



DOC21/609785-4

Ms Sally Munk
Principal Planner Officer
Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Email: sally.munk@planning.nsw.gov.au

Dear Ms Munk

**Proposed increase in Solid Waste Derived Fuel use - DA-401-11-2002-i-Mod-14 - SEAR
Boral Cement Limited – Berrima Plant**

I am writing in response to your email and attached Scoping Report dated 21 July 2021 to the Environment Protection Authority (EPA) requesting input for the Secretary's Environmental Assessment Requirements (SEARs) for the above project. The EPA regulate the activities at the premises through Environment Protection Licence number 1698.

The proponent - Boral Cement Limited (Boral) - is seeking to modify the existing consent (DA-401-11-2002-i, as modified) to:

- increase in the consumption of Solid Waste Derived Fuel (SWDF) from 100,000 tonnes per annum (tpa) to 250,000 tpa
- increase the permitted volumes of wood waste, Refuse Derived Fuel and woodchips
- increase truck deliveries and delivery hours for SWDF to 24/7
- expand the storage and handling facilities at the site
- construct and operate a new site access road and intersection with the Old Hume Highway.

The EPA has considered the preliminary details of the proposal as provided in the documentation attached to your email. Our information requirements are provided in **Attachment A**, covering the following environment protection themes:

- General Planning Matters
- Environment Protection Licence
- Air Quality
- Water Quality
- Noise
- Waste Management
- Contaminated Land Management.

These should be assessed in accordance with any relevant guidelines/documents listed in **Attachment B**.

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If you have questions regarding the above, please phone Matt Fuller on (02) 4224 4100.

Yours sincerely

William Dove

05.08.2021

WILLIAM DOVE
Unit Head Regulation

ATTACHMENT A

KEY ENVIRONMENTAL IMPACT ASSESSMENT REQUIREMENTS

1. General Planning Matters

Details should be documented on the location of the proposed development including the affected environment to place the proposal in its local and regional environmental context. This should include but not be limited to details of land ownership, maps and/or aerial photographs showing surrounding land uses, planning zonings, potential sensitive receptors and catchments. Details should also be provided on the proposals relationship to any other industry or facility.

The Statement of Environmental Effects (SEE) should describe mitigation and management options that will be used to prevent, control, abate or mitigate identified environmental impacts (including any cumulative impacts) associated with the project and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented. Appropriate Best Management Practices must be outlined.

2. Environment Protection Licence

The development must comply with the *Protection of the Environment Operations Act 1997* (POEO Act) and associated regulations at all times (if approved).

Under the POEO Act the following are scheduled activities (Extractive Activities recently updated) and require an Environment Protection Licence (EPL):

- **Cement of lime works –**

(1) This clause applies to the following activities—

cement or lime handling, meaning the handling of cement, fly ash, powdered lime (other than agricultural lime) or any other similar dry cement products, but not if the handling occurs as part of the production of pre-mixed concrete (concrete batching).

cement or lime production, meaning the production of cement or lime—

(a) by heating argillaceous or calcareous materials to produce cement clinkers, grinding clinkers or slags, or

(b) by hydrating quicklime.

(2) Each activity referred to in Column 1 of the Table to this clause is declared to be a scheduled activity if it meets the criteria set out in Column 2 of that Table.

cement or lime handling	capacity to handle more than 150 tonnes of cement or lime per day or 30,000 tonnes of cement or lime per year
cement or lime production	capacity to produce more than 150 tonnes of cement or lime per day or 30,000 tonnes of cement or lime per year

- **Energy recovery –**

(1) This clause applies to the following activities—

energy recovery from general waste, meaning the receiving from off site of, and the recovery of energy from, any waste (other than hazardous waste, restricted solid waste, liquid waste or special waste).

energy recovery from hazardous and other waste, meaning the receiving from on site or off site of, and the recovery of energy from, hazardous waste, restricted solid waste, liquid waste or special waste.

(2) However, this clause does not apply to any of the following—

(a) the processing of contaminated soil,

(b) container reconditioning,

(c) the recovery of gases that are dangerous goods of Class 2 within the meaning of the Transport of Dangerous Goods Code.

