Mount Piper Power Station Ash Placement Project Modification 1

Lamberts North Ash Repository Upgrades

State Significant Development Modification Assessment (MP09_0186 MOD 1)

September 2021

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Title: Mount Piper Power Station Ash Placement Project Modification 1

Subtitle: Lamberts North Ash Repository Upgrades

Cover image: *Mount Piper Power Station, Lamberts North Ash Repository (Source: photo taken during site visit by the NSW Department of Planning, Industry and Environment on 24 May 2021)*

1 Introduction

EnergyAustralia NSW Pty Ltd (EnergyAustralia) owns and operates the Mount Piper (Mt Piper) Power Station, located approximately 17 kilometres (km) north-west of Lithgow and approximately 5 km east of Portland in the Lithgow City local government area (see **Figure 1**). In July 2013, EnergyAustralia acquired the site from Delta Electricity.

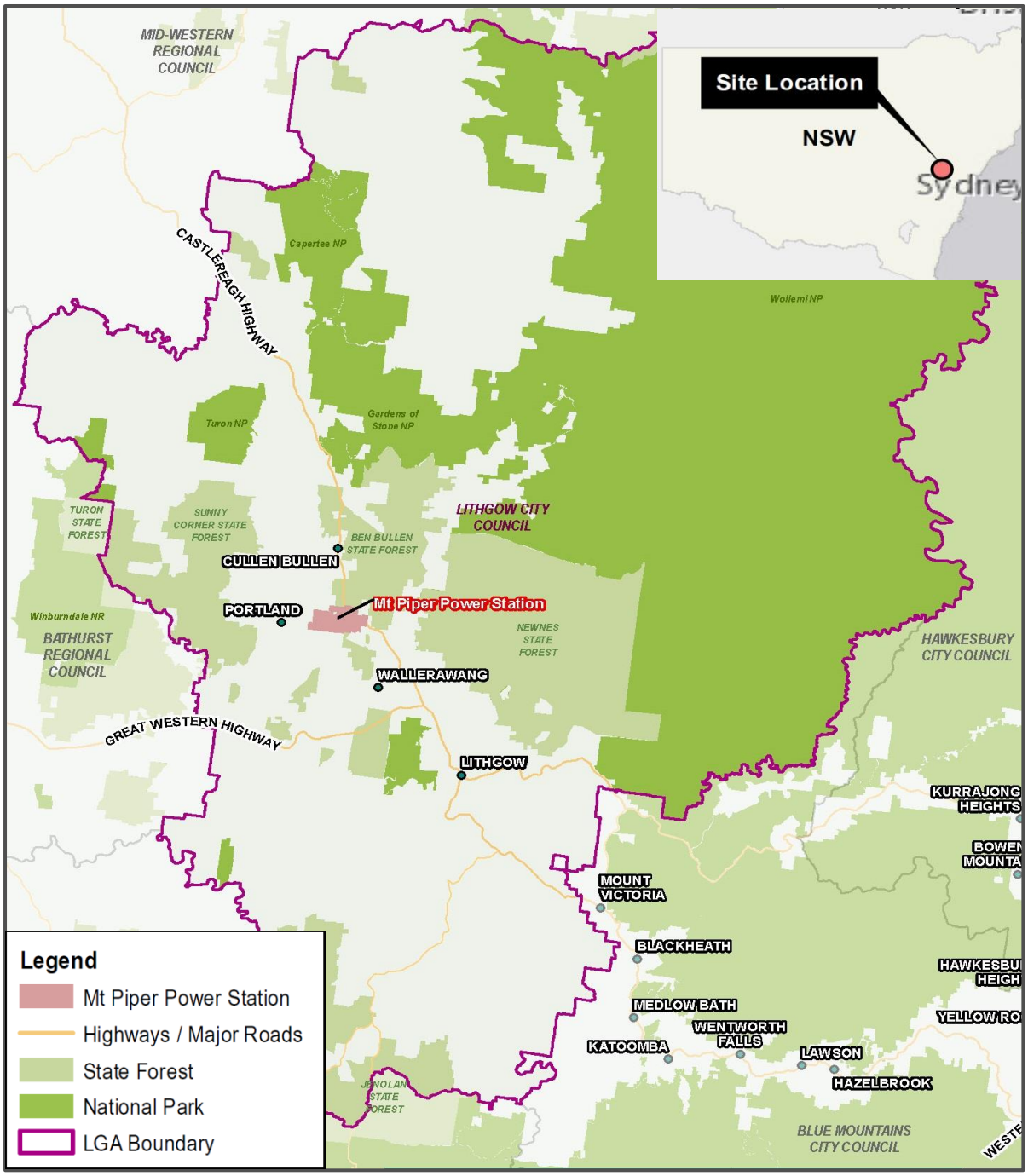

Figure 1 | Mt Piper Power Station - Regional Context (Source: Supplied by EnergyAustralia)

The closest towns to the site are Blackmans Flat (about 1 km to the east) and Lidsdale (about 3 km to the south-east).

The Mt Piper Power Station was approved by the then Minister for Planning in April 1982 (last modified in July 2019) under a separate approval (DA80/10060) and has been operational since 1994. It has a power generation capacity of 1,400 megawatts (MW) provided by two 700 MW coal-fired steam turbine units, which utilise black coal sourced from the local area.

Coal-fired power generation results in production of ash comprising of bottom furnace ash (coarse and wet ash) and fly ash (dry ash). The produced ash in the Mt Piper Power Station project approval (DA80/10060) allows placement of wet and dry ash at the Mt Piper Ash Repository (MPAR), with the dry ash requiring to be conditioned with either brine or water before deposition in order to increase its moisture level to meet specifications for compaction/ geotechnical requirements and for reducing dust emissions during materials handling.

