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COMPLIANCE AUDIT PROGRAM

EL8590 KIOLA EXPLORATION DRILLING PROGRAM

Emmerson Resources Pty Ltd



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1. Introduction

1.1. Background

Exploration licence 8590 (EL8590) was granted to Lachlan Resources Pty Ltd and Kenex Pty Ltd on 5 June 2017. The exploration area is located approximately 33 kilometres south of Cowra in central NSW. The licence was initially granted over 203 units but was reduced to 25 units at the request of the licence holder in 2018.

Lachlan Resources, a wholly owned subsidiary of Emmerson Resources Pty Ltd (operator of the title), is the main titleholder. Kenex Pty Ltd is now known as Duke Exploration Limited.

Between June 2017 and May 2020, exploration activities had been limited to field mapping, geochemical sampling surveys, soil sampling and rock chipping.

In February 2020, Emmerson Resources applied to conduct exploration activities for assessable prospecting activities. The description of activities included:

- two diamond drill holes
- three reverse circulation drill holes.

No new tracks were required, with drilling access using the existing roads and farm tracks.

The application was approved by the NSW Resources Regulator in February 2020 and drilling commenced in May 2020. In April 2020, Emmerson Resources was successful in securing funding for the drilling program through the NSW Government's New Frontiers Cooperative Drilling Program.

As part of the compliance audit program, an audit of the exploration activities associated with the Kiola project within EL8590 was undertaken on 21 July 2020.

At the time of the inspection in July 2020, four of the five holes approved had been completed and rehabilitated. All four holes were drilled as diamond drill holes rather than two as RC holes. The fifth hole was not planned to be drilled at that time.

1.2. Audit objectives

The objectives of the audit were to:

- Undertake a compliance audit of the Lachlan Resources Pty Ltd (titleholder) and Emmerson Resources Pty Ltd (operator) 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 Kiola exploration project including:
 - exploration activities within EL8590 including a selected sample of exploration drillholes
 - borehole sealing and rehabilitation for selected drilling activities undertaken since June 2019.
- a review of documents and records pertaining to the exploration activities
- the assessment of compliance for the period commencing 1 June 2019 and ending 21 July 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 EL8590 (granted 5 June 2017)
- exploration activities application (ESF4) dated 14 February 2020 and associated approval dated 12 March 2020
- *Exploration Code of Practice: Environmental Management* (Version 2, April 2017) published by the (then) NSW Department of Planning and Environment
- *Exploration Code of Practice: Rehabilitation* (Version 2, April 2017) published by the (then) NSW Department of Planning and Environment

- *Exploration Code of Practice: Community Consultation* (Version 1.1, May 2016) published by the (then) NSW Department of Industry – Resources and Energy
- *Exploration Code of Practice: Produced Water Management, Storage and Transfer* (Version 2, April 2017) published by the (then) NSW Department of Planning and Environment
- *Exploration Reporting: A guide for reporting on exploration and prospecting in New South Wales* (Version 2, March 2016) published by the (then) NSW Department of Industry – Resources and Energy
- *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 Regulator.

1.5. Publishing and disclosure of information

This audit report will be published on our 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 at EL8590 on 21 July 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, 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. 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 sites:

- drill site KIODD001 – drilling completed, collar cut below ground level, hole filled, and site rehabilitated
- drill site KIODD002 - drilling completed, collar cut below ground level, hole filled, and site rehabilitated
- drill site KIODD003 - drilling completed, collar cut below ground level, hole filled, and site rehabilitated.

2.3. Closing meeting

The closing meeting was held onsite at EL8590 on 21 July 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 in Table 1.

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	<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	<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>

ASSESSMENT	CRITERIA
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 titleholder 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 site inspections and interviews.

The draft audit findings were forwarded to Emmerson Resources 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 EL8590 required the licence holder to carry out the operations described in the approved work program. Work program WP-EL8590-2017-2021 was approved by the (then) Division of Resources and Energy (DRE) on 5 June 2017 as part of the grant of EL8590.

Based on the information in the annual exploration reports, the work program has progressed with no variations. Shallow drill testing was proposed for Year 3 (2019-2020) and Emmerson Resources Pty Ltd (operator) was granted funding under Round 3 of the New Frontiers Cooperative Drilling Program for the drilling of three holes on EL8590. These holes have been completed. The work program appears to be progressing on track.

Exploration data is maintained and submitted to Mining, Exploration and Geoscience (MEG), within the Department of Regional NSW, with the annual activity reports as required.

3.2. Access agreements

Section 140 of the *Mining Act 1992* stated, '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 was required to be agreed in writing between the holder of the prospecting title and each landholder of that area of land.

Access agreements were noted to be in place for those landholders on whose properties drilling has been undertaken. Three of these agreements (dated May 2019) were reviewed by the auditor. All were standard land access agreements and none had any additional specific landholder requirements listed in the 'Annexure B - Farm Protocols' section. The Emmerson Resources drilling field hand advised that liaison was maintained with owners during the drilling works and no landholders had expressed any issues.