(3) Each activity referred to in Column 1 of the Table to this clause is declared to be a scheduled activity if—

- (a) it meets the criteria set out in Column 2 of that Table, and
- (b) in the case of an activity that meets the criteria to be the scheduled activity of waste disposal (thermal treatment)—an exemption granted under Part 9 of the Protection of the Environment Operations (Waste) Regulation 2014 exempts the person carrying out the activity from the requirements of section 48 (2) as they apply to waste disposal (thermal treatment).
- (4) For the purposes of this clause, 1 litre of waste is taken to weigh 1 kilogram.

energy recovery from general waste	involves processing more than 200 tonnes per year of waste (other than hazardous waste, restricted solid waste, liquid waste or special waste)
energy recovery from hazardous and other waste	involves having on site at any time more than 200 kilograms of hazardous waste, restricted solid waste, liquid waste or special waste

- ***extractive activities –***

- (1) meaning the extraction (by any method, including by excavation, dredging, blasting or tunneling) or processing of extractive materials for the primary purpose of the sale of extracted material.
- (2) However, this clause does not apply to cut and fill operations, or the excavation of foundations or earthworks, that are ancillary to development that is subject to development consent or approval under the Environmental Planning and Assessment Act 1979.
- (3) The activities to which this clause applies are declared to be scheduled activities if they involve the extraction or processing of more than 30,000 tonnes of extractive materials per year.
- (4) More than 30,000 tonnes of material are taken to have been extracted in a year at premises at which extraction occurs if the total amount of extractive material transported from those premises in that year is more than 30,000 tonnes.
- (5) In this clause, "extractive materials" means clay, sand, soil, stone, gravel, rock, sandstone or similar substances that are not minerals within the meaning of the Mining Act 1992.

- ***crushing, grinding or separating –***

- (1) meaning the processing of materials (including sand, gravel, rock or minerals, but not including waste of any description) by crushing, grinding or separating them into different sizes.
- (1A) However, this clause does not apply to the processing of materials by crushing, grinding or separating that occurs as part of an activity that is declared to be a scheduled activity by:
- (a) clause 33 (Railway activities--railway infrastructure construction), or
 - (b) clause 35 (Road construction).
- (2) The activity to which this clause applies is declared to be a scheduled activity if it has a capacity to process more than 150 tonnes of materials per day or 30,000 tonnes of materials per year.

- ***Resource recovery –***

- (1) This clause applies to the following activities—
- recovery of general waste, meaning the receiving of waste (other than hazardous waste, restricted solid waste, liquid waste or special waste) from off site and its processing, otherwise than for the recovery of energy.
 - recovery of hazardous and other waste, meaning the receiving of hazardous waste, restricted solid waste or special waste (other than asbestos waste or waste tyres) from off site and its processing, otherwise than for the recovery of energy.
 - recovery of waste oil, meaning the receiving of waste oil from off site and its processing, otherwise than for the recovery of energy.
 - recovery of waste tyres, meaning the receiving of waste tyres from off site and their processing, otherwise than for the recovery of energy.
- (2) However, this clause does not apply to the recovery of stormwater or the processing of any of the following—
- (a) contaminated soil,
 - (b) contaminated groundwater,
 - (c) sewage within a sewage treatment system (whether or not that system is licensed).

(2A) This clause also does not apply to the receiving of waste at premises from off site and its processing if—

(a) the waste is to be sold or supplied from those premises as landscaping material (that is, as lawful soil amendments or for landscape gardening) and nothing else occurs in respect of the waste at the premises other than blending, mixing, packaging or storage of the waste for the purpose of that sale or supply, and

(b) the waste is virgin excavated natural material or meets all of the conditions of a resource recovery order (made under clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014) at the time it is received, and

(c) the waste does not include any liquid waste or biosolids that are not general solid waste (non-putrescible), and

(d) no other activity is carried out at the premises that would result in the premises being a scheduled waste facility within the meaning of the Protection of the Environment Operations (Waste) Regulation 2014.

(2B) This clause also does not apply to the receiving of waste at premises from off site and its processing if the only waste received from off site is untreated wood waste (other than sawdust or wood shavings) and that wood waste is processed by being cut or split into smaller pieces (other than by chipping) for sale as firewood.

