



Office of
Environment
& Heritage

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MP 07_2284 MOD 1

Ms Ellen Jones
Environmental Assessment Officer – Resource and Energy Assessments
Department of Planning & Environment
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Dear Ellen

OEH Review of Environmental Assessment: Eraring Power Station Ash Dam Expansion MOD 1 (MP 07_2284) – Port Stephens LGA

I refer to your email dated 26 September 2018, seeking comments on the Environmental Assessment for the Eraring Power Station Ash Dam Expansion modification (MP 07_2284 MOD 1), located near the township of Dora Creek, in the Lake Macquarie City local government area.

The Office of Environment and Heritage (OEH) has reviewed the Environmental Impact Statement, including relevant appendices, annexures, attachments and parts of the document titled '*Ash Dam Augmentation Project – Environmental Assessment*' (Prepared by AECOM, and dated 15 August 2018) in relation to impacts on biodiversity, Aboriginal Cultural Heritage and flooding / flood risk.

OEH's recommendations are provided in **Attachment A** and detailed comments are provided in **Attachment B**. If you require any further information regarding this matter, please contact Steven Cox, Senior Team Leader Planning, on 4927 3140, or via email at rog.hcc@environment.nsw.gov.au

Yours sincerely

Sharon Molloy 15/10/2018

SHARON MOLLOY
Director Hunter Central Coast Branch
Conservation and Regional Delivery Division

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Enclosure: Attachments A and B

OEH's recommendations

Eraring Power Station Ash Dam Expansion MOD 1 (MP 07_2284)

Biodiversity

1. OEH recommends that the proponent clarifies the area of the development footprint and corrects it in the Biodiversity Development Assessment Report.
2. OEH recommends that the proponent correct Section 5.1.1 – Direct Impacts in the Biodiversity Development Assessment Report to show the correct area of direct impact on native vegetation.
3. OEH is satisfied with the biodiversity assessment provided and no further assessment is required.
4. OEH recommends that a condition of consent is included that requires the proponent to retire all ecosystem and species credits, in accordance with the offset rules of the Biodiversity Assessment Method.

Aboriginal cultural heritage

5. OEH recommends that an Aboriginal cultural heritage assessment be undertaken in consultation with relevant Aboriginal parties to adequately determine if there are any Aboriginal cultural heritage items or cultural values present within the modification footprint.

Water, Flood and Coast

6. All details for the hydrological and hydraulic calculations need to be submitted, including, but not limited to, assumptions made, and methodology used, to achieve water mitigation measures such as receiving pond storage, outlet structures and scour protection works.
7. OEH recommends consideration should be given to redesigning the receiving pond so that it has a capacity to store all appropriate floodwaters.
8. To satisfy conditions under the Coastal Management SEPP 2018 for development on land in proximity to coastal wetlands, the Environmental Assessment should include consideration of clause 11 (1) (a) & (b) of *State Environmental Planning Policy (Coastal Management) 2018*.

OEH's detailed comments

Eraring Power Station Ash Dam Expansion MOD 1 (MP 07_2284)

Biodiversity

1. The total area of impact is not clear

Different development footprint sizes have been quoted in the Biodiversity Development Assessment Report (BDAR). The Executive Summary and Introduction state that the development footprint covers approximately 15.1 hectares, while Table 1.1 indicates the area is 15.36 hectares.

Recommendation 1

OEH recommends that the proponent clarifies the area of the development footprint and corrects it in the Biodiversity Development Assessment Report.

2. The total area of native vegetation impact is not clear

Paragraph two of Section 5.1.1 – Direct Impacts in the BDAR states:

Table 5.1 below outlines the direct impacts on native vegetation, which totals approximately 3.1 hectares...

This statement is incorrect as the total area of impact on native vegetation is 8.95 hectares (i.e. PCT 1627 = 0.95 hectares and PCT 1636 = 8 hectares).

Recommendation 2

OEH recommends that the proponent correct Section 5.1.1 – Direct Impacts in the Biodiversity Development Assessment Report to show the correct area of direct impact on native vegetation.

3. OEH is satisfied with the biodiversity assessment

The proposal will impact on approximately 8.95 hectares of native vegetation across two plant community types (PCTs) for the purposes of augmenting the Eraring Power Station Ash Dam, including minor modifications to the existing ancillary infrastructure. In accordance with the Biodiversity Assessment Methodology (BAM) under the *Biodiversity Conservation Act 2016*, the proposal generated 283 ecosystem credits from the following PCTs:

- 22 credits – PCT 1627 Smooth-barked Apple – Turpentine – Sydney Peppermint heathy woodland on sandstone ranges of the Central Coastal (0.95 hectare)
- 261 credits – PCT 1636 Scribbly Gum – *Angophora inopina* heathy woodland on lowlands of the Central Coast (8.00 hectares)

The proposal also impacts on approximately 8.95 hectares of significant habitat for Stephen's banded snake, squirrel glider and *Tetratheca juncea* which generated 981 species credits (327 credits each).

The Biodiversity Development Assessment Report has been completed in accordance with the BAM and by an accredited assessor (in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the *Biodiversity Conservation Act 2016*). Apart from the minor corrections to the BDAR outlined above, OEH is satisfied with the assessment.

Recommendation 3

OEH is satisfied with the biodiversity assessment provided and no further assessment is required.

