Mr Michael Muscat
Director
GOW STREET RECYCLING CENTRE PTY. LTD.
81GOW STREET
PADSTOW New South Wales 2211

Dear Mr Muscat

Padstow Resource Recovery Facility (SSD-10450)
Planning Secretary's Environmental Assessment Requirements

Please find attached a copy of the Planning Secretary's environmental assessment requirements (SEARs) for the preparation of an environmental impact statement (EIS) for the Development Application (DA) and EIS.

These requirements have been prepared in consultation with relevant public authorities based on the information you have provided to date. I have also attached a copy of the public authorities' comments for your information. Please note that the Planning Secretary may modify these requirements at any time.

The Department is yet to receive comments from the City of Canterbury-Bankstown (Council). The Department of Planning, Industry and Environment, Biodiversity Conservation Division is currently reviewing the request to waiver the requirements to prepare a Biodiversity Assessment Report. The Department will forward you the above agency comments, once received.

If you do not submit a Development Application (DA) and EIS within 2 years, you must consult further with the Planning Secretary in relation to the preparation of the EIS.

Prior to exhibiting the EIS, the Department will review the document in consultation with relevant authorities to determine if it addresses the requirements in Schedule 2 of the *Environmental Planning and Assessment Regulation 2000*. You will be required to submit an amended EIS if it does not adequately address the requirements.

The Department wishes to emphasise the importance of effective and genuine community consultation where a comprehensive open and transparent community consultation engagement process must be undertaken during the preparation of the EIS. This process must ensure that the community is provided with a good understanding of what is proposed, description of any potential impacts and they are actively engaged in issues of concern to them.

Please contact the Department at least two weeks before you propose to submit your DA and EIS. This will enable the Department to:

- confirm the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and
- determine the number of copies (hard-copy) of the DA and EIS that will be required for reviewing purposes.

If your development is likely to have a significant impact on matters of National Environmental Significance, it will require an approval under the Commonwealth *Environment Protection and*

Biodiversity Conservation Act 1999 (EPBC Act). This approval would be in addition to any approvals required under NSW legislation and it is your responsibility to contact the Commonwealth Department of the Environment and Energy to determine if an approval under the EPBC Act is required (http://www.environment.gov.au or 6274 1111).

If you have any questions, please contact Susan Fox on 92746466 at susan.fox@planning.nsw.gov.au.

Yours sincerely,

Chris Ritchie
Director
Industry Assessments

as delegate for the Planning Secretary

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979* Schedule 2 of the Environmental Planning and Assessment Regulation 2000

Application Number	SSD-10450
Project Name	Padstow Resource Recovery Facility
Development	The expansion of an existing resource recovery facility (which currently processes and stores up to 80,000 tonnes per annum (tpa) of construction and demolition waste) to include a liquid waste treatment plant to process up to 250,000 tpa of drilling mud with a maximum storage capacity of 120,000 tonnes of liquid waste at any one time.
Location	81-87 Gow Street, Padstow; Lot A DP103140 within Canterbury-Bankstown Local Government Area
Applicant	GOW STREET RECYCLING CENTRE PTY. LTD.
Date of Issue	
General Requirements	The environmental impact statement (EIS) for the development must meet the for and content requirements in clauses 6 and 7 of Schedule 2 of the Environmental Planning and Assessment Regulation 2000 (the Regulation). In addition, the EIS must include: · a detailed description of the development, including: - the need for the proposed development - justification for the proposed development - likely staging of the development - likely interactions between the development and existing, approved and - proposed operations on-site and within the vicinity of the site - plans of any proposed building works. · consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments · a risk assessment of the potential environmental impacts of the development identifying the key issues for further assessment · a detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: - a description of the existing environment, using sufficient baseline data - an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant

	guidelines, policies, plans and statutes - a description of the measures that would be implemented to avoid, minimise mitigate and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/ or contingency plans to manage significant risks to the environment. · a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. The EIS must also be accompanied by a report from a qualified quantity surveyor providing: · a detailed calculation of the capital investment value (CIV) of the development as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000, including details of all components of the CIV · an estimate of the jobs that will be created by the development during the construction and operational phases of the development · certification the information provided is accurate at the date of preparation
Key issues	The EIS must address the following specific matters: · **Community and Stakeholder Engagement – including:** - a community and stakeholder participation strategy which identifies who in the community has been consulted and a justification for their selection, other stakeholders consulted and the form(s) of consultation, including justification for the approach - a report on the results of the implementation of the strategy including issues raised by the community and surrounding landowners and occupiers - details of how issues raised during consultation have been addressed and whether they have resulted in changes to the development - details of the proposed approach to future community and stakeholder engagement based on the results of consultation. · **Suitability of the Site – including:** - details of the development consents and approved plans for the existing development, including for all structures, plant and equipment - a detailed justification that the site can accommodate the development - a detailed justification that the site can accommodate the proposed processing capacity and storage of liquid waste combined with the existing storage of general solid waste (construction and demolition waste). · **Waste Management – including:** - a description of all waste streams that would be accepted at the site including the maximum weekly, monthly and annual throughputs - details of the source of the waste streams to justify the need for the proposed processing capacity

- a description of waste processing operations, including a description of the technology to be installed, resource outputs, and the quality control measures that would be implemented
- details of the existing operations including the storage and processing of construction and demolition waste
- details of the interaction between the existing operations and the proposed operations
- details of how waste would be stored and handled on site, and transported to and from the site including details of how the receipt of non-conforming waste would be dealt with
- details of the development's waste tracking system for incoming and outgoing waste
- details of the waste management strategy for construction and ongoing operational waste generated
- 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.

· **Air Quality and Odour – including:**

- a quantitative assessment of the potential air quality and odour impacts of the development in accordance with relevant NSW Environment Protection Authority (EPA) guidelines
- the details of buildings and air handling systems and strong justification for any material handling, processing or stockpiling external to a building
- a greenhouse gas emission assessment
- details of proposed mitigation, management and monitoring measures.

· **Traffic and Access – including:**

- details of all traffic types and volumes likely to be generated during construction and operation, including a description of haul routes. Traffic flows are to be shown diagrammatically to a level of detail sufficient for easy interpretation
- an assessment of the predicted impacts of traffic on road safety and the capacity of the road network, including consideration of cumulative traffic
- impacts at key intersections, using SIDRA or similar traffic modelling
- plans demonstrating how all construction and operation vehicles, including those awaiting loading, unloading or servicing can be accommodated on the site to avoid queuing in the street network
- detailed plans of the proposed site access and parking provision on site in accordance with the relevant Australian Standards
- swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site
- plans of any proposed road upgrades, infrastructure works, or new roads

required for the development.

- **Soil and Water – including:**
  - an assessment of potential impacts to soil and water resources, topography, hydrology, groundwater, drainage lines, watercourses on or nearby the site, including mapping and description of existing background conditions and cumulative impacts
  - a detailed site water balance including identification of water requirements for the life of the development, measures that would be implemented to ensure an adequate and secure water supply is available for the development and a detailed description of the measures to minimise the water use at the site
  - characterisation of water quality at the point of discharge to surface and/or groundwater against the relevant water quality criteria (including details of the contaminants of concern that may leach from the waste into the wastewater and proposed mitigation measures to manage any impacts to receiving water)
  - details of stormwater/wastewater management system including the capacity of onsite detention system(s), onsite sewage management and measures to treat, reuse or dispose of water
  - detailed flooding assessment
  - a description of erosion and sediment controls.
- **Noise and Vibration – including:**
  - a quantitative assessment of potential construction, operational and traffic noise and vibration impacts, including cumulative impacts, in accordance with relevant NSW Environment Protection Authority guidelines
  - details and justification of the proposed noise mitigation, management and monitoring measures.
- **Fire and Incident Management – including:**
  - detailed information regarding the proposed structures addressing relevant levels of compliance with Volume One of the National Construction Code (NCC)
  - details of how stockpile storage will be limited in size and volume and arranged to minimise the likelihood of the fire spreading
  - technical information on the environmental protection equipment to be installed on the premises such as air, water and noise controls, spill clean-up equipment and fire (including location of fire hydrants and water flow rates at the hydrant) management and containment measures 5
  - consideration of consistency with *NSW Fire & Rescue Fire Safety Guideline Fire Safety in Waste Facilities* (February 2020)
  - details regarding the site's ability to contain appropriate volume of contaminated fire water run-off.
- **Biodiversity** – including an assessment of the biodiversity impacts in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR) or a waiver for the