(3) Each activity referred to in Column 1 of the Table to this clause is declared to be a scheduled activity if—

(a) it meets the criteria set out in Column 2 of that Table, and

(b) either—

(i) less than 50% by weight of the waste received in any year requires disposal after processing, or

(ii) an exemption granted under Part 9 of the Protection of the Environment Operations (Waste) Regulation 2014 exempts the person carrying out the activity from the requirements of section 48 (2) as they apply to waste disposal (application to land), waste disposal (thermal treatment), waste processing (non-thermal treatment) and waste storage.

recovery of general waste	if the premises are in the regulated area— (a) involves having on site at any time more than 1,000 tonnes or 1,000 cubic metres of waste, or (b) involves processing more than 6,000 tonnes of waste per year if the premises are outside the regulated area— (a) involves having on site at any time more than 2,500 tonnes or 2,500 cubic metres of waste, or (b) involves processing more than 12,000 tonnes of waste per year
recovery of hazardous and other waste	involves having on site at any time more than 200 kilograms of waste
recovery of waste oil	involves processing more than 20 tonnes of waste oil per year or having on site at any time more than 2,000 litres of waste oil
recovery of waste tyres	involves having on site at any time (other than in or on a vehicle used to transport the tyres to or from the premises) more than 5 tonnes of waste tyres or 500 waste tyres, or involves processing more than 5,000 tonnes of waste tyres per year

- **Waste storage –**

(1) This clause applies to waste storage, meaning the receiving from off site and storing (including storage for transfer) of waste.

(1A) Waste is taken to be stored at premises for the purposes of this clause even if the waste is only being transferred at those premises between units of rolling stock, motor vehicles or trailers.

(2) However, this clause does not apply to any of the following—

(a) the storage of stormwater,

(b) the storage of up to 60 tonnes at any time of any of the following kinds of waste (but not when accompanied by any other kind of waste)—

- (i) drilling mud,
- (ii) grease trap waste,
- (iii) waste lead acid batteries,
- (iv) waste oil,

(c) the storage of sewage within a sewage treatment system,

(d) the storage and transfer of liquid waste that is generated and treated on site prior to sewer discharge, or lawful discharge to waters.

(2A) This clause also does not apply to the receiving of waste from off site and its storage if—

(a) the waste is to be sold or supplied from those premises as landscaping material (that is, as lawful soil amendments or for landscape gardening) and nothing else occurs in respect of the waste at the premises other than storage of the waste for the purpose of that sale or supply, and

(b) the waste is virgin excavated natural material or meets all of the conditions of a resource recovery order (made under clause 93 of the Protection of the Environment Operations (Waste) Regulation 2014) at the time it is received, and

(c) the waste does not include any liquid waste or biosolids that are not general solid waste (non-putrescible), and

(d) no other activity is carried out at the premises that would result in the premises being a scheduled waste facility within the meaning of the Protection of the Environment Operations (Waste) Regulation 2014.

(2B) This clause also does not apply to the receiving of virgin excavated natural material from off site and its storage if the only waste received is virgin excavated natural material.

(2C) This clause also does not apply to the receiving of waste at premises from off site and its storage if the only waste received from off site is untreated wood waste (other than sawdust or wood shavings) and that wood waste has been cut or split into smaller pieces (other than by chipping) as firewood.

(3) The activity to which this clause applies is declared to be a scheduled activity if—

(a) more than 5 tonnes of hazardous waste, restricted solid waste, liquid waste or special waste (other than waste tyres) is stored on the premises at any time, or

(b) more than 5 tonnes of waste tyres or 500 waste tyres is stored on the premises at any time (other than in or on a vehicle used to transport the tyres to or from the premises), or

(c) more than the following amounts of waste (other than waste referred to in paragraph (a) or (b)) are stored on the premises at any time—

(i) in the case of premises in the regulated area—more than 1,000 tonnes or 1,000 cubic metres,

(ii) in the case of premises outside the regulated area—more than 2,500 tonnes or 2,500 cubic metres, or

(d) more than the following amounts of waste (other than waste referred to in paragraph (a) or (b)) is received per year from off site—

(i) in the case of premises in the regulated area—6,000 tonnes,

(ii) in the case of premises outside the regulated area—12,000 tonnes.

(4) For the purposes of this clause, 1 litre of waste is taken to weigh 1 kilogram.

3. Air Quality

The environmental outcome for the project should ensure:

- emissions do not cause adverse impact upon human health or the environment
- no offensive odour beyond the boundary of the premises
- compliance with the requirements of the POEO Act and its associated regulations
- maintains or improves air quality to ensure National Environment Protection Measures for ambient air quality are not compromised
- all dust emissions from material handling, storage, processing, haul roads, transport and material transfer systems are prevented or minimised; and vehicular kilometres travelled are minimised.