1.1 Approved Project

In February 2012, the then Minister for Planning approved the Mt Piper Power Station - Ash Placement Project (the project) (MP09_0186), which allows construction and transportation of ash by truck into the Lamberts North Ash Repository (LNAR) and the Lamberts South Ash Repository (LSAR) with an estimated capacity[1] of 8,250,000 m^3 and 15,000,000 m^3 (in-situ volume), respectively.

The project approval allows for reuse/recycling of ash to optimise beneficial reuse and minimise ash disposal in accordance with waste hierarchy principles.

Water for LNAR's Water Conditioned Ash (WCA) is supplied from the Mt Piper Power Station water management system, including non-potable water stored in multipurpose storage ponds, and stormwater runoff within the existing holding ponds.

Brine for the Brine Conditioned Ash (BCA) is currently sourced from the treatment of Mt Piper Power Station's cooling water, through a brine concentrator, or from the Springvale Water Treatment Plant (Springvale WTP), operated under a separate approval by Springvale Coal Pty Limited. Solid Mixed Salts from the Springvale WTP are also permitted to be disposed in the ash repositories.

WCA can be deposited in the LNAR and LSAR to an elevation of 946 m Australian Height Datum (AHD). Above this level, BCA and Solid Mixed Salts are permitted to be deposited to the maximum height of 980 m AHD and encapsulated within a compacted WCA perimeter to minimise any BCA leachate.

EnergyAustralia is currently using northern areas of the LNAR for ash placement (current height 941-944 m AHD) and anticipate commencing use of the southern area of the LNAR in October 2021, following transfer of land from Centennial Coal.

Extensive groundwater and surface water investigations undertaken by EnergyAustralia indicates the presence of elevated levels of salts and metals (e.g. sulfate, chloride, nickel, manganese, zinc and boron) in the groundwater and surface waters surrounding the operating ash depositories.

Consequently, EnergyAustralia have identified that existing ash placement methods used at the MPAR, and approved for the LNAR and LSAR are not effective in minimising or preventing leachate migration, and propose to upgrade the leachate barrier system for emplacement of BCA and Solid Mixed Waste into the LNAR.

[1] Refer to **Appendix E – Additional Information -** Consistency Report dated 2012

2 Proposed Modification

EnergyAustralia are seeking to modify the project approval to undertake improvements to the water management and design of the approved LNAR, including:

- placement of BCA, Solid Mixed Salts and other authorised wastes above a low permeability liner, but at levels below the approved height of 946 m AHD through staged installation of a liner/leachate barrier system progressively throughout the life of the LNAR;
- replacement of the approved LNAR's WCA perimeter layer with a low density polyethylene (LDPE) liner, welded to the sidewall geo-membrane liner, as the capping liner;
- staged installation of double high-density polyethylene (HDPE) lined multipurpose storage ponds to manage leachate and water intercepted from the LNAR.; and
- minor amendments to the approved LNAR footprint and overall reduction of about 4.9 hectares (ha) of the approved project area, including removing interaction with the Western Coal Services infrastructure area.

Staged installation for the liner would occur in accordance with the NSW Environment Protection Authority (EPA)'s *Environmental Guidelines- Solid Waste Landfills 2016* (EPA Landfill Guideline). The process would use a single HDPE liner, geo-composite or equivalent (liner) at the LNAR's current height directly above the WCA. This would involve utilisation of mine spoil for leachate barrier support systems and include a leachate collection system, drainage aggregate and pipework and a leachate sump and riser. **Figure 2** below shows that conceptual leachate collection system, noting that final detailed design would be subject to review and endorsement by the EPA through a variation to the existing Environment Protection Licence (EPL) for the site.

EnergyAustralia propose to recycle the collected leachate for dust suppression within the lined areas or transfer to Mt Piper Power Station for treatment and use in electricity generation by providing an alternative source of water for use in the Mt Piper Power Station water management system.

Construction for the proposed modification would occur during the approved operational hours and largely utilise the project's existing plant, equipment and workforce. The liner installation would require approximately 3-4 truck deliveries of liner materials and drainage aggregate from local suppliers per day on average, which is expected to take about 3-4 months for each installation stage.

Assuming a worst-case scenario of minimal reuse of ash and placement of all the conditioned dry ash in LNAR, the modification's Concept Plan estimated progressive staged installation would occur over approximately 7.5 years (see Appendix A of the Modification Report).

The approved project and proposed modification to the LNAR boundary are shown in **Figure 3,** with indicative staging of the LNAR, along with landform integration with the MPAR shown in **Figure 4**. The Department notes that the green area on **Figure 4** is an ash emplacement area for the proposed Mount Piper Energy Recovery Project, which is currently under separate assessment by the Department.

Detailed design of the waste cells and leachate collection system would also need to consider potential subsidence risks associated with earlier underground (bord and pillar) mining operations, including additional bedding materials to stabilise these workings (see **Figure 4**).

Full details of the proposal are available in the Modification Report and Submissions Report (see **Appendix A** and **Appendix C**).