3.3. Native title and exempted areas

Condition 2 of EL8590 required the licence holder to obtain the prior written consent of the Minister administering the Mining Act before carrying out any activities on land on which native title had not been extinguished. Similarly, Section 30 of the *Mining Act 1992* required the consent of the Minister before a licence holder undertook any activities within an exempted area.

Prior to applying for exploration activity approval, Emmerson Resources undertook land title searches to determine if there were any exempted areas, or areas to which native title may apply, within the area of the proposed drilling activity. There were no such areas within the areas to be drilled and further approvals were not required.

A review of available mapping using the NSW Government SEED Portal showed that some Crown roads exist within the EL area, but drilling had not been undertaken in those areas. This confirmed that no further approvals were required.

3.4. Community consultation

Condition 3 of EL8590 required the licence holder to carry out community consultation in relation to the planning and conduct of exploration activities. Community consultation was 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 required the titleholder to conduct a risk assessment to identify and consider the range of opportunities and potential threats associated with community consultation and engagement.

Emmerson Resources has undertaken a community consultation risk assessment in accordance with the guidance provided in the code of practice. The activity impact level was assessed as low, which the auditor concurs with, given the small scale and location of the exploration drilling program. The community consultation risk assessment was noted to be documented in the 2019 annual community consultation report.

3.4.2. Community consultation strategy

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

The community consultation strategy was documented as part of the 2019 annual community consultation report. The strategy was reviewed as part of the audit and found to be appropriate for the scale and location of the exploration activities.

A range of stakeholders have been identified including relevant landholders, local councils and other government agencies. Contact details for all landholders in the area were noted to be maintained in a spreadsheet.

Consultation mechanisms were appropriate for the activity impact level and generally consistent with the guidance in Appendix 1 of the code of practice. Consultation mechanisms included:

- Emmerson NSW newsletter
- distribution of project fact sheets (e.g. Emmerson Resources Fact Sheet - Geochemical sampling surveys)
- regular liaison with local landholders regarding exploration activities through phone calls, emails and text messages.

The strategy included a process for receiving and considering feedback from the community including complaints. A spreadsheet is maintained to document consultation activities.

3.4.3. Implementation and reporting

Mandatory requirement 4 required the titleholder to implement, monitor and report annually on the community consultation strategy.

A community consultation report for the 2018-2019 reporting year was submitted in July 2019. A further report was due to be submitted at the time of the audit in July 2020.

The 2019 report was reviewed by MEG and found to be adequate. A review of the report by the auditor found that the report's content was generally consistent with the guidance provided in the code of practice.

3.5. Exploration activity approvals

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

Emmerson Resources applied to conduct exploration activities for a complying exploration activity (CEA) on 14 February 2020. The application was for five holes - two diamond drill holes and three reverse circulation holes. The application was approved by the Regulator on 12 March 2020. Drilling was conducted in May/June after the approval was granted.

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

3.6. Environmental management

Condition 4 of EL8590 required 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 required 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. The exploration drilling had been completed at the time of the audit, the drill rig had demobilised from site, and the holes had been rehabilitated. An assessment against the *Exploration Code of Practice: Environmental Management* could not be completed but the following observations were made:

- It was noted that there was some minor oil staining remaining on the ground at KIODD001 from a hydraulic or oil leak on the rod sloop (Figure 1). This was not causing any significant environmental harm and was of a size that would not be considered a reportable incident. The oil leakage is raised as observation of concern no. 1. Emmerson Resources should ensure that any spills or leaks are cleaned up as soon as possible.

Figure 1 Minor oil staining remaining at KIODD001



- Photos were provided by the titleholder to show that aboveground sumps were used for the drilling. No water quality issues were observed during the site inspections.

- Photos were provided by the titleholder to demonstrate that drill cuttings and fluids were removed from site by a sucker truck (Polpure, a liquid waste specialist). A tax invoice for the waste removal was also provided. No significant drilling wastes were sighted at any site during the site inspection.
- The three holes drilled under the New Frontiers funding were all drilled in cleared paddock areas where vegetation disturbance was minimal. Drill pads were not required to be constructed with the drill rig driving across the groundcover to the drill location.
- The tracks used to access the drill sites inspected were all observed to be existing farm tracks maintained in reasonable condition.
- One existing waterway crossing was traversed during the audit site inspection. The crossing was in reasonable condition and no impacts to fish habitat were observed.
- Rain had fallen in the area during the time of the drilling program, but no significant impact was observed on the tracks and areas traversed during the site inspection.

3.7. Security deposit

Condition 5 of EL8590 required the licence holder to provide a security deposit to secure funding for the fulfilment of obligations under the licence.