The SEE should:

1. Include a detailed description of the proposal. All processes that could result in air emissions must be identified and described. Sufficient detail to accurately communicate the characteristics and quantity of all emissions must be provided. Describe the receiving environment in detail. The

proposal must be contextualised within the receiving environment (local, regional and inter-regional as appropriate). The description must include but need not be limited to:

- meteorology and climate
 - topography
 - surrounding land-use
 - receptors
 - ambient air quality.
2. Account for cumulative impacts.
 3. Assess the risk associated with potential discharges of fugitive and point source emissions for all stages of the proposal. Assessment of risk relates to environmental harm, risk to human health and amenity.
 4. Describe any proposed emission control techniques, monitoring and management measures the proponent intends to apply to ensure the above goals are satisfied.
 5. Assess opportunities to minimise Vehicle Kilometres Travelled and measures to minimise the potential for air quality impacts associated with truck movements.
 6. Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the POEO Act 1997 and the *POEO (Clean Air) Regulation 2010*.

The SEE must include an Air Quality Impact Assessment (AQIA). The AQIA must identify and describe in detail all possible sources of air pollution and activities/processes with the potential to cause air pollutants including odours and fugitive dust emissions beyond the boundary of any premises proposed to be licensed by an EPL. This should cover both the construction and operational phases of the development. The AQIA should include cumulative impacts associated with existing developments and any developments having been granted development consent but which have not commenced.

The SEE should demonstrate that the facility will operate to minimise adverse effects on the amenity of local residents and sensitive land uses and to limit the effects of emissions on local, regional and inter-regional air quality.

The SEE must describe in detail the measures proposed to mitigate the impacts and quantify the extent to which the mitigation measures are likely to be effective in achieving the relevant environmental outcomes.

The AQIA must be prepared in accordance with the EPA's "*Approved Methods and Guidance for the Modelling & Assessment of Air Pollutants in NSW*". The AQIA must describe the methodology used and any assumptions made to predict the impacts. Air pollutant emission rates, ambient air quality data and meteorological data used in the assessment must be clearly stated and justified.

4. Water Quality

The environmental outcome for the project should ensure:

- there is no pollution of waters (including surface and groundwater) except in accordance with any conditions contained in an EPL for the activity.
- polluted water (including process waters, wash down waters, polluted stormwater or sewage) is captured on the site and directed to reticulated sewer where available or else collected, treated and beneficially reused, where this is safe and practicable to do so.
- Promote integrated water cycle management that optimises opportunities for sustainable water supply, wastewater and stormwater management and reuse initiatives where it is safe and practicable to do so.
- bunding is designed in accordance with the EPA's Bunding and Spill Management guidelines.

The SEE should document how the above outcomes will be achieved.

The SEE should also include but not necessarily be limited to the following matters:

- a) Details on the existing stormwater management system, its performance and whether it needs to be upgraded to meet current contemporary standards. This should include water management associated with activities including:

- any process waters
 - any equipment and maintenance areas, including wash down facilities, oil and water separation
 - open stockpiles
 - unsealed/sealed areas
 - extraction areas
 - material processing and transfer areas
 - loading facilities
 - haul roads
 - onsite wastewater management
 - any associated treatment and reuse systems.
- b) Provide a description of the receiving waters including surface and groundwater.
- c) Provide information on any water discharges including location, volumes, water quality, monitoring programs and frequency of discharge.
- d) Describe the nature and degree of any likely impacts that the proposed project may have on the receiving environment. This should include a characterisation of potential water pollutants at the site and any associated mitigation and management measures.
- e) Demonstrate that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.
- f) Describe how stormwater will be managed both during the construction phase.

The SEE should demonstrate how the stormwater management system will satisfy relevant contemporary guidelines such as *Managing Urban Stormwater - Soils and Construction - Volume 2E Mines and Quarries* (DECC June 2008).

5. Noise Impact

The environmental outcome of the project should be to minimise adverse impacts due to noise from the project. The SEE must clearly outline the noise mitigation, monitoring and management measures the proponent intends to apply to the project to minimise noise pollution.

A noise assessment should be undertaken in accordance with the *New South Wales Noise Policy for Industry* (EPA 2017). It should include, but not necessarily be limited to:

- identification and assessment of all potential noise sources associated with the development
- the location of all noise sensitive receivers
- proposed hours of operation
- proposed noise mitigation measures
- assessment of cumulative noise impacts, having regard to existing surrounding industrial activities and development.
- background noise measurements
- account for any low frequency noise

The assessment should also consider vibration from the proposed project in accordance with NSW *Noise Policy for Industry* and *Assessing Vibration: a technical guideline* (DEC, 2006) for assessing vibration.