	preparation of a BDAR under the *Biodiversity Conservation Act 2016.* · **Heritage and Aboriginal Cultural Heritage** – including an assessment of Aboriginal cultural heritage values that exist across the development documented in an Aboriginal Cultural Heritage Assessment Report (ACHAR) or an assessment of Aboriginal cultural heritage issues which satisfies the requirements of the *National Parks and Wildlife Act 1974* (NSW). · **Hazard and Risk** – including preliminary hazard analysis (PHA) adopting a Level 1 qualitative risk analysis as per the Department's Multi-level Risk Assessment and prepared in accordance with the Department's *Hazardous Industry Planning 4 Advisory Paper No. 6, 'Hazard Analysis'*. The PHA must verify potential dust explosion hazards within the building, identify any additional hazards arising from the SSD, verify the existing safeguards and identify any additional safeguards to control the risks from the facility as a whole. · **Contamination** – including an assessment of site suitability under the provisions of State Environmental Planning Policy No. 55 – Remediation of Land. · **Cumulative Impacts –** particularly in relation to air, noise, and traffic associated with other nearby industrial and commercial operations**.**
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the *Environmental Planning and Assessment Regulation 2000*. You should provide these as part of the EIS rather than as separate documents.
Consultation	During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with: · City of Canterbury-Bankstown · NSW Environment Protection Authority · Department of Planning, Industry and Environment, specifically: - Environment, Energy and Science Group, including the Climate Change and Sustainability Branch - Water Group - Natural Resources Access Regulator · NSW Fire and Rescue · Sydney Water · Ausgrid · Transport for NSW (including the former Roads and Maritime Services)

	· Surrounding residents and stakeholders The EIS must describe the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided. You must also consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. The EIS must describe the consultation process and the issues raised and identify where the design of the infrastructure has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.
Further consultation after 2 years	If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, you must consult further with the Planning Secretary in relation to the preparation of the EIS.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.

ATTACHMENT 1

The following guidelines may assist in the preparation of the environmental impact statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal. Many of these documents can be found on the following websites:

http://www.planning.nsw.gov.au

https://www.australia.gov.au/about-government/publications

Plans and Documents

The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the Environmental Planning and Assessment Regulation 2000. Provide these as part of the EIS rather than as separate documents.

In addition, the EIS must include the following:

1. An existing site survey plan drawn at an appropriate scale illustrating:

   - the location of the land, boundary measurements, area (sqm) and north point
   - the existing levels of the land in relation to buildings and roads
   - location and height of existing structures on the site
   - location and height of adjacent buildings and private open space
   - all levels to be to Australian Height Datum (AHD).

2. Locality/context plan drawn at an appropriate scale should be submitted indicating:

   - significant local features such as heritage items
   - the location and uses of existing buildings, shopping and employment areas
   - traffic and road patterns, pedestrian routes and public transport nodes.

3. Drawings at an appropriate scale illustrating:

   - detailed plans, sections and elevations of the exist

Documents to be submitted

Documents to submit include:

- - 1 electronic copy of all the documents and plans for review prior to exhibition ·
- - Other copies as determined by the Department once the development application is lodged.

