



DOC19/800399-3

Ms Sally Munk
Principal Planning Officer, Industry Assessments
Department of Planning, Industry and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Ms Munk

I refer to the Department of Planning, Industry and Environment's request for the NSW Environment Protection Authority's (EPA) input on the Secretary's Environmental Assessment Requirements (SEARs) for the Botany Cogeneration Plant at the Orora Paper Mill in Matraville – SSD 10373 (the proposal).

The proposal is to construct and operate a cogeneration plant to produce steam and electricity to offset existing natural gas generated steam and grid electricity requirements at the Orora Paper Mill.

Based on the information provided, the proposal will require an Environment Protection Licence (EPL) under the *Protection of the Environment Operations Act 1997* (POEO Act). The EPA is currently reviewing whether the proposal will be licensed under the existing EPL for the Orora Botany Mill (licence no. 1594), or whether the proposal should hold a separate Environment Protection Licence.

The proponent should be made aware that, consistent with provisions under Part 9.4 of the POEO Act, the EPA may require the provision of a financial assurance and/ or assurances for the proposal. The amount and form of the assurance(s) would be determined by the EPA and specified under the EPL.

The EPA has provided recommendations for SEARs that should be considered in relation to the proposal. Please see **Attachment A** for details.

If you have any questions in relation to this letter please contact Mr Mark Hanemann on 9995 6845 or via email at mark.hanemann@epa.nsw.gov.au.

Yours sincerely

26/09/2019

CRAIG FLEMMING
Unit Head Sydney Industry
Environment Protection Authority

Attachment A – EPA recommendations for SEARs for Botany Cogeneration Plant 1891 Botany Road, Matraville (SSD-10373)

ATTACHMENT A

Phone 131 555	Fax +61 2 9995 5999	PO Box 668	L13, 10 Valentine Ave
Phone +61 2 9995 5555	TTY 133 677	Parramatta	Parramatta NSW
(from outside NSW)	ABN 43 692 285 758	NSW 2124 Australia	2150 Australia
			info@epa.nsw.gov.au
			www.epa.nsw.gov.au

EPA recommendations for SEARs for Botany Cogeneration Plant 1891 Botany Road, Matraville (SSD-10373)

The EPA supports the recommendations that the key areas identified in the conclusion of the Botany Cogeneration Plant – Scoping Report for further detailed assessment during the preparation of the Environmental Impact Statement (EIS). The EPA recommends that the following matters be addressed as part of the EIS.

Air Quality

The EIS for the proposal should include an Air Quality Impact Assessment (AQIA), prepared in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales 2016*. The AQIA should:

1. Identify all potential discharges of fugitive and point source emissions of pollutants and odour for all stages 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.
2. 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
 - identified sensitive receptors; and
 - ambient air quality.
3. Assess all risks to the environment, human health and amenity associated with emissions of air pollutants, including odour, from all stages of the proposal.
4. Justify the level of assessment undertaken on the basis of risk factors, including but not limited to:
 - proposal location;
 - characteristics of the receiving environment; and
 - type and quantity of pollutants emitted.
5. Include a consideration of 'worst case' emission scenarios and impacts at proposed emission limits including consideration of what emissions may be released during a trip or emergency shut down.
6. Account for cumulative impacts associated with existing emission sources as well as any currently approved developments linked to the receiving environment.
7. Include air dispersion modelling where there is a risk of adverse air quality impacts, or where there is sufficient uncertainty to warrant a rigorous numerical impact assessment. Air dispersion modelling must be conducted in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales 2016*.
8. Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations (POEO) Act (1997)* and the *POEO (Clean Air) Regulation (2010)*.
9. Detail emission control techniques/ practices, including emission sampling and monitoring, that will be employed by the proposal, and benchmark these techniques/ practices against best practice emission control and management.

Human Health Risk Assessment

The EPA recommends that a human health risk assessment (HHRA) be undertaken in conjunction with the AQIA, and included in the EIS. The HHRA must be undertaken in accordance with *Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards* (enHealth) and must include:

1. The inhalation of criteria pollutants and exposure from all pathways i.e., inhalation, ingestion and dermal to specific air toxics.
2. Details of any pollution control equipment and other impact mitigation measures for fugitive and point source emissions.
3. A demonstration of how the waste to energy facility would be operated in accordance with best practice measures to manage toxic air emissions with consideration of the *European Union's Waste Incineration Directive 2000* and the *Environment Protection Authority's NSW Energy from Waste Policy Statement*.
4. An examination of best practice management measures for the mitigation of toxic air emissions.
5. Details of the proposed technology and a demonstration that it is technically fit for purpose.

Noise and vibration

1. Construction noise associated with the proposed development should be assessed using the *Interim Construction Noise Guideline* (DECC, 2009).
2. Operational noise from all industrial activities to be undertaken on the premises should be assessed using the guidelines contained in the *Noise Policy for Industry* (EPA, 2017). This assessment should be undertaken for all proposed operational times (i.e. day, evening and night).
3. Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the *NSW Road Noise Policy* (DECCW, 2011). <http://www.epa.nsw.gov.au/resources/noise/2011236nswroadnoisepolicy.pdf>
4. 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).