The Interim Construction Noise Guideline (DECC 2009) states that noise from construction associated with mining is not covered by the Guideline. Noise from construction activities associated with new infrastructure should be assessed against INP noise objectives. All feasible and reasonable noise mitigation measures to be implemented for any construction noise that exceeds INP objectives should be identified.

The SEE must identify the transport route(s) to be used, the hours of operation and assess any potential road traffic noise impacts in accordance with the “*NSW Road Noise Policy*”.

6. Waste Management

The goal of the development should be to ensure:

- All waste is managed in accordance with the principles of the waste hierarchy and cleaner production.
- the handling, processing and storage of all materials used at the premises does not have negative environmental or amenity impacts.
- land pollution is prevented.
- the beneficial reuse of all wastes generated at the premises are maximised where it is safe and practical to do so.
- no waste disposal occurs on site except in accordance with the conditions contained in any EPA Licence.

Any waste generated at the site should be assessed and classified in accordance with the *Waste Classification Guidelines* and documented in the SEE. Detail on this guideline is available in Attachment B.

The proponent should also consult NSW EPA's *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities* (Dec 2012). This guideline provides information on better waste management practice in design, establishment, operation and ongoing management of waste services in commercial and industrial developments. This guideline can be accessed at: <http://www.epa.nsw.gov.au/resources/managewaste/120960-comm-ind.pdf>.

The SEE should also detail the type and quantity of any chemical substances to be used or stored at the site and describe arrangements for their safe use and storage in accordance with any legislative or EPA policy requirements.

7. Contaminated Land Management

The environmental outcome of the project should ensure any contaminated land is identified and appropriately managed for the purpose of reducing the risk of harm to human health or any other aspect of the environment.

The requirements of *State Environmental Planning Policy (SEPP) 55* will need to be satisfied and documented in the SEE. SEPP 55 states that as part of the development process, the following key considerations should be addressed:

- Whether the land is contaminated.
- If the land is contaminated whether it is suitable in its contaminated state (or will be suitable, after remediation) for all the purposes to which the land will be used.
- If the land requires remediation; it will be made suitable for any purpose for which the land will be used.

In cases where land is potentially contaminated, the investigation and any remediation and validation work is to be carried out in accordance with the guidelines made or approved by the EPA under Section 105 of the *Contaminated Land Management Act 1997* and be in accordance with the requirements and procedures in the following:

- *Contaminated Land Management Act 1997*
- *Contaminated Land Management Regulation 2013*
- *SEPP 55 – Remediation of Land*.

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 (2016)	http://www.epa.nsw.gov.au/air/appmethods.htm
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/#/view/regulation/2010/428
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)	http://www.epa.nsw.gov.au/your-environment/noise/transport-noise
NSW Rail Infrastructure Noise Guideline (EPA, 2013)	http://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	
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/envguidlms/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
European Unions Waste Incineration Directive 2000	http://ec.europa.eu/environment/archives/air/stationary/wid/legislation.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
Chemicals subject to Chemical Control Orders	
Chemical Control Orders (regulated through the EHC Act)	http://www.epa.nsw.gov.au/pesticides/CCOs.htm
National Protocol - Approval/Licensing of Trials of Technologies for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
National Protocol for Approval/Licensing of Commercial Scale Facilities for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
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
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, 2000)	http://www.epa.nsw.gov.au/resources/clm/20110650consultantsgline.pdf
Guidelines for the NSW Site Auditor Scheme - 2nd edition (DEC, 2006)	http://www.epa.nsw.gov.au/resources/clm/auditorglines06121.pdf
Sampling Design Guidelines (EPA, 1995)	http://www.epa.nsw.gov.au/resources/clm/95059samppgdline.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
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
Applying Goals for Ambient Water Quality Guidance for Operations Officers - Mixing Zones	Contact the EPA on 131555
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approved-methods-water.pdf

Our ref: STH09/02593/07
Contact: Andrew Lissenden 0418 962 703
Your ref: DA401-11-2002-1-MOD-14

4 August 2021

Sally Munk
Department of Planning, Industry and Environment
BY EMAIL: information@planning.nsw.gov.au

REQUEST FOR SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SEAR'S) – MODIFICATION 14 — BERRIMA CEMENT WORKS

Dear Sally

Transport for NSW (TfNSW) refers to the notification it received on 22 July 2021 regarding the request for input into the SEAR's for the above State Significant Development (SSD) modification application.

