documented in Table 3. One suggestion for improvement was identified as documented in Table 4.

Table 3 Summary of non-compliances

NON-COMPLIANCE NO.	DESCRIPTION OF ISSUE	RECOMMENDATION
1 NC3	Peel Mining has not prepared a community consultation strategy in accordance with mandatory requirements 2 and 3 of the community consultation code of practice. The strategy is required as a mandatory record under mandatory requirement 5 of the code.	<p>It is recommended that Peel Mining prepares a community consultation strategy that:</p> <ul style="list-style-type: none"> ■ clearly identifies all key stakeholders including the landowner, native title groups, and the general community ■ describes how community consultation will be undertaken for each of the stakeholder groups, including how community consultation feedback will be monitored and responded to ■ sets out mechanisms for revising the strategy where required.

NON-COMPLIANCE NO.	DESCRIPTION OF ISSUE	RECOMMENDATION
2 NC3	<p>It was noted that rehabilitation objectives and completion criteria had not been submitted to the Regulator for each approved drilling program. The failure to submit rehabilitation objectives and completion criteria in relation to the September 2017 exploration activity approval (OUT17/36805) was raised as a non-compliance in a compliance audit undertaken by the Regulator in February 2018. Peel Mining received an official caution for the non-compliance in February 2019.</p> <p>The December 2018 exploration activity approvals were issued after the February 2018 audit but there was no evidence that rehabilitation objectives and completion criteria were developed and submitted for those programs.</p>	<p>Peel Mining should ensure that rehabilitation objectives and completion criteria are developed and submitted to the Regulator at least 14 days before the start of future drilling programs.</p>

Table 4 Summary of suggestions for improvement

SUGGESTIONS FOR IMPROVEMENT	DESCRIPTION OF ISSUE
1	<p>Peel Mining should consider using tools such as the Regulator’s self-audit checklist for explorers, to increase familiarity with the compliance obligations and undertake its own compliance assessment.</p>