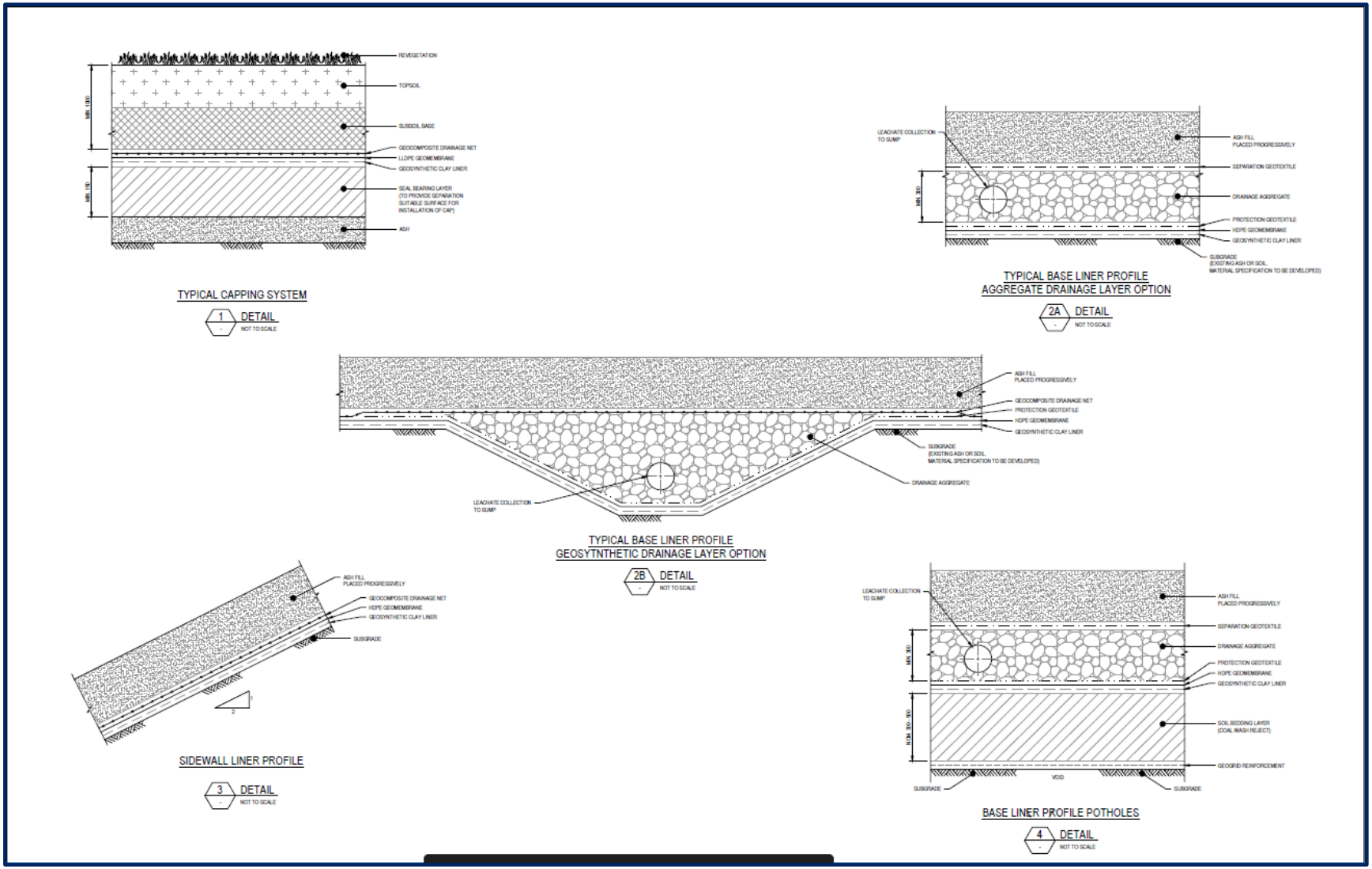

Figure 2 | Conceptual Ash Placement Cell Design (Source: Modification Report (MOD 1), EnergyAustralia)