TfNSW has completed a review of the information provided (Scoping Report by Boral dated July 2021 and the Department of Planning, Industry and Environments draft SEAR's) and notes:

- Its input is requested by the Secretary under Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*.
- The modification application is seeking approval to increase Solid Waste Derived Fuel (SWDF) consumption from 100,000 tonnes per annum (tpa) to 250,000 tpa, increase truck deliveries and hours for SWDF to 24/7, expansion of storage/handling facilities and provide a new site access.
- The new site access is to/from the Old Hume Highway which adjoins the sites western boundary. At this location the Old Hume Highway is a regional classified road managed by Wingecarribee Shire Council. The closest state classified road is the Hume Motorway (known as the Hume Highway south of Medway Rivulet).
- Limited details are provided in the submitted scoping report on transport and traffic-related issues. The impacts of traffic generated by the development (both from construction and ongoing operation) will need to be considered and mitigation measures detailed as part of any future SSD modification application lodged.

Having regard for the above, TfNSW requests the matters outlined in **Attachment 1** be included in any SEAR's issued and subsequently addressed by the applicant in the Environmental Impact Statement (EIS) prepared for the development.

If you have any questions, please contact myself on 0418 862 703.

Yours faithfully



Andrew Lissenden
Development Case Officer
Community and Place | South Region

Cc: sally.munk@planning.nsw.gov.au;
Robert.Rutledge@transport.nsw.gov.au

1. **Traffic Impact Study (TIS):** A TIS is required to examine any potential transport related implications of the development. As a guide Table 2.1 of the RTA's Guide to Traffic Generating Developments outlines the key issues that should be considered in preparing a TIS. In addition, regard should be had for the Austroads publications, particularly the *Austroads Guide to Traffic Management Part 12: Integrated Transport Assessments for Developments* and *Part 3: Traffic Studies and Analysis Methods*.

Noting the above, the TIS also needs to address, but not be limited to, the following:

- a) TfNSW considers that the traffic related issues relevant to the development should be considered and addressed in 2 distinct stages as follows:
 - i. *Construction phase* – The transport of materials and equipment/components for the establishment of the facility (e.g. gravel, concrete, oversize over mass movements, etc) and ancillary infrastructure (overhead power/transmission line construction access points), the movement and parking of construction related vehicles including workers vehicles, etc; and
 - ii. *Operational phase* – The ongoing traffic generation due to the operation, maintenance and servicing of the various elements of the project.
- b) Noting the above stages the following will need to be addressed for each stage:
 - i. Details of all traffic types (both heavy and light vehicles) including a description of heavy vehicle types that will be used and the routes that will be taken to enable vehicles that are travelling from the north and south to gain access to the site as well as details on the routes that vehicles wishing to leave the site to go north and/or south will take;
 - ii. For heavy vehicles, details are required on their size, their associated carrying capacity, etc for both the receipt of materials and the removal of waste products. This should also include details on the maximum number of vehicles per day and per annum that the proposed development will generate including how these numbers correlate to the daily and annual limits for which approval is being sought;
 - iii. Details on traffic volumes that are likely to be generated by the proposed development. It should also include details on the distribution of the traffic generated that will come from and go to the north and south; and
 - iv. Details on how maximum vehicle numbers will be monitored to ensure ongoing compliance.
- c) An assessment of the cumulative impact of traffic from this development and nearby developments that use the same access to and from the Hume Motorway/Highway.
- d) An assessment of the suitability of the road connections with the classified road network at each access point as well as details on any works required. While TfNSW notes that the Old Hume Highway to which the new access is proposed to connect is a regional classified road managed by Council, any upgrade works should demonstrate compliance with the applicable requirements in *Austroads Guide to Road Resign* (2021). This including, but not limited to, an assessment for the treatment at the sites new access with the Old Hume Highway against the warrants for BA, AU and CH Turn Treatments outlined in Figure 3.25 of *Austroads Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings Management* and the provision of volume plots on Figure 3.25 to identify the appropriate turn treatments. The design speed to be used is posted speed +10km/h.
- e) Details of measures to mitigate and/or manage potential impacts including a schedule/timeframe for their provision.
- f) Swept path diagrams to demonstrate the largest vehicles that will be using the classified road network can undertake all required manoeuvres to enable access to and from the development site.

