

Internal Environmental Audit Report

Lamberts North Project

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1. Introduction

An environmental audit was conducted to confirm environmental compliance with the Department of Planning and Environment (DPE) Conditions of Approval (CoA) for the Mt Piper Ash Repository Project 09_0186-Lamberts North. CoA B8 required Delta Electricity (now privatised EnergyAustralia NSW) to develop and implement a Compliance Tracking Program to track and report on compliance with all CoA's. In particular, B8 c) requires a program of independent environmental auditing with audits *“carried out in accordance with ISO 19011:2002 - Guidelines for Quality and or Environmental Management Systems Auditing”* with non-compliances to be rectified as per B8 d).

2. Audit Objectives, Criteria & Scope

The audit objective was to assess compliance with:

- Environmental mitigation measures stated in Operation Environmental Management Plans (OEMP) in relation to soil and surface water management;
- Environmental management protocols and controls stated in the Operational Environmental Management Plan (OEMP) in relation to soil and surface water management;
- Relevant Project Approval conditions and statement of commitments contained in the NSW Planning Approval of 16 February 2012.

The scope of the audit was to assess the standard of compliance with documented requirements / procedure(s) and to make recommendations, where appropriate, to enable improved environmental performance. This internal audit was conducted as part of the internal audit program specified for EMSAP-16 Internal Audit and the Lamberts North Compliance Tracking Plan that requires a 6 monthly audit be performed by the Environmental Representative. The scope of the audit was limited to implementation of obligations, commitments and environmental practices either at the time of the audit or in the preceding period.

3. Methodology

The on-site audit was conducted by Coleen Milroy, Environmental Representative for the Lamberts North project. The audit methodology consisted of:

- An audit opening meeting
- Completion of the audit, using the Audit Checklist to record the audit findings following
 - Interviews with EnergyAustralia NSW personnel / contractors;
 - Examination of data, records, reports and checklists;
 - Review of procedures and processes used;
- Completion of the audit report.

The audit was undertaken in accordance with ISO 19011:2002 – Guidelines for Quality and/or Environmental Management Systems Auditing.

3.1.1 Documents considered

A number of documents have been considered in preparing this Audit Report. This includes the following:

- Major Project Application 09_0186
- Mt Piper Ash Placement (two volumes) – Environmental Assessment (EA), prepared by SKM, August 2010.
- Conditions of this approval (dated 16 February 2012).

In addition to the above documents, the following documents were also reviewed for the checklist preparation.

- Lamberts North Ash Placement Project Operation Environmental Management Plan (OEMP) prepared by CDM Smith, dated May 2013.
- Environmental Protection Licence (EPL) 13007.

3.2 Checklist preparation

A checklist for the site audit was prepared based on the review of the documents listed in Section 3.1.1.

3.3 Opening meeting

An Audit opening meeting was held at 12.30pm on Thursday 27 August 2015 at Mt Piper Power Station. The meeting was attended by:

- Wayne Gaynor (Contract Administrator for Lend Lease, EnergyAustralia NSW)
- Coleen Milroy (Audit Leader)
- Alicia De Vos (Auditor)

3.4 Interviews

Relevant documentation was reviewed and interviews were undertaken with relevant staff.

Those interviewed included:

- Jane Aiken (Environmental Team Leader / Scientist, Lend Lease)
- Peter James (Team Leader / Lend Lease)
- Wayne Gaynor (Contract Administrator for Lend Lease, EnergyAustralia NSW)
- Peter Griffith (Environment Manager)

3.5 Documents and records

Project records and reports reviewed during the audit included the following:

- Repository Management Plan
- Operational Noise Review (Conditions of Approval E11)
- Audit reports applicable to Lamberts North
- Monitoring data:
 - Surface water monitoring data and assessments
 - Ecological monitoring
 - Weather monitoring
- Records and registers:
 - Incidents register
 - Risk register
 - Complaints register
 - Inspections records ie daily, weekly, monthly
 - Ash moisture content at placement and water usage

3.6 Audit report

Section 4 of the report provides a summary of the findings described in more detail in the checklists in Appendix A.

Table 1 defines the terminology used in the checklists and identifies the action required with respect to audit findings.

Table 1 – Definitions and action required

Audit Finding	Definition and Actions
Compliant	There is sufficient and appropriate evidence to demonstrate the particular requirement has been complied with and is within the scope of the audit.
Non-compliance	Clear evidence has been collected to demonstrate the particular requirement has not been complied with and is within the scope of the audit.
Observation	An observation made which does not directly relate to conformance.

4. Compliance with Conditions of Approval

4.1 Conditions of Approval

This section addresses Conditions of Approval D3 and aims to “*assess compliance with the requirements of this approval (09_0186), and other licences and approvals that apply to the project*”. A review of compliance with the Conditions of Approval is provided in **Appendix A**.

4.2 Status of compliance

The audit found that the operation of Lamberts North in regard to soil and surface water management was generally undertaken in accordance with the requirements of the Conditions of Approval.

Three non-compliances and one observation relating to the Conditions of Approval were identified and are summarised in Table 2.

Table 2 – Summary of non-compliances

Ref	Non-Compliances	Recommendation
24	SSWMP Section 6.5.3.4 OEMP requires Clean and dirty water sediment ponds form the primary source of water for dust suppression, as well as irrigation.	Cooling water currently forms the primary source of water for dust suppression and irrigation. Recommend using clean and dirty water ponds as primary source for dust suppression and irrigation.
39	The SSWMP Section 6.5.4 of the OEMP requires the establishment of an erosion and sediment emergency procedure that can be used during an unlikely major erosion event.	Emergency procedures are to maintain the lowest point for capture of water of approx.160mL in an hour Stability bund is in place (geotechnically designed to not breach). However no emergency procedure is evident for a major erosion event. Recommend preparing erosion and sediment emergency procedure.
40	The SSWMP Section 6.5.4 of the OEMP requires that all staff working on-site made aware of erosion and sediment emergency procedure.	Lend Lease employees may be aware of designed structural plan, but no emergency procedure for a major erosion event exists. Once emergency procedure is in place recommend that all employees of both Lend Lease and EnergyAustralia NSW are made aware of procedure.
Ref	Observation	Recommendation
22	SSWMP Section 6.5.3.4 OEMP requires design of pond sizes on the basis of catchment areas and where possible sized to a target of minimum 50 year ARI event	10ML may not be adequate to accommodate 50 year ARI. Recommend investigating adequacy of pond sizes.

5. Conclusion

The audit was carried out generally in accordance with the requirements of ISO 19011:2002 Guidelines for Quality and ISO 14001:2004 Guidelines for Environmental Management Systems. The environmental management of the project, including environmental impact mitigation works were generally found to be effective. No complaints or incidents related to the Lambert North ash placement have been reported during operation. The audit found that both Lend Lease and EnergyAustralia NSW have well established inspection schedules and the information was readily available during the audit. Monitoring programs as required by the OEMP and Conditions of Approval are in place and monitoring data is available.

The audit found that the operation of Lamberts North was generally in compliance with the requirements of the approval of the project. Three non-compliances were identified that indicate that EnergyAustralia NSW is generally compliant with the Conditions of Approval. However modifications are required to ensure full compliance is obtained.

APPENDIX A

Table A: Audit Checklist see attachment