Policies, Guidelines & Plans

Aspect	Policy /Methodology
Waste	
	Waste Avoidance and Resource Recovery Strategy 2010-2021 (EPA)
	The National Waste Policy: Less Waste More Resources 2009
	Waste Classification Guidelines (DECC)
	Environmental guidelines: Composting and Related Organics Processing Facilities (DEC)
	Environmental guidelines: Use and Disposal of Biosolid Products (NSW EPA)
	Composts, soil conditioners and mulches (Standards Australia, AS 4454)
	Standards for Managing Construction Waste in NSW (EPA 2018)
Air Quality	
	Protection of the Environment Operations (Clean Air) Regulation 2010
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
Odour	
	Technical Framework: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
	Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
Greenhouse Gas	
	The National Greenhouse and Energy Reporting (Measurement) Technical Guidelines (NGER Technical Guidelines)
	Guidelines for Energy Savings Action Plans (DEUS 2005)
Transport	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
	NSW Long Term Transport Master Plan (TfNSW 2012)
	Road Design Guide (RTA)
Noise	
	Noise Policy for Industry (EPA 2017)

	NSW Road Noise Policy (EPA, 2011)
	Environmental Criteria for Road Traffic Noise (NSW EPA)
	Interim Construction Noise Guideline (2009)
	Assessing Vibration: A Technical Guideline (DEC 2006)
	Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC 1990)
Soil and Water	
Soil	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)
	Draft Guidelines for the Assessment & Management of Groundwater Contamination (DECC)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (DOP)
	Acid Sulfate Soils Manual (Stone et al. 1998)
Surface Water	National Water Quality Management Strategy: Water quality management - an outline of the policies (ANZECC/ARMCANZ)
	NSW Guidelines for Controlled Activities on Waterfront Land (NOW, 2012)
	National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	NSW State Rivers and Estuaries Policy(1993)
	State Water Management Outcomes Plan
	NSW Government Water Quality and River Flow Environmental Objectives (DECC)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Managing Urban Stormwater: Soils & Construction (Landcom)

	Managing Urban Stormwater: Treatment Techniques (DECC)
	Managing Urban Stormwater: Source Control (DECC)
	Technical Guidelines: Bunding & Spill Management (DECC)
	NSW Floodplain Development Manual 2005
Groundwater	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	Australian Groundwater Modelling Guidelines (NWC, 2012)
	NSW State Groundwater Policy Framework Document (DLWC)
	NSW State Groundwater Quality Protection Policy(DLWC)
	NSW State Groundwater Dependent Ecosystems Policy (2002)
	NSW State Groundwater Quantity Management Policy (DLWC) Draft
	Guidelines for the Assessment and Management of Groundwater Contamination (DEC, 2007)
Hazards	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
	Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DUAP)
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
Biodiversity	
	Biodiversity Assessment Method (2017))
Heritage	
	Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011)
	Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)
	Draft Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation (Department of Planning, 2005)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS 4282)
	State Environmental Planning Policy No 64 - Advertising and Signage
Social	
	Social impact assessment guideline for State significant mining, petroleum production and extractive industry development (2017)

ATTACHMENT 2

Government Authority and Council Responses to Request for Key Issues

Our ref: DOC20/310867
Senders ref: SSD-10450

Ms Susan Fox

Planning and Assessment Group
Department of Planning, Industry & Environment
4PSQ, Level 17, 12 Darcy Street
PARRAMATTA NSW 2150

Dear Ms Fox

Subject: EES comments on Request for SEARs – Stage 1 - Padstow Resource Recovery Facility - Gow Street Recycling Centre – drilling mud dewatering facility - 81-87 Gow Street Padstow – SSD-10450

Thank you for your email of 17 April 2020 requesting advice in relation to this State Significant Development.

The Environment, Energy and Science Group (EES) has reviewed the Scoping Report and provides the following comments and recommendations in Attachment A.

Biodiversity and BDAR Waiver request

EES is currently reviewing the BDAR Waiver request for this SSD. Until EES has undertaken this review it is recommended the SEARs include the attach biodiversity requirements.

Flooding
EES recommends the SEARs include the attached EES standard flooding requirements.

Aboriginal Cultural Heritage
The Scoping Report notes a search of the NSW State Heritage Inventory found no Aboriginal places or items of heritage on, or within the vicinity of the site and that the site is fully concreted with no vegetation and therefore a full Aboriginal and Cultural Heritage Assessment is not considered required (Section 6.6, page 23). EES notes however that the proposed development may require excavation work (section 5.3.1.2, page 17). If the excavation is likely to disturb the ground surface it is recommended an Aboriginal cultural heritage assessment report is prepared. EES recommends the SEARs include the attached Aboriginal cultural heritage requirements.