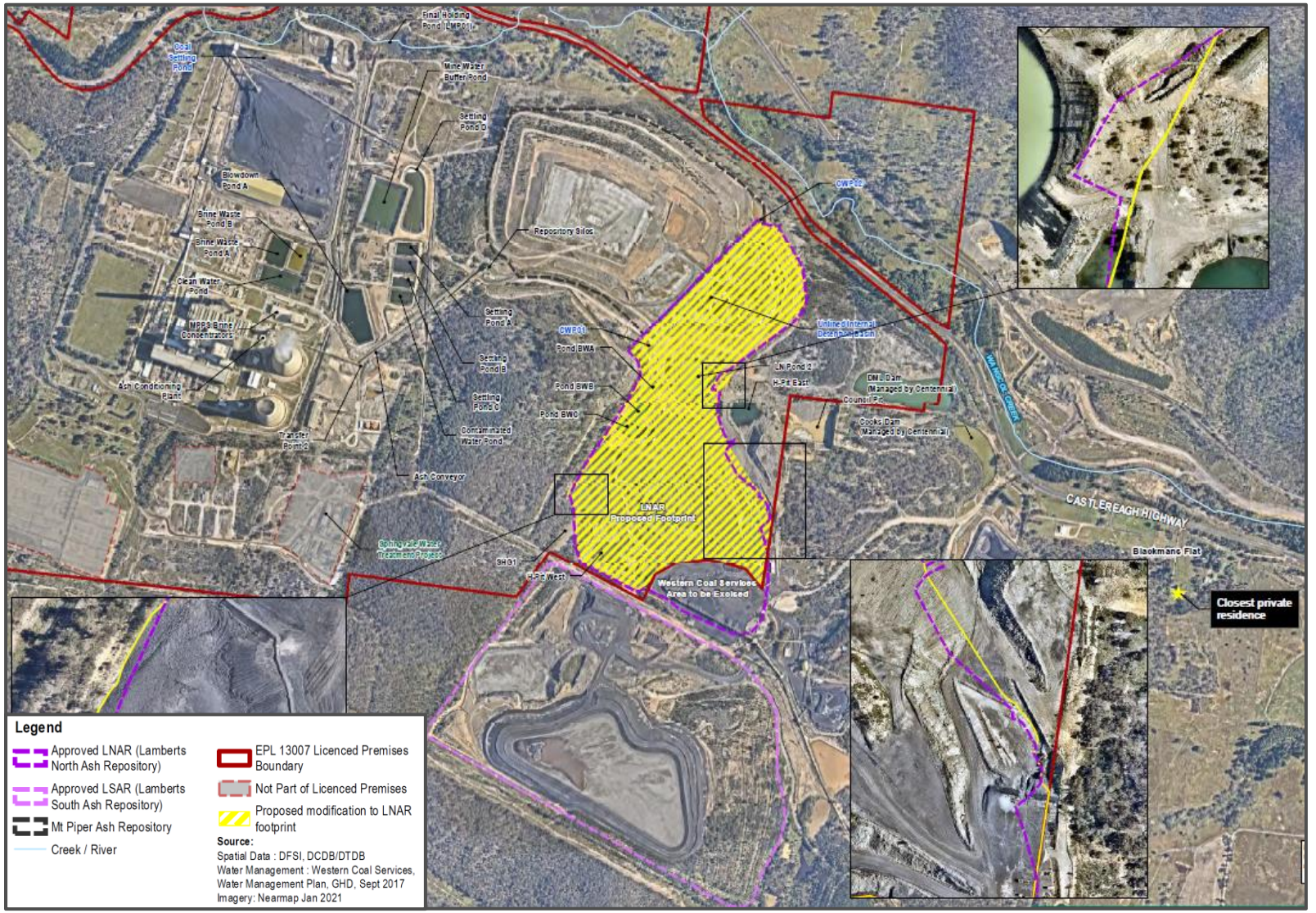

Figure 3 | Existing Project and Proposed Modification (Source: Modification Report (MOD 1), EnergyAustralia)

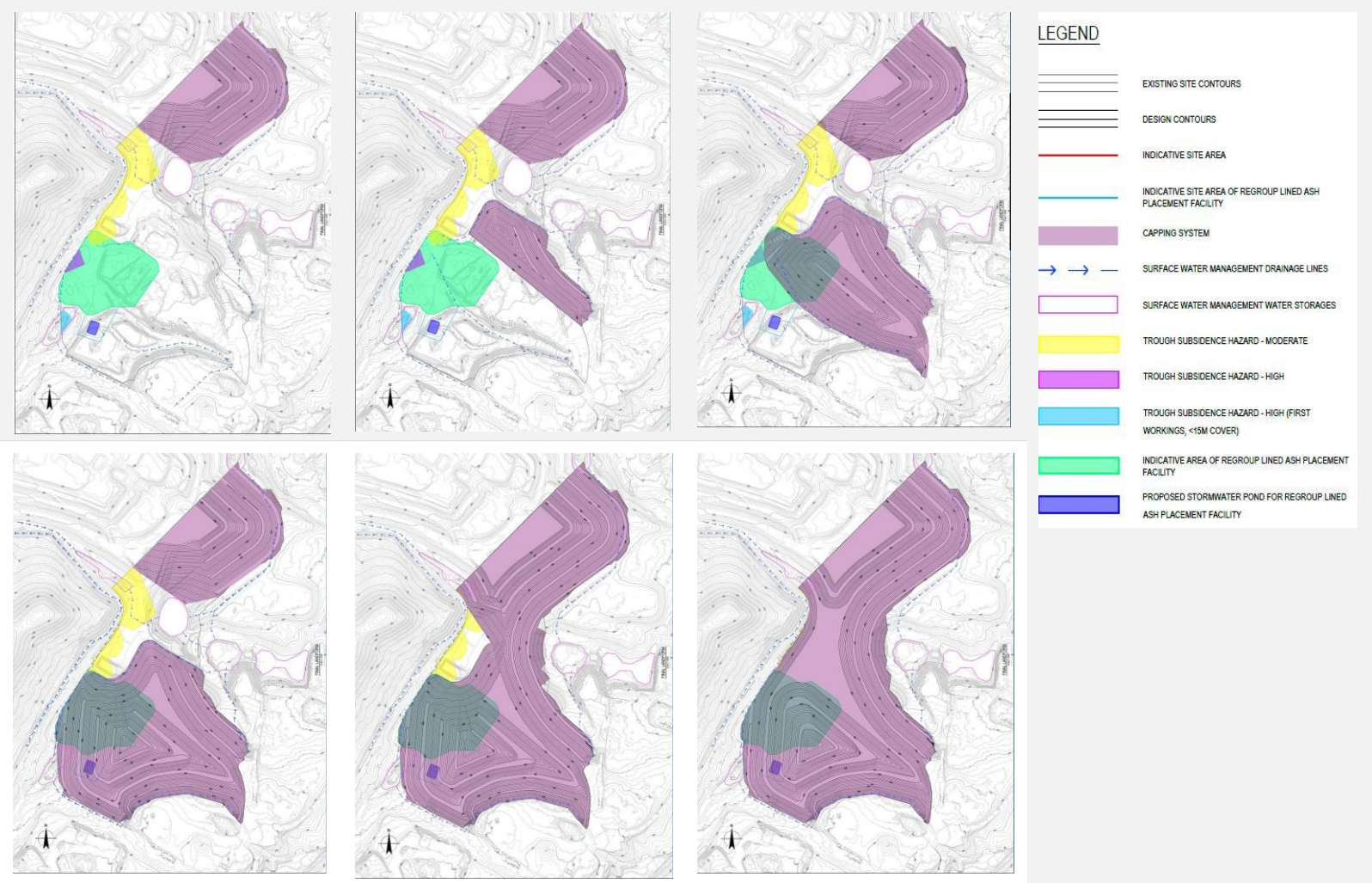

Figure 4 | Emplacement Staging (Source: Modification Report (MOD 1), EnergyAustralia)

3 Statutory Context

3.1 Scope of Modification

On 16 February 2012, the project was approved under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act) by the Minister for Planning and Infrastructure.

Under clause 6 of Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*, the project was transitioned to State significant development (SSD) by order, which took effect by publication in the NSW Government Gazette on 20 November 2018.

On 17 May 2021, EnergyAustralia lodged a modification application and Modification Report under Section 4.55(1A) of the EP&A Act. The proposed modifications involve changes to the approved LNAR without significantly changing the approved project, including the project's landscape, revegetation and site rehabilitation strategy, ash conveyance and transfer from the Mt Piper Power Station to the LNAR or the existing ash management, monitoring and testing practices, including moisture control, use of artificial dust suppressants, sprinklers and water carts, and engineering and geotechnical considerations.

