Executive summary

Introduction

In November 2014, EnergyAustralia announced that it would close Wallerawang Power Station (WWPS) due to ongoing lower energy demand, lack of access to competitively priced coal and high operating costs. EnergyAustralia has commenced the decommissioning, demolition and rehabilitation of the power station, which is known as the WWPS Closure Project.

EnergyAustralia propose to construct and operate a new asbestos disposal area (the 'Proposal') that would have sufficient capacity to receive all the asbestos waste that is expected to be generated during the WWPS Closure Project.

The Proposal

The proposed asbestos disposal area would be located on EnergyAustralia-owned land at Wallerawang Ash Repository, which is located about 2.5 kilometres north-east of WWPS. Wallerawang Ash Repository comprises Kerosene Vale Ash Repository, Sawyers Swamp Creek Ash Dam, Lidsdale Cut landfill area and the closed and current asbestos disposal areas. The site would comprise six parallel, 250-metre long trenches excavated three-metres apart. Each trench would be about three-metres wide and three-metres deep. The trenches would be excavated progressively as the need arises.

Need for the Proposal

The WWPS Closure Project will generate asbestos waste comprising asbestos containing materials and insulation that would need to be safely disposed of. It is estimated that about 7,000 cubic metres of asbestos waste would be generated during the demolition of the WWPS, which would require a landfill with about 11,000 cubic metres of capacity when packing inefficiencies are factored in. There are two existing asbestos disposal areas adjacent the Wallerawang Ash Repository, however, one of these disposal areas was closed in 1989 and the current disposal area is nearing capacity. The Proposal also minimises public health risks and provides for the safe disposal of asbestos waste.

Therefore, there is a need for a new location to dispose of asbestos waste generated by the WWPS Closure Project.

Options considered

EnergyAustralia has investigated five alternative sites in detail including a base case to dispose of asbestos waste generated by the WWPS Closure Project. Three of these alternatives were to dispose of the waste on-site, while one alternative was to dispose of it off-site at the nearest existing waste facilities that are licenced to received asbestos waste.

The performance of the alternatives was compared in terms of their engineering feasibility, cost, environmental and social impacts. The Proposal provided the best overall performance and is the preferred asbestos disposal site.

Two design options were investigated for the excavation of the asbestos disposal area which included: large-area and trench-and-fill methods. The trench-and-fill method has the advantage of allowing the landfill operator to minimise the area of disturbed ground at any one time by only excavating a length of trench sufficient to receive the volume of asbestos waste being generated by the WWPS Closure Project at that time. The main disadvantage of the trench-and-fill method is that it requires a larger area of land than the large-area method due to the undisturbed strips of land left between the parallel trenches. However, there is sufficient land of low biodiversity value at the preferred asbestos disposal area for the trench-and-fill method. Therefore, the trench-and-fill method would provide a better environmental outcome and is the preferred design option.

Statutory framework

The *Environmental Planning and Assessment Act 1979* (EP&A Act) regulates development in NSW. Under this Act, the Proposal is classified as 'designated development' as it meets the trigger levels in Clause 32, Schedule 3 of the Environmental Planning and Assessment Regulation 2000 (EP&A Regulation).as the Proposal is within a Sydney Drinking Water catchment. Accordingly, approval for the Proposal is required under Division 4.1 of the Act.

Section 4.12(8) of the EP&A Act requires a development application for designated development to be accompanied by an environmental impact statement (EIS). In accordance with Clause 3, Schedule 2 of the EP&A Regulation, EnergyAustralia applied to the Secretary of the Department of Planning and Environment to obtain environmental assessment requirements for the Proposal. The Secretary's Environmental Assessment Requirements (SEARs) were issued on 18 January 2018. This EIS has been prepared in accordance with the SEARs and pursuant to relevant provisions of Schedule 2 of the EP&A Regulation and the Department's Register of Development Assessment Guidelines.

Community and stakeholder consultation

The following key stakeholders have been consulted during preparation of this EIS:

- Lithgow City Council
- Department of Planning and Environment
- Environment Protection Authority
- Office of Environment and Heritage
- Department of Primary Industries
- SafeWork NSW
- WaterNSW
- Rural Fire Service
- Western Region Community Reference Group
- the surrounding landowners and occupiers within 500 metres of the Proposal.

EnergyAustralia would continue to consult with these stakeholders as part of the WWPS Closure Project.

Environmental impacts

The potential environmental impacts of the proposed asbestos disposal area include:

- clearing less than 2 hectares of degraded vegetation that contains a mixture of exotic and disturbance-tolerant native species. No threatened species would be affected. The only native tree that is likely to be affected is a single Silver Wattle (*Acacia dealbata*), which is a common and widespread species. The dominant shrub across the site is Common Cassinia (*Cassinia aculeata*), which is also a widespread species common on degraded or waste ground. It is not expected that the removal of vegetation would result in any negative impacts to the ecological values of the area
- vegetation removal, topsoil stripping and excavation of trenches would expose soils, which would increase the risk of soil erosion. Soil erosion can adversely impact the surrounding environment including being transported to downstream aquatic environments and affecting terrestrial vegetation. This risk would be reduced by only clearing the site progressively in line with the rate at which the WWPS Closure Project generates a need for landfill capacity at the site, to minimise the area of disturbed ground at any one time. Appropriate erosion and sediment controls would be implemented in accordance with *Managing Urban Stormwater: Soils and Construction* (Landcom 2004)
- air quality modelling of the Proposal predicts that concentrations of total suspended particulates and asbestos at the nearest sensitive receiver would comply with the relevant Environment Protection Authority criteria without mitigation. However as the area has existing high background levels of particulate matter, cumulative concentrations of particulate matter emissions would exceed the 24-hour

averaging period criterion. Level 2 watering, requiring greater than two litres of water per square metre per hour, would be implemented to achieve compliance with the criterion.

- the Proposal would cause a minor change to the visual character of the locality due to a perimeter fence and signage, which would remain in place permanently to prevent unauthorised access to the site or disturbance of the land. The final capping layer would result in a slight change to the topography of the site, however, this would not be visible from the nearest sensitive receivers, particularly once vegetation planted as part of the rehabilitation of the site becomes established
- the Proposal, in the context of the wider WWPS Closure Project, would provide economic benefits through expenditure and engagement of local businesses during the demolition period, and long-term amenity benefits by removing large, unused and redundant infrastructure and creating an opportunity for future alternative uses of the site.

Justification and conclusion

The Proposal is required to dispose of asbestos waste that will be generated by the WWPS Closure Project. A range of options for disposing of asbestos waste were considered to identify the best performing option against environmental, social and economic factors. The proposed asbestos disposal area at Wallerawang Ash Repository was identified as having fewer social and environmental impacts on the surrounding community compared to other feasible alternatives including:

- The Proposal also complies with the proximity principle under the Protection of the Environment Operations (Waste) Regulation 2014.
- The risk to public health would be minimised by avoiding the need to transport asbestos waste on the public road network.
- It would avoid overwhelming nearby local licenced waste facilities, which have a limited capacity to receive asbestos waste.
- The Proposal site is a previously disturbed area with minimal native vegetation.
- The Proposal would have minimal impact on the community due to the large distance between the proposed asbestos disposal area and the nearest sensitive receivers.