4. OEH recommends appropriate offsetting be incorporated into the conditions of consent

The proposal requires the retirement of 283 ecosystem credits and 981 species credits for Stephen's banded snake, squirrel glider and *Tetratheca juncea* (327 credits each). The proponent has committed to a biodiversity offset strategy, which states that the credits will be retired via:

- a. establishment of a Stewardship site
- b. purchase of 'like-for-like' credits from a registered stewardship site or
- c. payment into the Biodiversity Conservation Fund of an equivalent amount of credits calculated using the BAM Offsets Payment Calculator.

OEH is satisfied with the above approach as it is consistent with the BAM. OEH notes (as detailed in the EA) that the proponent is currently investigating potential offsets sites to secure.

Recommendation 4

OEH recommends that a condition of consent is included that requires the proponent to retire all ecosystem and species credits, in accordance with the offset rules of the Biodiversity Assessment Method.

Aboriginal cultural heritage

5. An Aboriginal cultural heritage assessment should be provided

OEH has reviewed the information supplied with respect to Aboriginal cultural heritage for the Eraring Ash Dam Augmentation Expansion MOD 1 (PA 07_0084) dated 29 April 2008 and notes that a current assessment of Aboriginal cultural heritage items and values has not been undertaken in consultation with the Aboriginal community.

OEH is unable to comment on the *Eraring Ash Dam MOD1 Due Diligence Report* (AECOM 2018) as OEH does not review Aboriginal cultural heritage due diligence reports.

An assessment of the Aboriginal cultural heritage items and cultural values that may occur, or previously occurred, should be undertaken in consultation with the Aboriginal stakeholders and should be guided by the following OEH documents:

- *Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW* (DECCW, 2011) available at www.environment.nsw.gov.au/licences/investassessreport.htm
- *Aboriginal cultural heritage consultation requirements for proponents 2010* (DECCW, 2010) available at www.environment.nsw.gov.au/licences/consultation.htm
- *Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales* (OEH, 2010) www.environment.nsw.gov.au/licences/archinvestigations.htm

Recommendation 5

OEH recommends that an Aboriginal cultural heritage assessment be undertaken in consultation with relevant Aboriginal parties to adequately determine if there are any Aboriginal cultural heritage items or cultural values present within the modification footprint.

Water, flood and coast

6. Hydrological and hydraulic calculations should be included

Section 8.2 of the Environmental Assessment (EA) includes discussion on the existing hydrologic environment, potential impacts because of this development, and mitigation measures. This includes discussion on augmentation of the receiving pond storage capacities at various levels, including discharge characteristics.

Details, such as assumptions used, methodology or calculations used to attain the outcomes such as receiving pond storage volume and rate of outflow have not been included in the EA. As such, OEH is unable to verify whether the proposed mitigation measures are suitable for the proposed development. Verification of the hydrological and hydraulic calculations are important as they will determine the size of the receiving pond storage, which will influence the amount of ancillary works, such as clearing for construction and access road requirements and scour protection works at outlets.

Recommendation 6

All details for the hydrological and hydraulic calculations need to be submitted, including but not limited to, assumptions made, and methodology used, to achieve water mitigation measures such as receiving pond storage, outlet structures and scour protection works.

7. Flood water storage across infrastructure

Section 8.2 and Figure 8 of the Environmental Assessment (EA) includes discussion on the "overtopping storage" of the proposed receiving pond flood waters that would be beyond the storage capacity of the receiving pond and so floodwaters would be stored across Ulan Road (private access road) and the coal conveyor.

Storage of floodwaters across a road or over infrastructure is not recommended and consideration should be given to redesigning the receiving pond so that it has a capacity to store all appropriate floodwaters.

Recommendation 7

OEH recommends consideration should be given to redesigning the receiving pond so that it has a capacity to store all appropriate floodwaters.

8. Apply provisions of the Coastal Management SEPP 2018

The planning proposal is mapped within the "proximity area for coastal wetlands" of the Coastal Management SEPP 2018 that requires any development on land in 'proximity to coastal wetlands' demonstrate development will not significantly impact on:

- *the biophysical, hydrological or ecological integrity of the adjacent coastal wetland or littoral rainforest, or*
- *the quantity and quality of surface and ground water flows to and from the adjacent coastal wetland or littoral rainforest.*

No such assessment has been provided in the planning proposal.

Recommendation 8

To satisfy conditions under the Coastal Management SEPP 2018 for development on land in proximity to coastal wetlands, the Environmental Assessment should include consideration of clause 11 (1) (a) & (b) of *State Environmental Planning Policy (Coastal Management) 2018*.

1. The first part of the report deals with the general situation of the country and the position of the various groups of the population.

2. The second part of the report deals with the economic situation of the country and the position of the various groups of the population.

3. The third part of the report deals with the social situation of the country and the position of the various groups of the population.

4. The fourth part of the report deals with the cultural situation of the country and the position of the various groups of the population.

5. The fifth part of the report deals with the political situation of the country and the position of the various groups of the population.

6. The sixth part of the report deals with the international situation of the country and the position of the various groups of the population.

7. The seventh part of the report deals with the future of the country and the position of the various groups of the population.

8. The eighth part of the report deals with the conclusion of the report and the position of the various groups of the population.

9. The ninth part of the report deals with the appendix of the report and the position of the various groups of the population.

10. The tenth part of the report deals with the bibliography of the report and the position of the various groups of the population.