The Department has reviewed the modification application and considers that it can be classified as a modification involving minimal environmental impact, as the impacts of the project as modified would be similar to those of the approved project (see **section 5**), and the development would remain substantially the same development as originally approved in 2012, prior to transitioning from Part 3A.

Consequently, the Department is satisfied that the proposed modification is within the scope of section 4.55(1A) of the EP&A Act.

3.2 Consent Authority

The Minister for Planning and Public Spaces (the Minister) is the consent authority for the modification application. However, under the Minister's delegation of 26 April 2021, the Director, Resource Assessments, may determine the application. This is because EnergyAustralia has not made any reportable political donations, Lithgow City Council (Council) did not object to the proposed modification, and there were less than 15 objections from the community.

3.2 Impacts on Biodiversity Values

Under Clause 30A(2)(c) of the *Biodiversity Conservation (Savings and Transitional) Regulation 2017*, the Department and its Department's Biodiversity, Conservation and Science Directorate (BCS) consider that the proposed modifications would not result in an increase in impacts on biodiversity values, and are satisfied that a Biodiversity Development Assessment Report (BDAR) is not required to be submitted with the modification application.

4 Engagement

The Department publicly exhibited the modification application and Modification Report from Thursday 27 May 2021 to Wednesday 9 June 2021. Public submitters on the original project application and surrounding residents were notified of the modification application and invited to make a submission. The Department also consulted with Council and the relevant government agencies throughout the assessment process.

4.1 Submissions and Response to Submissions

During the exhibition, the Department received three public submissions from special interest groups, advice from seven government agencies, and a submission from Council (see **Appendix B**). No public agencies raised concerns for the modification application and Council supported the application.

EnergyAustralia provided a Submissions Report, responding to all matters raised in submissions (see **Appendix C**). The Department referred the Submissions Report back to the key agencies which provided no additional comments for further assessment, with Transport for New South Wales (TfNSW) and the Environment Protection Authority (EPA) both recommending conditions (see **Appendix D**).

4.2 Key Issues – Public Submissions

The Department received objections from the Bathurst Community Action Network, the Hunter Community Environment Centre and the Lithgow Environment Group Incorporated. Key issues raised in the submissions that were relevant to the scope of the modification included:

- site suitability for continued use of ash emplacement and storage;
- concerns for water quality impacts from leachate and leachate management;
- requests for further information on the ash repositories rehabilitation and remediation plans; and
- alternatives to ash placement including beneficial reuse of ash and the stability and remediation of the ash repositories.

The Department's consideration of water quality impacts from leachate and the proposed leachate management system is provided in **section 5.1**, whilst consideration of other issues is provided in **sections 5.2** and **6**.

The submissions also raised specific concerns calling for changes to State and Commonwealth legislation (regarding reducing emissions, impacts to waterways, and recycling of all ash produced by coal-fired power stations), and in general promoted the movement away from coal-fired power stations as the State's key energy generators. These issues raised do not relate to the proposed modification and were not considered further.

4.3 Key Issues – Government Agencies

The **Biodiversity, Conservation and Science Directorate** (BCS) within the Department did not raise any concerns and confirmed that potential biodiversity impacts have been appropriately addressed in the Modification Report and therefore, a BDAR is not required.

The **Environment Protection Authority** (EPA) required no additional assessment and recommended conditions to the Department to assist with managing leachate impacts. The EPA advised that a variation to the project's EPL (EPL 13007) would be required, if the proposal is approved. EPA also advised that they do not support excising of the Western Coal Services Washery Infrastructure, as it would change the boundary of the existing EPL. However, EPA confirmed that it was satisfied with EnergyAustralia's response in its Submissions Report, including that the proposal would not change

the existing EPL's boundary (see **Appendix D**). The Department's consideration of issues relating to water and leachate management are discussed in **sections 5.1**.

Transport for New South Wales (TfNSW) recommended a number of conditions to minimise and mitigate potential traffic impacts including limiting heavy vehicle lengths to 20 m, managing the number of vehicle movements in accordance with project's approval, scheduling haulage to occur outside of peak hours, limiting traffic queuing and implementing a Driver's Code of Conduct. Following consultation with TfNSW on the Submissions Report, TfNSW recommended that the proposed traffic impact measures be incorporated into a revised Operational Environmental Management Plan (OEMP). The Departments consideration of traffic related impacts is discussed in **section 5.2**.

WaterNSW raised that the proposed modification is likely to achieve Neutral or Beneficial Effects on Water Quality (NorBE), provided proposed management measures are appropriately implemented, and recommended the Soil and Water Management Plan as part of the project's Construction Environment Management Plan (CEMP) and the OEMP be reviewed and revised if required in consultation with WaterNSW. The Department's consideration of water impacts is provided in **section 5.1**.

The Department's **Water Group** (DPIE Water) and the **Natural Resources Access Regulator** (NRAR) requested an additional review of surface water storages to confirm clean and dirty water can be separated and clean water can be diverted downstream. They also recommended a review of the OEMP should the modification be approved. DPIE Water and NRAR were both satisfied that EnergyAustralia adequately addressed the issues raised relating to the management of surface water in the Submissions Report. The Department's consideration of potential water quality issues is provided in **section 5.1**.

The **Resources Regulator** within the Department of Regional NSW, **Dams Safety NSW**, the **Department of Primary Industries, Fisheries Division** (DPI Fisheries) and Council did not raise concerns or recommend conditions. DPI Fisheries requested to be removed as a relevant agency for consultation under a number of conditions in the existing project approval.

5 Assessment

The Department has assessed the modification application and supporting information in accordance with the relevant requirements of the EP&A Act, including the matters for consideration, as set out in section 4.15(1) of the EP&A Act.

The modification would involve minor additional disturbance to previously disturbed areas; however, it would reduce the overall area of the approved project by 4.9 ha. The proposed progressive construction and operation of a liner and leachate collection system for BCA and Solids Mixed Salts would reduce leachate migration from the site compared to the approved (unlined) operations.