Information in departmental records indicates that the security deposit for EL8590 is \$10,000 and has been paid. The exploration activity approval did not trigger an increase in security due to the small scale and low impact of the drilling program.

3.8. Rehabilitation

Condition 6 of EL8590 required the titleholder 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*.

Rehabilitation of the three holes drilled under the New Frontiers funding had been undertaken with all three holes inspected during the site inspection.

An assessment against the mandatory requirements of the code of practice was undertaken for the 2020 drilling program as documented in the following sections.

3.8.1. Risk assessment

Mandatory requirement 1 required the titleholder 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 risk assessment was completed as part of the development of the rehabilitation objectives and completion criteria and provided with the exploration activity approval application.

3.8.2. Rehabilitation objectives and completion criteria

Mandatory requirement 2 required the titleholder, 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 was required to be prepared and submitted with the rehabilitation objectives and completion criteria.

Rehabilitation objectives and completion criteria were developed for the Kiola project and submitted to the Regulator on 12 February 2020. These were accepted as satisfactory on 6 May 2020. Drilling did not commence until May 2020, after the objectives and completion criteria had been submitted and approved.

The drilling program did not fall within the definition of a “higher-risk prospecting operation”, given the small scale and location of the drill sites, so a rehabilitation management plan was not required.

3.8.3. Rehabilitation program

Mandatory requirement 3 required that the titleholder 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 required that the titleholder commence rehabilitation of a site as soon as reasonably practicable following the completion of activities on that site.

The three drill sites inspected had all been rehabilitated. Rehabilitation included:

- sealing the holes with a concrete plug
- cutting the casing one metre below ground level
- backfilling the hole to surface.

A photographic record of before, during and after drilling has been maintained. This photographic record is used to monitor the rehabilitation progress. Given that drilling and rehabilitation has only recently been completed, further monitoring of the rehabilitation has not yet been undertaken.

Figure 2 to Figure 7 show the rehabilitation at the three drill sites inspected.

Figure 2 Site KIODD001



Figure 4 Site KIODD001



Figure 3 Site KIODD002



Figure 5 Site KIODD002



Figure 6 Site KIODD003



Figure 7 Site KIODD003



3.9. Reporting

Section 163C of the *Mining Act 1992* and clauses 59 to 61 of the Mining Regulation require the licence holder to prepare reports at specified times. Condition 8 of EL8590 requires 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*.

Emmerson Resources has been submitting annual activity reports as required. The 2019 annual activity report comprised the following components:

- *'Kiola' Annual Report 05/06/2018 to 04/06/2019*
- *resubmitted Prospecting Title Work Program*
- *Environmental and Rehabilitation Compliance Report for EL 8590 'Kiola Project'*
- *'Kiola' Community Consultation Report 05/06/2018 to 04/06/2019.*

Generally, reports were found to be in accordance with the MEG and/or Regulator templates and guidance material.

In 2018, Emmerson Resources applied to relinquish part of EL8590. This relinquishment was approved in November 2018. In accordance with section 163C of the *Mining Act 1992* and clause 60 of the Mining Regulation, a partial relinquishment report was prepared and submitted for the relinquished area. This report was accepted as satisfactory by MEG.

3.10. Core and sample storage

Clause 65 of the Mining Regulation required 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 cores and samples collected were required to be labelled, stored and managed in a manner that preserved the integrity of the core or samples.

Cores and samples were collected during the drilling program on EL8590 but had been removed from site for storage at the Rangott Mineral Services core yard in Orange. An inspection of the core yard in Orange was not undertaken during the audit.

3.11. Record keeping

Sections 163D and 163E of the *Mining Act 1992* related 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 were 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.

Generally, the records provided by Emmerson Resources demonstrated that the required mandatory records were being maintained. For example:

- waste management records
- photographic records of the drilling program
- community consultation records.

3.12. Titleholder response to draft audit findings

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

The Emmerson Resources response indicated it was satisfied with the audit findings. Two minor errors were corrected in the final report:

- all four holes were drilled as diamond core holes
- core is stored at the Rangott Mineral Services core yard in Orange.

4. Audit conclusions

From the evidence reviewed during the audit, and observations made on site during the audit site inspections, it was concluded that Emmerson Resources has achieved a high level of compliance with the requirements of the exploration licence, exploration activity approval and the exploration codes of practice.

One observation of concern was noted by the auditor as summarised in Table 2.

Table 1 Summary of observations of concern

OBSERVATION OF CONCERN NO.	DESCRIPTION OF ISSUE	RECOMMENDATION
1	It was noted that there was some minor oil staining remaining on the ground at KIODD001 from a hydraulic or oil leak on the rod sloop (Figure 1). This was not causing any significant environmental harm and was of a size that would not be considered a reportable incident.	Emmerson Resources should ensure that any spills or leaks are cleaned up as soon as possible.