- g) An assessment of the crash history with the connections to be used with the Hume Motorway/state classified road (e.g. Medway Road and the Hume Motorway on-load and off-load ramps, Mereworth Road and the Hume Highway off-load ramp, etc) including details on what if any crashes have involved vehicles associated with the operations of the existing site.

Please note the above relates only to potential impacts on the classified road network. Noting that the regional classified road network is managed by Wingecarribee Shire Council, discussions should be had with Council concerning the information they may require to be included in the TIS relating to road impacts.

2. State Environmental Planning Policies: An assessment against the provisions of:

- a) *State Environmental Planning Policy (Infrastructure) 2007*. Specifically, Part 3, Division 15, Subdivision 2, Section 104 need to be addressed. If it is not applicable details shall be provided on why.
- b) *State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 2007*. Specifically, Part 3, Section 16 need to be addressed. If it is not applicable details shall be provided on why.

3. Strategic/Concept Design: Noting the comments provided in Point 1 above, should it be identified as part of preparing the EIS or during the assessment of the application that mitigation measures are required that will impact a classified road then a concept design for the proposed works will need to be prepared and submitted (e.g. new access and associated turn treatments in the Old Hume Highway). This is needed to clarify the scope of works, demonstrate the works can be constructed within the road reserve and allow the consent authority to consider any environmental impacts of the works as part of their assessment.

The concept design submitted must include, but not be limited to, legal property boundaries (including the existing road reserve boundaries based on a survey), existing and proposed lane configurations and lane widths at several locations along the length of the proposed works, etc. The design provided should be based on a design speed that is 10km/h over the posted speed limit and should demonstrate compliance with the applicable requirements in *Austroads Guide to Road Design* (2021) and the relevant TfNSW supplements.

4. Consultation: TfNSW encourages further consultation, if required, during the preparation of the EIS to discuss issues/impacts on the state classified road and/or rail corridors.

2 August 2021

Contact: *Miles Ellis*

Our ref: *D2021/83051*

Sally Munk
Principal Planner
Industry Assessments | Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Water NSW response to Request for SEARs – Berrima Cement Works Kiln 6: DA 401-11-2002-I-Modification 14

Water NSW appreciates the opportunity to provide input into the Secretary's Environmental Assessment Requirements (SEARs) for the proposed modification to existing consent DA-401-11-2002-I at Berrima Cement Works.

The project site is located in the Sydney Drinking Water Catchment (SDWC) within the Warragamba catchment and hence the provisions of the *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011* (the SEPP) are applicable. Any environmental impact assessment (EIS) shall demonstrate that the additional works proposed in the modification will result in a Neutral or Beneficial Effect (NorBE) on water quality.

Requirements for the EIS

General

- Details of the project shall also include detailed site plans of the new storage buildings and other infrastructure showing locations of all buildings, new haulage road and any earthworks.
- Demonstration of compliance with Clauses 9 and 10 of the *State Environmental Planning Policy (Drinking Water Catchment) 2011* that the development will have a NorBE on water quality.

Waste Input, Output and Characterisation

- Quantity, composition, waste classification, storage and use/disposal of input waste material and of the bottom ash and flue gas treatment residues from Kiln 6, including leaching potential of the waste.
- Consideration of the treatment of waste ash and flue gas residues on-site before removal from site shall be considered in the EIS.

Stormwater Management

- A stormwater quality modelling using MUSIC application and associated report, including a stormwater drainage plan.
- The MUSIC model and report shall demonstrate a NorBE on water quality is resultant from the proposed works and include specific details on any proposed stormwater treatment measures.
- The Stormwater Drainage Plan must reflect what is modelled in the MUSIC model.

- An electronic copy (in .sqz format) must be provided to Water NSW on submission of the EIS.
- A Concept Soil and Water Management Plan is required for all works involving soil disturbance proposed.

It is requested that WaterNSW be included as stakeholder for future consultation on the project and looks forward to reviewing the forthcoming EIS.