Urban Tree Canopy and Landscaping
The Scoping report states the proposed development will not result in the removal of existing vegetation or a change to landscaping of the site (section 6.7, pages 24-25). If a landscape plan is required for this SSD, EES recommends the SEARs require that the plan:

- includes details on the native vegetation community (or communities) and native plant species that once occurred in this locality
- specifies that any landscaping will use a diversity of local provenance species (trees, shrubs and groundcovers) from the native vegetation community (or communities) that once occurred on the site to improve biodiversity
- includes a list of local provenance species (trees, shrubs and groundcovers) to be used in the site landscaping

- uses advanced sized trees, providing sufficient area/space to allow any planted trees to grow to maturity on the site.

If you have any questions about this advice, please do not hesitate to contact Janne Grose, Senior Conservation Planning Officer via email at janne.grose@environment.nsw.gov.au or on 8837 6017

Yours sincerely

05/05/20

Susan Harrison
Senior Team Leader Planning
Greater Sydney Branch
Environment, Energy and Science

Attachment A – EES group Environmental Assessment Requirements

Biodiversity
1. Biodiversity impacts related to the proposed development are to be assessed in accordance with Section 7.9 of the Biodiversity Conservation Act 2017 the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), *Biodiversity Conservation Regulation 2017* (s6.8) and Biodiversity Assessment Method, including an assessment of the impacts of the proposal (including an assessment of impacts prescribed by the regulations). 2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method. 3. The BDAR must include details of the measures proposed to address the offset obligation as follows; • The total number and classes of biodiversity credits required to be retired for the development/project; • The number and classes of like-for-like biodiversity credits proposed to be retired; • The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules; • Any proposal to fund a biodiversity conservation action; • Any proposal to conduct ecological rehabilitation (if a mining project); • Any proposal to make a payment to the Biodiversity Conservation Fund. If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits. **4.** The BDAR must be prepared by a person accredited 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*.
Aboriginal cultural heritage
5. 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 Investigations of Aboriginal Objects in NSW (OEH

2010), and guided by the Guide to investigating, assessing and reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011)

6. Consultation with Aboriginal people must be undertaken and documented in accordance with the Aboriginal cultural heritage consultation requirements for proponents 2010 (DECCW). The significance of cultural heritage values for Aboriginal people who have a cultural association with the land must be documented in the ACHAR.
7. 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 ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH.

Please note that due diligence is not an appropriate assessment for a major project and an Aboriginal cultural heritage assessment report must be prepared.

Water and soils

8. The EIS must map the following features relevant to water and soils including:
    a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
    b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).
    c. Wetlands as described in s4.2 of the Biodiversity Assessment Method.
    d. Groundwater.
    e. Groundwater dependent ecosystems
    f. Proposed intake and discharge locations
9. The EIS must describe background conditions for any water resource likely to be affected by the development, including:
    a. Existing surface and groundwater.
    b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
    c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
    d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.
    e. Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions http://www.environment.nsw.gov.au/research-and-

publications/publications-search/risk-based-framework-for-considering-waterway-health-outcomes-in-strategic-land-use-planning
10. The EIS must assess the impacts of the development on water quality, including: a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction. b. Identification of proposed monitoring of water quality. c. Consistency with any relevant certified Coastal Management Program (or Coastal Zone Management Plan)
11. The EIS must assess the impact of the development on hydrology, including: a. Water balance including quantity, quality and source. b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas. c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems. d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches). e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water. f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options. g. Identification of proposed monitoring of hydrological attributes.

Flooding and coastal hazards

12. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
    a. Flood prone land.
    b. Flood planning area, the area below the flood planning level.
    c. Hydraulic categorisation (floodways and flood storage areas)
    d. Flood Hazard.
13. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 5% Annual Exceedance Probability (AEP), 1% AEP, flood levels and the probable maximum flood, or an equivalent extreme event.
14. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:
    a. Current flood behaviour for a range of design events as identified in 14 above. This includes the 0.5% and 0.2% AEP year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.
15. Modelling in the EIS must consider and document:
    a. Existing council flood studies in the area and examine consistency to the flood behaviour documented in these studies.
    b. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood, or an equivalent extreme flood.
    c. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazard categories and hydraulic categories
    d. Relevant provisions of the NSW Floodplain Development Manual 2005.
16. The EIS must assess the impacts on the proposed development on flood behaviour, including:
    a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
    b. Consistency with Council floodplain risk management plans.
    c. Consistency with any Rural Floodplain Management Plans.
    d. Compatibility with the flood hazard of the land.
    e. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
    f. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.

g. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.

h. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the NSW SES and Council.

i. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the NSW SES and Council.

j. Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the NSW SES

k. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

(END OF SUBMISSION)

OUT20/4337

Susan Fox
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

susan.fox@planning.nsw.gov.au

Dear Ms Fox

Padstow Resource Recovery Facility (SSD-10450)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 17 April 2020 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. Please note Crown Lands, the Department of Primary Industries (DPI) – Fisheries and DPI - Agriculture all now provide a separate response directly to you.

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 – NRAR & Water can be sent by email to: landuse.enquiries@dpi.nsw.gov.au.

Any further referrals to (a) Crown Lands; (b) DPI – Fisheries; and (c) DPI – Agriculture can be sent by email to: (a) lands.ministerials@industry.nsw.gov.au; (b) ahp.central@dpi.nsw.gov.au; and (c) landuse.ag@dpi.nsw.gov.au respectively.

Yours sincerely

Alistair Drew
Project Officer, Assessments
Water – Strategic Relations
17 April 2020

Susan Fox
Senior Environmental Assessment Officer
Industry Assessments
Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Notice Number	1594079
Date	20-Apr-2020

RE: Proposal for construction and operation of drilling mud dewatering facility at exisiting recycling centre - 81-87 Gow Streeet, Padstow - SSD-10450

I refer to your request for the Environment Protection Authority's (EPA) requirements for the environmental assessment (EA) in regard to the above proposal received by EPA on 17 April 2020.

Gow Street Recycling Centre (the proponent) is seeking a modification to the existing operation of the waste and recycling facility located at 81-87 Gow Street, Padstow (the facility). The proponent stated that the facility is currently approved to handle 80,000 tonnes per annum (tpa) and a maximum storage quantity of 7,300 tonnes at any one time of construction and demolition waste including asphalt waste.

The proponent is seeking to expand the operational activity at the facility to include establishment of a drilling mud processing plant, with capacity of 250,000 tpa and a storage maximum of 120,000 of liquid waste at the facility at any one time. The proponent is also seeking increase the operation hours to 24/7.

The EPA has considered the details of the proposal as provided by Department of Planning Industry and Environment (DPIE) and has identified the information it requires to issue its general terms of approval in Attachment A & B. In summary, the EPA's key information requirements for the proposal include an adequate assessment of:

1. Air quality and odour;
2. Noise and vibration;
3. Stormwater and leachate management; and
4. Waste management.

In carrying out the assessment, the proponent should refer to the relevant guidelines as listed in Attachment C and any relevant industry codes of practice and best practice management guidelines.

Please note that the EPA has not considered Aboriginal cultural heritage, biodiversity or built form/urban design requirements as these are the purview of the Environment, Energy and Science Group (EES) within the Department of Planning, Industry and Environment.

The proponent should be made aware that any commitments made in the EA may be formalised as approval conditions and may also be placed as formal licence conditions.

The proponent should be made aware that the EPA requires that all waste and materials are stored and processed inside an enclosed building. All waste handling activities, including receival, sorting, processing, sampling, quarantine, storage and loading must be conducted within an enclosed building. No waste, including finished products, may be stored outside. Any external haulage areas or roads must be sealed hardstand. Any unused external surfaces must be sealed hardstand or vegetated (refer to Attachment A).

The proponent should be made aware that, consistent with provisions under Part 9.4 of the *Protection of the Environment Operations Act 1997* ("the Act") the EPA may require the provision of a financial assurance and/or assurances. The amount and form of the assurance(s) would be determined by the EPA and required as a condition of an Environment Protection Licence ("EPL").

In addition, 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 Act.