The Department considers the key assessment issues for the proposed modification relate to leachate management and potential water related impacts, as discussed further below. The Department has considered other issues relevant to the proposed modification in **section 5.2**.

5.1 Water Resources

A water assessment report was prepared by Environmental Resources Management Australia Pty Ltd (ERM) for the proposed modification, including:

- a revised water balance, including leachate management;
- an assessment of potential impacts associated with the design and staged installation of the leachate management system and capping layer; and
- a review of the relevant LNAR's existing water management, monitoring and contingency mitigation measures.

Water Catchment Context

The LNAR is located in the Huons Gully catchment which flows into Coxs River, a tributary of the Warragamba Dam water supply catchment (see **Figure 5**). There are no terrestrial groundwater dependent ecosystems (GDEs) or aquatic GDEs with a high potential for groundwater intersection within 0.5 and 2 km of the LNAR, respectively, and also no registered groundwater users within 2 km, with the nearest registered users located about 2.5 km north-east and south-east from the LNAR.

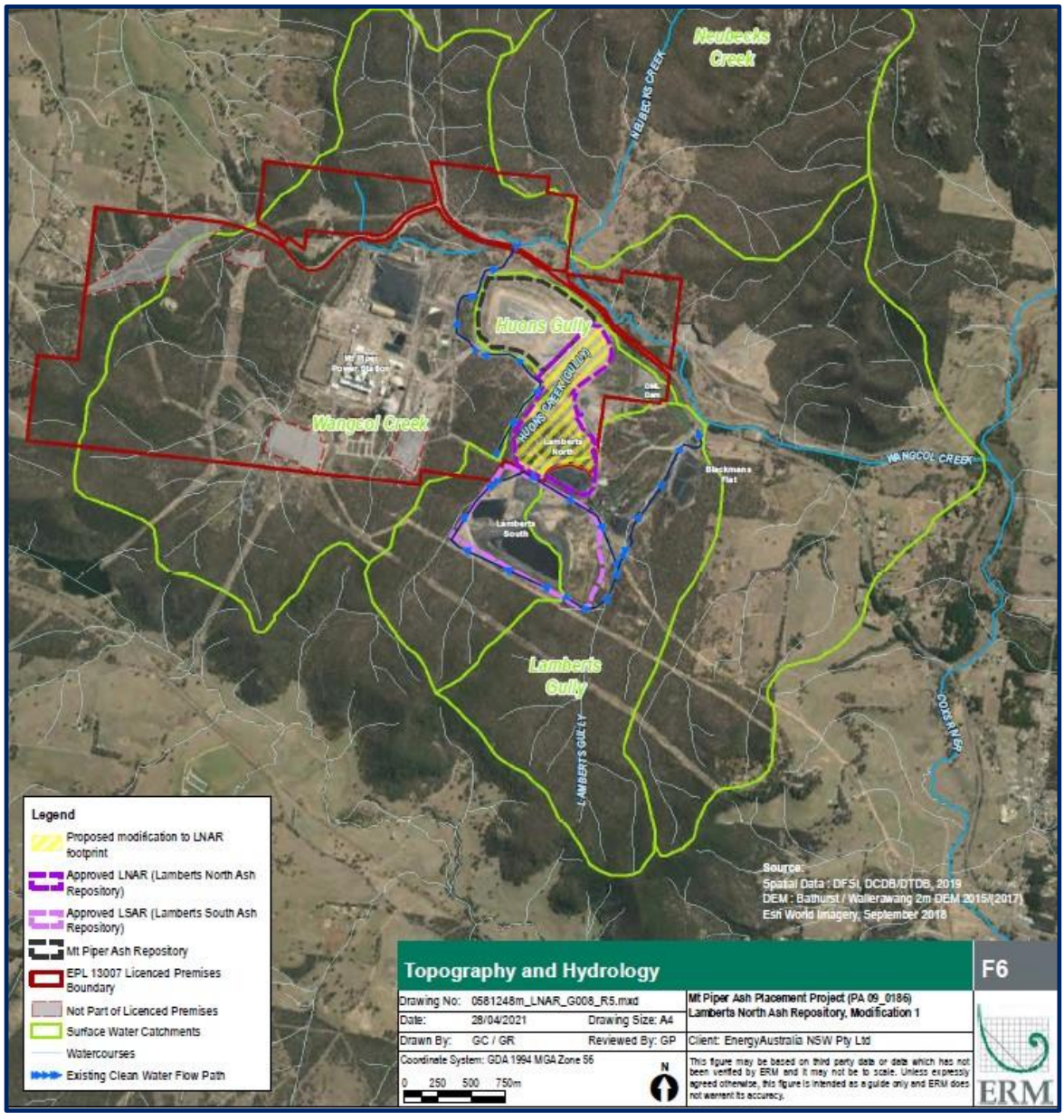

Figure 5 | Catchment Context (Source: Modification Report (MOD 1), EnergyAustralia)

The surface water quality within Wangcol Creek has elevated concentrations of total dissolved salts (TDS) and heavy metals as a result of leachate migration from the MPAR. A separate groundwater interception project is currently being implemented as category 2 remediation works under *State Environmental Planning Policy No 55. Remediation of Land* (SEPP 55) to capture leachate plume in groundwater from the site and minimise discharge to the surface water system. This project, in conjunction with the proposed improved leachate management system for the LNAR would improve downstream water quality and reduce pollutant loads into Sydney's drinking water catchment.

Leachate Management to Minimise Seepage

Based on the minimum standards required by EPA Landfill Guideline, EnergyAustralia proposes the following key leachate management measures:

- inclusion of a leachate extraction and level control system installed in all lined areas to maintain leachate to no more than 300 millimetres above the upper surface of the base liner, that is designed to operate until the final capping layer is installed and placement areas are stable;
- placement of intermediate cover over non-active areas to reduce potential leachate generation prior to final capping;
- storage of leachate in suitably sized HDPE lined ponds, with volume of stored leachate managed by recycling leachate over lined ash placement areas or transferred to the Mt Piper Power Station for use in the water management system; and
- additional stabilisation works and liner layers in areas of mine subsidence risk.