If you have any queries on the above, please contact Miles Ellis via email at environmental.assessments@waterNSW.com.au

Yours sincerely



DARYL GILCHRIST
Manager Catchment Protection



OUT21/9849

Sally Munk
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

sally.munk@planning.nsw.gov.au

Dear Ms Munk

**Berrima Cement Works SWDF Increase & Delivery Variation Mod 14 (DA401-11)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)**

I refer to your email of 21 July 2021 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following recommendations are provided by DPIE Water and NRAR.

The SEARs should include:

- The identification of an adequate and secure water supply for the life of the project. This includes confirmation that water can be sourced from an appropriately authorised and reliable supply. This is also to include an assessment of the current market depth where water entitlement is required to be purchased.
- A detailed and consolidated site water balance.
- Assessment of impacts on surface and ground water sources (both quality and quantity), related infrastructure, adjacent licensed water users, basic landholder rights, watercourses, riparian land, and groundwater dependent ecosystems, and measures proposed to reduce and mitigate these impacts.
- Proposed surface and groundwater monitoring activities and methodologies.
- Consideration of relevant legislation, policies and guidelines, including the NSW Aquifer Interference Policy (2012), the Guidelines for Controlled Activities on Waterfront Land (2018) and the relevant Water Sharing Plans (available at <https://www.industry.nsw.gov.au/water>).

Any further referrals to DPIE Water and NRAR can be sent by email to landuse.enquiries@dpie.nsw.gov.au, or to the following coordinating officer within DPIE Water:

Alistair Drew, Project Officer- email: Alistair.drew@dpie.nsw.gov.au

Yours sincerely

Alistair Drew
Project Officer, Assessments
Water – Knowledge Office
28 July 2021



Our ref: DOC21/658050
Senders ref: PAE-24516176

Sally Monk
Principal Planner

Industry Assessments
E-mail: sally.monk@planning.nsw.gov.au

Dear Sally

**Advice on SEARs for Modification 14 SWDF increase, Delivery Variation & Site Access,
Boral Cement, Berrima.**

Thank you for your referral dated 1 July 2021 requesting comment on the abovementioned major project.

We have no specific comments in relation to the SEARs and are supportive of the draft advice in relation to assessing any biodiversity impacts associated with the proposal. That is, a BDAR is prepared for unavoidable biodiversity impacts, or if all impacts are avoided a BDAR waiver is requested.

A look at the new access road indicates possibility to avoid impacts to existing trees and vegetation. We would support any design which avoids impacts to biodiversity. This would benefit the applicant by eliminating the need for biodiversity assessment and any subsequent offsetting costs.

If you have any questions about this advice, please do not hesitate to contact Dan Robson, Senior Conservation Planning Officer, via daniel.robson@environment.nsw.gov.au or 4224 4185.

Yours sincerely

Chris Page

3 August 2021

**Senior Team Leader, Planning (Illawarra)
Biodiversity & Conservation Division
Environment, Energy and Science**

HERITAGE NSW – Aboriginal Cultural Heritage - SEARs

Project Name: Berrima Cement Works

SSD/I #: DA401-11-2002-I-Mod-14

1. The EIS must identify and describe the Aboriginal cultural heritage values that exist across the whole area that will be affected by the development and document these in an Aboriginal Cultural Heritage Assessment Report (ACHAR). This may include the need for surface survey and test excavation. The identification of cultural heritage values must be conducted in accordance with the [Code of Practice for Archaeological Investigation in NSW](#) (DECCW 2010), and be guided by the [Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in New South Wales](#) (OEH 2011).
2. Consultation with Aboriginal people must be undertaken and documented in accordance with the [Aboriginal Cultural Heritage Consultation Requirements for Proponents](#) (DECCW 2010). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.
3. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the EIS must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to Heritage NSW.
4. The assessment of Aboriginal cultural heritage values must include a surface survey undertaken by a qualified archaeologist. The result of the surface survey is to inform the need for targeted test excavation to better assess the integrity, extent, distribution, nature and overall significance of the archaeological record. The results of surface surveys and test excavations are to be documented in the ACHAR.
5. The ACHAR must outline procedures to be followed if Aboriginal objects are found at any stage of the life of the project to formulate appropriate measures to manage unforeseen impacts.
6. The ACHAR must outline procedures to be followed in the event Aboriginal burials or skeletal material is uncovered during construction to formulate appropriate measures to manage the impacts to this material.

NOTE: The process described in the *Due Diligence Code of Practice for the protection of Aboriginal objects in NSW* (DECCW 2010) is not sufficient to assess the impacts on Aboriginal cultural heritage of Major Projects.