

ATTACHMENT A

EPA's Recommended Secretary's Environmental Assessment Requirements Muswellbrook Pumped Hydro Energy Storage Project (SSD-60598738)

1. Licensing Requirements

- 1.1. Identify all approvals and licences required under environment protection legislation including details of all scheduled activities under schedule 1 of the *Protection of the Environment Operations Act 1997* (the POEO Act).

2. Construction Works

- 2.1. Include detail of the construction works including:
 - a. actions to address any existing soil contamination
 - b. any earthworks or site clearing; re-use and disposal of cleared and excavated material (including use of spoil on-site and off-site)
 - c. construction timetable and staging; hours of construction; proposed construction methods
 - d. environment protection measures, including noise mitigation measures, dust control measures and erosion and sediment control measures.
- 2.2. Include a site diagram showing the site layout and location of environmental controls.

3. Vibration

The EIS must assess the following vibration aspects of the proposed development:

- 3.1. Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the *Assessing Vibration: a technical guideline* (DEC, 2006). These are available at:
<https://www.epa.nsw.gov.au/yourenvironment/noise/industrial-noise/assessing-vibration>

4. Waste, chemicals and hazardous materials and radiation

The EIS must assess the following waste, chemical and hazardous materials related aspects of the proposed development:

- 4.1. Demonstrate compliance with all regulatory requirements outlined in the POEO Act and associated waste regulations.
- 4.2. Outline contingency plans for any event that may result in environmental harm, such as excessive stockpiling of material, or dirty water volumes exceeding the storage capacity available on-site.
- 4.3. Demonstrate that appropriate spill containment will be provided for storage, filling and loading of all fuels and other chemicals to be used on site, in accordance with the relevant Australian Standard.
- 4.4. Identify the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-21*.

5. Water

- 5.1. The EIS must demonstrate how the proposed development will meet the requirements of section 120 of the POEO Act.

- 5.2. If the proposed development intends to discharge waters to the environment, the EIS must demonstrate how the discharge(s) will be managed in terms of water quantity, quality and frequency of discharge and include an impact assessment of the discharge on the receiving environment. This should include:
- Description of the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.
 - Description of the receiving waters including upstream and downstream water quality as well as any other water users.
 - Demonstration that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.
- 5.3. The EIS must refer to Water Quality Objectives for the receiving waters and indicators and associated trigger values or criteria for the identified environmental values of the receiving environment. This information should be sourced from the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (<https://www.waterquality.gov.au/anz-guidelines>).
- 5.4. The EIS must describe how stormwater will be managed in all phases of the project, including details of how stormwater and runoff will be managed to minimise pollution. Information should include measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site. The EIS should consider the guidelines *Managing urban stormwater: soils and construction*, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC, 2008).

ATTACHMENT B: GUIDANCE MATERIAL

Title	Web address
Relevant Legislation	
<i>Contaminated Land Management Act 1997</i>	http://www.legislation.nsw.gov.au/#/view/act/1997/140
<i>Environmentally Hazardous Chemicals Act 1985</i>	http://www.legislation.nsw.gov.au/#/view/act/1985/14
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/#/view/act/1979/203
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/#/view/act/1997/156
<i>Water Management Act 2000</i>	http://www.legislation.nsw.gov.au/#/view/act/2000/92
Licensing	
Guide to Licensing	www.epa.nsw.gov.au/licensing/licenceguide.htm
Air Issues	
Air Quality	
Approved methods for modelling and assessment of air pollutants in NSW (2022)	https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/approved-methods-for-the-modelling-and-assessment-of-air-pollutants
Approved methods for sampling and analysis of air pollutants in NSW (2022)	https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/sampling-analysing-air-emissions
POEO (Clean Air) Regulation 2022	https://legislation.nsw.gov.au/
Noise and Vibration	
NSW Noise Policy for Industry	http://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017)
Interim Construction Noise Guideline (DECC, 2009)	http://www.epa.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.epa.nsw.gov.au/noise/vibrationguide.htm
NSW Road Noise Policy (DECCW, 2011)	https://www.epa.nsw.gov.au/your-environment/noise/transport-noise
NSW Rail Infrastructure Noise Guideline (EPA, 2013)	https://www.epa.nsw.gov.au/your-environment/noise/transport-noise

Human Health Risk Assessment	
Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards (enHealth, 2012)	http://www.eh.org.au/documents/item/916
Waste, Chemicals and Hazardous Materials and Radiation	
Waste	http://www.epa.nsw.gov.au/wastestrategy/warr.htm
Environmental Guidelines: Solid Waste Landfills (EPA, 2016)	http://www.epa.nsw.gov.au/waste/landfill-sites.htm
Draft Environmental Guidelines - Industrial Waste Landfilling (April 1998)	http://www.epa.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf
EPA's Waste Classification Guidelines 2014	http://www.epa.nsw.gov.au/wasteregulation/classify-guidelines.htm
Resource recovery orders and exemptions	http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm
EPA's Energy from Waste Policy Statement	http://www.epa.nsw.gov.au/wastestrategy/energy-from-waste.htm
NSW Waste Avoidance and Resource Recovery Strategy 2014-2021	http://www.epa.nsw.gov.au/wastestrategy/warr.htm
Standards for managing construction waste in NSW	https://www.epa.nsw.gov.au/your-environment/waste/industrial-waste/construction-demolition/construction-and-demolition-waste
Chemicals subject to Chemical Control Orders	
Chemical Control Orders (regulated through the EHC Act)	http://www.epa.nsw.gov.au/pesticides/CCOs.htm
Water and Soils	
Acid sulphate soils	
Coastal acid sulfate soils guidance material	http://www.environment.nsw.gov.au/acidsulfatesoil/ and http://www.epa.nsw.gov.au/mao/acidsulfatesoils.htm
Acid Sulfate Soils Planning Maps	http://www.environment.nsw.gov.au/acidsulfatesoil/riskmaps.htm
Contaminated Sites Assessment and Remediation	
Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land	http://www.epa.nsw.gov.au/clm/planning.htm
Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2020)	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/contaminated-land/20p2233-consultants-reporting-on-contaminated-land-guidelines.pdf
Guidelines for the NSW Site Auditor Scheme – 3rd edition (EPA, 2017)	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/contaminated-land/17p0269-guidelines-for-the-nsw-site-auditor-scheme-third-edition.pdf
Sampling Design Guidelines (EPA, 1995)	http://www.epa.nsw.gov.au/resources/clm/95059sampgdline.pdf

National Environment Protection (Assessment of Site Contamination) Measure 1999 (or update)	http://www.scew.gov.au/nepms/assessment-site-contamination
Soils – general	
Managing land and soil	http://www.environment.nsw.gov.au/soils/landandsoil.htm
Managing urban stormwater for the protection of soils	http://www.environment.nsw.gov.au/stormwater/publications.htm
Landslide risk management guidelines	http://australiangeomechanics.org/admin/wp-content/uploads/2010/11/LRM2000-Concepts.pdf http://www.australiangeomechanics.org/resources/downloads/
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Local Government Salinity Initiative Booklets	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
Australian and New Zealand Guidelines for Fresh and Marine Water Quality	https://www.waterquality.gov.au/anz-guidelines
Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (2022)	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/water/22p3488-approved-methods-for-water-in-nsw.pdf