EnergyAustralia's water assessment found that potential adverse impacts to surrounding surface water and groundwater would be mitigated, compared to the approved project, provided the proposed works are installed in accordance with the concept design (see **Figure 2**) and implemented in accordance with the minimum standards required by the EPA Landfill Guideline.

This includes installation of a base liner and sidewall liner of suitable resistance to hypersaline environments for the life of the LNAR (including post-closure), installation of a low permeability cap, and installation of leachate and stormwater collection systems and quality assurance measures.

The proposal would change the water balance for the LNAR due to the proposed storage and management of leachate in double lined ponds, using the existing double HDPE lined multipurpose ponds with a combined capacity of 60 megalitres (ML). EnergyAustralia's water assessment described that the worst-case scenario for leachate interception and capture would be up to 9.25 ML per month, based on a 90th percentile rainfall year.

The assessment concluded that the peak leachate volumes could be managed without discharge from the site through on-site storage, utilising the leachate for ash conditioning and irrigation at LNAR, or through treatment and use in electricity generation as part of the Mt Piper Power Station water management system.

However, the EPA advised that there were limited details provided on the sizing and layout of the leachate collection dams and recommended that prior to the commencement of operation, EnergyAustralia demonstrate that the design is consistent with the EPA Landfill Guideline. The Department supports EPA's position and has recommended conditions to this effect.

Proposed Updates to Water Management and Mitigation

The project currently operates under the Lamberts North OEMP, which includes water performance targets for Wangcol Creek. EnergyAustralia propose to revise the OEMP to incorporate the proposed modification.

The water assessment concluded that the existing stormwater management practices and controls, water management, monitoring and reporting requirements of the OEMP would remain suitable management measures, with stormwater continuing to be directed into internal basins.

DPIE Water recommended that EnergyAustralia review the surface water storages that capture runoff to ensure that clean and dirty water is appropriately separated, and that clean water is diverted downstream. EnergyAustralia's provided additional details relating to surface water management in the Submission Report including:

- confirmation that runoff from external batters of the LNAR would be managed in accordance with existing management measures, including approved basins, with no changes to surface water management proposed as part of the modified LNAR;
- further description of stormwater management measures, including flow directions, capture and diversion of stormwater through a series of existing and approved ponds and drains;
- measures to ensure there is no harvesting or use of water that has come into contact with ash placement activities; and
- details of water management principles approved at the LNAR to ensure clean and dirty water is appropriately separated and managed during operations.

The Department also notes that WaterNSW recommended revising the CEMP for each stage of works as described in the project's approval; however, following consultation with EnergyAustralia, the Department considers that works to construct the lined cells and associated leachate management works for the LNAR can be suitably managed under the OEMP.

As the project approval also includes approved construction work for the LSAR which has not yet commenced, the Department has recommended that the CEMP remain in the project approval for use in future construction works, and that potential impacts associated with the proposed modification to the LNAR be managed through implementation of a revised OEMP.

Summary

EnergyAustralia described that the proposal would not materially change the project's water demands or existing water supplies, and that the MPAR is expected to reach the end of its operational life by end of 2021, making the water or brine that are used for MPAR's ash conditioning available for LNAR.

The Department notes that the existing approval requires EnergyAustralia to operate under the approved OEMP, which includes groundwater, soil and surface water management sub-plans requiring:

- preparation in consultation with DPIE Water and Water NSW;
- sufficient baseline data for groundwater and surface water quality of Huons Creek, Wangcol Creek and Lamberts Gully Creek;
- identification of potential operation activities that could result in pollution of waterways;
- descriptions of measures to monitor and mitigate potential impacts including trigger and response plans for water quality objective exceedances; and
- provisions for periodic reporting of results to relevant government agencies (WaterNSW and/or DPIE Water).

The Department and WaterNSW consider that the proposal would achieve NorBE through installation of an improved leachate collection system for the LNAR as compared to the approved project, and implementation of relevant management plans, including the revised OEMP.

The EPA recommended a condition that EnergyAustralia must demonstrate that the leachate management system as constructed is consistent with the EPA Landfill Guideline prior to operation.

Consistent with the recommendations by EPA, DPIE Water and WaterNSW, the Department has recommended changes to the relevant existing conditions and notes that detailed design of the leachate management ponds and liner installation would occur for each stage of proposed activities and may vary depending on operational requirements.

The following recommended changes to the water and leachate management related conditions include:

- inclusion of the Department's standard revision of strategies, plans and programs condition which requires EnergyAustralia to revise and update management plans following any modifications to the project approval;
- demonstrating that the leachate management system design is generally consistent with EPA Landfill Guideline, including demonstrating that the leachate management system is appropriately sized and consistent with water balance modelling prior to operation of each stage of the LNAR; and
- inclusion of the proposed leachate management system in both the Groundwater Management and Soil and Surface Water Management sub-plans in the OEMP.

The Department is satisfied that the modification works, incorporating the staged construction of lined cells and associated leachate collection system in accordance with the EPA Landfill Guidelines would reduce the potential for leachate seepage to groundwater and surface waters.

5.2 Other Issues

Table 1 summarises the Department's consideration of other issues related to the proposed modification.

Table 1 Assessment of Other Issues

Issue	Consideration	Recommendation
Traffic	• Liner installation would require three to four truck deliveries per day, occurring in stages of installation periods lasting three to four months each time. • The estimated increase in truck movements is within the previously assessed and approved traffic impacts for the project and would result in a negligible (0.1-0.2%) increase of traffic on the Great Western Highway, a 1-2% increase on the Castlereagh Highway and 3-5% increase on Boulder Road. • TfNSW recommended additional measures to be incorporated into the conditions to minimise and mitigate traffic impacts such as scheduling haulage vehicle movements to occur outside of peak hours, revision of the OEMP and implementation of a Drivers Code of Conduct. • Following further consultation with TfNSW, the Department considers that the additional required traffic management measures in the recommended conditions can appropriately manage and mitigate any residual traffic issues.	• Include traffic management measures and a Drivers Code of Conduct in the OEMP.
Biodiversity	• The proposed modification would require disturbance of 0.25 ha of areas previously assessed, approved and not formally rehabilitated, with a coverage of sparse vegetation regrowth of native, introduced and exotic species with low biodiversity value. • The BCS confirmed that a BDAR was not required, and the Modification Report's Biodiversity Assessment adequately addressed potential biodiversity impacts.	• Comply with existing conditions.