Waste

The EPA recommends that the EIS:

1. Identifies, characterises and classifies all waste that will be accepted at the premises for thermal treatment, including proposed sources, quantities, composition and classes of waste.
Note: All waste must be classified in accordance with EPA's *Waste Classification Guidelines*.
2. Provides a detailed description of waste processing procedures for each waste type received at the premises, including the types of pollution which may result from the storage and processing of that waste, and mitigation measures for managing any such impacts.
3. Provides details of the maximum annual throughput of waste and the maximum volume of waste to be stored at the premises at any one time.
4. Provides a commitment to ensuring that all waste and materials are stored and processed inside an enclosed building. All waste handling activities, including receipt, sorting, processing, sampling, quarantine, storage, and loading must be conducted in an enclosed building. No waste, including finished products, may be stored outside.
5. Details how the proponent will meet the EPA's record keeping and reporting requirements, including weighing material in and out of the premises (refer to the EPA's *Waste Levy Guidelines* for more information – available at <http://www.epa.nsw.gov.au/your-environment/waste/waste-levy>).
6. Includes a detailed site plan(s) identifying areas for:

- haulage;
 - waste receipt, processing, storage, and loading (for each waste type);
 - quarantine;
 - infrastructure for environmental controls including dust, noise, and water;
 - weighbridge;
 - site boundaries;
 - stormwater drainage areas; and
 - unused stabilised areas.
7. Includes a list and description, including quantities, of the types of materials or finished products (if any) to be produced and their intended fate.
8. Demonstrates that each type of material being "produced" meets the conditions of a Resource Recovery Order and/or Resource Recovery Exemption, if it is proposed to re-use the material or apply that material to land. The EIS should list each order and exemption by name, and set out details as to how the proponent will meet each order and exemption.
- Note: if the material does not meet the conditions of an order and/or exemption, the proponent may need to apply for a specific order and/or exemption to allow for the re-use or land application of the material.
9. The intended fates of all other waste received/ produced on site which are not suitable for re-use.
10. Demonstrate that waste used as a feedstock in the waste to energy plant would be the residual from a resource recovery process that maximises the recovery of material in accordance with EPA guidelines and the Energy from Waste Policy statement.
11. Demonstrate how the proposal would operate as an energy from waste facility in accordance with the *NSW Energy from Waste Policy Statement*.
12. Provide a description of, or details of procedures, that would be implemented to control the inputs to the waste to energy plant, including contingency measures that would be implemented if inappropriate materials are identified.
13. Provide procedures for the management of all waste materials produced from the waste to energy facility (solid, liquid and gaseous).
14. Identify, characterise and classify all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling.
- Note: All waste must be classified in accordance with the EPA's *Waste Classification Guidelines*.
15. Include a commitment to retaining all sampling and classification results for the life of the proposal to demonstrate compliance with the EPA's *Waste Classification Guidelines*.
16. Provide details of how waste accepted on to the site will be handled and managed to minimise pollution, including:
- stockpile location and management;
 - labelling of stockpiles for identification, ensuring that all waste is clearly identified and stockpiled separately from other types of material (especially the separation of any contaminated and non-contaminated waste);
 - proposed height limits for all waste to minimise the potential for dust and odour;
 - procedures for minimising the movement of waste around the site and double handling; and
 - measures to minimise leaching from stockpiles into the surrounding environment, such as sediment fencing, geofabric liners etc.

17. Provide details of how any waste will be handled and managed during transport to a lawful facility. If the waste possesses hazardous characteristics, the proponent must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.
18. Include details of all procedures and protocols to be implemented to ensure that any waste accepted to and leaving from the site is transported and disposed of lawfully and does not pose a risk to human health or the environment.
19. Include a statement demonstrating that the Proponent is aware of the EPA's requirements with respect to notification and tracking of waste as appropriate.
20. Demonstrate that any waste material produced from the energy from waste facility for land application is fit-for-purpose and poses minimal risk of harm to the environment in order to meet the requirements for consideration of a resource recovery exemption by the EPA under Clauses 91 and 92 of the *Protection of the Environment Operations (Waste) Regulation 2014*.
21. Outline contingency plans for any event that affects operations at the site that may result in environmental harm, including (but not limited to) excessive stockpiling of waste, volume of leachate generated exceeds the storage capacity available on-site, etc.
22. 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 2014-2021*
 - *Waste Not Development Control Plan (DCP) Guideline* (EPA 2008)
 - *Better Practice Guidelines for Waste Management and Recycling in Commercial and Industrial Facilities* (DEC 2012)

Soil Issues

The EPA recommends that the EIS includes:

1. The nature and extent of any significant impacts should be identified. Particular attention should be given to soil erosion and sediment transport, in accordance with *Managing urban stormwater: soils and construction*, vol. 1 (Landcom 2004) and vol. 2 (A. Installation of services; B. Waste landfills; C. Unsealed roads; D. Main Roads; E. Mines and quarries) (DECC 2008).
2. A description of the mitigation and management options that will be used to prevent, control, abate or minimise identified soil and land resource impacts associated with the proposal. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

Water Issues

In general, development should maintain or restore the community's uses and values of waterways, including human and environmental health, through the achievement of relevant NSW Water Quality Objectives (WQO). The EIS for the proposal should:

1. Describe water usage for the proposal, including the position of any intakes and discharges, volumes, water quality and frequency of all water discharges.
2. Demonstrate that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.
3. Where relevant include a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.
4. Describe existing surface and groundwater quality. An assessment must to be undertaken for any water resource likely to be affected by the proposal.

5. State the Water Quality Objectives for the receiving waters relevant to the proposal. These refer to the community's agreed environmental values and human uses endorsed by the NSW Government as goals for ambient waters (<http://www.environment.nsw.gov.au/ieo/index.htm>). Where groundwater may be impacted the assessment should identify appropriate groundwater environmental values.
6. State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the *ANZECC (2000) Guidelines for Fresh and Marine Water Quality* (<http://www.environment.gov.au/water/quality/publications/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1>).
7. State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government.
8. Describe the nature and degree of impact that any proposed discharges will have on the receiving environment.
9. Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to:
 - protect the Water Quality Objectives for receiving waters where they are currently being achieved; and
 - contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.
10. Where a discharge is proposed that includes a mixing zone, the proposal should demonstrate how water discharged to waterways will ensure the ANZECC (2000) water quality criteria for relevant chemical and non-chemical parameters are met at the edge of the initial mixing zone of the discharge, and that any impacts in the initial mixing zone are demonstrated to be reversible.
11. Assess impacts on groundwater and groundwater dependent ecosystems.
12. Describe how stormwater will be managed both during and after construction.
13. Describe how predicted impacts will be monitored and assessed over time.
14. Outline opportunities for the use of integrated water cycle management practices and principles to optimise opportunities for sustainable water supply, wastewater and stormwater management across the development.
15. Detail how the proponent will ensure that any seepage waters from basement or underground car parking areas is undertaken in a manner that will prevent pollution of waters. Consideration should be given to waterproofing or "Tanking" all basement levels likely to interfere with an aquifer, to prevent the need for treatment and discharge of groundwater.

Stakeholder engagement

The EPA recommends that the proponent undertake stakeholder engagement during construction and operation of the proposal. The EPA recommends that the EIS includes a Stakeholder Engagement Plan that details:

1. When and how the proponent will engage with local residents and businesses, during construction and ongoing operation of the proposal.
2. How the identified needs and priorities of the local community and businesses will be considered in operational procedures and decision-making at the Botany Cogeneration plant.
3. How the proponent will provide timely and relevant information to the immediate neighbours of the proposal, especially during significant or emergency events where there is potential for harm to the environment or human health.

Complaints handling

The EPA recommends that the EIS includes details of how the proponent will manage any complaints received in relation to the proposal.

Management of Dangerous Goods and Hazardous Materials

The EIS should provide details of the following for all phases of the proposal:

1. Details of the type and quantity of all chemical substances to be used or stored on site.
2. Details of how any risks posed by chemicals, including oils and fuels, stored on site will be managed.
3. Procedures for the classification, assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of as part of the proposal, in addition to the requirements for liquid and non-liquid wastes.

Incident Risks and Contingency Practices

The EIS should include a comprehensive assessment of the potential for incidents to occur at any stage of the proposal, the measures to be used to minimise the risk of incidents, and the procedures to be employed in the event of an incident.

The proposal appears to be located within the Botany Bay Local Emergency Management area, and thus falls under the *Botany Bay Precinct Emergency Plan (2011)*, an authorised sub plan under the New South Wales State Emergency Management Plan. The EPA recommends that the EIS includes an Emergency Response and Incident Management plan that includes:

1. An assessment of any potential risks to the proposal from nearby industrial facilities, including Botany Industrial Park.
2. Any potential risks to nearby industrial facilities posed by the proposal.

Any relevant references to the Botany Bay Precinct Emergency Plan and any other strategic emergency plans relevant to the area. The Botany Bay Precinct Emergency Plan is available at <https://www.emergency.nsw.gov.au/publications/plans/sub-plans/botany-bay-precinct.html>

Environment Protection Licence

Based on the information provided, the proposal will require an Environment Protection Licence under the *Protection of the Environment Operations Act 1997*. The EPA is currently reviewing whether the proposal will be licensed under the existing Environment Protection Licence for the Orora Botany Mill (licence no. 1594), or whether the proposal should hold a separate Environment Protection Licence.

As a requirement of an EPL, the EPA will require the proponent to prepare, test and implement a Pollution Incident Response Management Plan and/or Plans in accordance with Section 153A of the POEO Act.

This concludes the EPA submission on the proposal.