Issue	Consideration	Recommendation
Amenity (Air, Noise, Visual)	• EnergyAustralia propose no changes to ash placement methods, intensity, duration or operational times for the approved project, as such, no additional air or noise (including traffic noise) quality impacts are anticipated to the sensitive receivers (located approximately 1 km east of the LNAR). • The proposal is consistent with the approved final landform of the LNAR and would not result in any additional visual impacts to nearby sensitive receivers. • Consistent with the existing approval, EnergyAustralia would be required to operate under the OEMP, which includes an Air Quality Monitoring and Management Plan and Operational Noise Monitoring Management Plan to minimise and mitigate potential residual impacts. • The EPA did not recommend additional assessment or conditions in relation to air and noise.	• Comply with existing conditions.
Heritage	• No non-Aboriginal heritage items would be impacted as a result of the proposed modification. • The LNAR and surrounds have been previously cleared and potential for impacts to unidentified Aboriginal heritage items are unlikely. The proposed modification is also expected to have a negligible impact on Aboriginal Places or Objects, or on any known or unidentified Aboriginal site.	• Comply with existing conditions.
Waste	• The changes in BC ash emplacement would increase opportunities for beneficial reuse of WCA through improved separation of WCA from the BCA, along with the removal of the 1 m thick layer of WCA, as required under current leachate management methods.	• Comply with existing conditions.

6 Evaluation

The Department has assessed the modification application and supporting information in accordance with the relevant requirements of the EP&A Act, including the relevant matters for consideration and the objects of the Act.

The Department notes that the footprint of LNAR is within an already disturbed area due to historical coal mining activities since 1940, and the proposed minor changes to the surface area of the approved LNAR would reduce the overall area of the approved project by 4.9 ha. The revised footprint would not have a significant impact on the LNAR's operational lifespan or result in any additional impacts to biodiversity values.

The Department considers the key issues for the proposed modification to the LNAR relate to leachate management and potential water related impacts.

Following consultation with the key agencies, including the EPA, DPIE Water, WaterNSW, TfNSW and Council, the Department's assessment included the following recommended updates to the project approval:

- updates to the definition table, including addition of the modification proposal in the project description and other administrative changes to reflect the Department's standard approach for incident and noncompliance notification and reporting;
- removal of any references to the "proposed Mount Piper Power Station Extension Project", as MP09_0119 lapsed and EnergyAustralia has advised that they no longer have any interest in that proposal;
- changes to government agencies, legislative changes, the consent authority, guidelines and standard definitions;
- review and revision of independent audits, strategies, plans and programs within three months of any modification to the approval, in consultation with the relevant government authorities and to the satisfaction of the Planning Secretary, including the OEMP;
- updates to the existing conditions in relation to impacts on water resources and leachate management system and to ensure any residual issues due to the proposed modifications can be adequately managed and mitigated;
- revision of Lot and DP numbers to reflect changes to cadastre since the original project's approval in 2012 and inclusion of a project layout map; and
- incorporation of traffic management measures and the leachate management system into the OEMP.

The Department notes that EnergyAustralia may need to apply separately to the EPA for a variation to the project's EPL under the POEO Act, and that EPA continues its monitoring and evaluations in accordance with the project's EPL.

The Department considers that the proposed modification can be undertaken without any significant environmental impacts beyond those already assessed and approved for the project. The modification also does not seek to change the location, use, rehabilitation or revegetation of the LNAR, providing EnergyAustralia with an improved method for containing and managing leachate to reduce potential water quality impacts compared to the approved project.

The proposed modification would also result in increased ability to manage and beneficially reuse ash by-products due to the proposed separation by liners of BCA and Solid Mixed Salts from WCA.

Based on this assessment, the Department considers that the proposed modification is in the public interest and should be approved, subject to the revised conditions.

7 Recommendation

The Department has drafted an Instrument of Modification (see **Appendix F**) for the proposed modification, as well as a consolidated version of the project approval as modified (see **Appendix G**).

The Department recommends that the Director, Resource Assessments, as delegate of the Minister for Planning and Public Spaces:

- **considers** the findings and recommendations of this report;
- **determines** that the application (MP09_0186) falls within the scope of section 4.55(1A) of the EP&A Act;
- **accepts and adopts** all of the findings and recommendations in this report as the reasons for making the decision to grant approval to the application;
- **modifies** the project approval (MP09_0186); and
- **signs** the attached Instrument of Modification (**Appendix F**).

Recommended by:

14/09/2021

Emily Murray
Environmental Assessment Officer
Resource Assessments

Recommended by:

14/09/2021

Mandana Mazaheri
Team Leader
Resource Assessments

8 Determination

The recommendation is **Adopted / Not adopted** by:

Steve O'Donoghue
Director Resource Assessments
as delegate of the Minister for Planning and Public Spaces

Appendices

Appendix A – Modification Report

Appendix B – Submissions

Appendix C – Submissions Report

Appendix D – Agency Advice

Appendix E - Additional Information

- Site Layout Figure; and
- Mt Piper Power Station Ash Placement Project Consistency Report - Project Approval 09_0186, SKM on behalf of Delta Electricity, June 2012.

Appendix F – Instrument of Modification

Appendix G – Consolidated Project Approval

Documents available at

https://www.planningportal.nsw.gov.au/major-projects/project/41576