Yours sincerely

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Lara Barrington

Unit Head

Sydney Waste Compliance

(by Delegation)

Attachment A - Site Specific Requirement for the proposal

Recycling waste facility - 81-87 Gow Streeet, Padstow - SSD-10450

1. The Facility must be enclosed – The EPA requires that all waste and materials are stored and processed inside an enclosed building. All waste handling activities, including receival, sorting, processing, sampling, quarantine, storage and loading must be conducted within an enclosed building.

No waste, including finished products, may be stored outside. Any external haulage areas or roads must be sealed hardstand. Any unused external surfaces must be sealed hardstand or vegetated.

2. Waste Management – the environmental impact statement (EIS) must include a detailed assessment of the waste management processes to be undertaken at the Premises. This includes but is not limited to:

- details of the sources of waste to be received at the Premises;
- details of the types and quantities of each type of waste to be received at the Premises;
- details of the maximum volume of waste to be stored on the Premises at any one time;
- details of the maximum annual throughput of waste for be processed at the Premises;
- a description of waste processing procedures for each waste type;
- a description of 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;
- a detailed site plan(s) identifying areas for:
  - haulage;
  - waste receival, processing, storage and loading (for each waste type)
  - quarantine;
  - infrastructure for environmental controls including dust, noise, water and wheelwash;
  - weighbridge;
  - site boundaries;
  - stormwater drainage areas; and
  - unused stabilised areas;
- details of the type and quantities of materials to be produced and their intended fate;
- details of any materials produced under a Resource Recovery Order, and the controls in place for meeting the conditions of that order;
- a description of procedures for dealing with non-conforming waste (i.e. waste not permitted to be received at the Premises).

3. Water Management – the EPA expects that assessment of the impacts to water be included in the application. This must include as a minimum characterisation of any proposed discharges from the premises (both volume and quality), assessment of the potential impacts from these discharges and proposed mitigation measures to manage any impacts. Discharges includes, but are not limited to stormwater (contaminated and uncontaminated), and waste water (such as from dewatering).

Please refer to Attachment B for detail of what is to be included in assessment of water impacts.

The EPA would expect that any buildings are constructed to exclude all stormwater and that internal surfaces be graded inwards to contain any contaminated water (being any water that has come into contact with waste). The EPA notes that even where all waste storage and processing is conducted within an

enclosed building, waste may be tracked on to external surfaces leading to the generation of contaminated water. Any external areas where waste vehicles travel or wait for loading/unloading must drain to a stormwater quality treatment device sufficient to remove any contaminants, both solid and dissolved, prior to discharge offsite.

Please consider including the following:

4. Air quality - The EIS should include an air quality assessment that identifies all potential air emission from the Premises. The Applicant must assess the impact of any discharges and demonstrate effective control of all identified air emissions from the Premises. Please refer to Attachment B for detals for what is to be included in the air quality impact assessment.

5. Noise and Vibration - The Applicant must assess noise impacts and demonstrate effective controls for managing noise impacts, including from traffic, at all receptors. Please refer to Attachment B for details of what is to be included in the noise and vibration impact assessment.

6. Fire Safety Guidelines - Fire safety in waste facilities - The Applicant should incorporate the Fire and Rescue NSW fire safety guidelines within the design and ongoing management of the Premises (more information available at
https://www.fire.nsw.gov.au/gallery/files/pdf/guidelines/guidelines_fire_safety_in_waste_facilities.pdf

7. Occupier of the Premises - The EPA can only issue an environment protection licence to a person or entity who is the lawful occupier of a Premises. The EPA understands that the Applicant is not the same entity that owns the land. The EPA requires evidence that the Applicant is the lawful occupier of the Premises, such as a copy of any lease agreement.

Changes to the Protection of the Environment Operations (Waste) Regulation
The Applicant should be aware that changes to the Protection of the Environment Operations (Waste) Regulation commenced on 16 November 2018, which legislates "Standards for managing construction waste in NSW"
(https://www.epa.nsw.gov.au/publications/managewaste/18p1270-standards-for-managing-construction-waste-in-nsw).
These standards must be complied with from 16 May 2019, regardless of when approval was given for the facility. The EPA encourages the Applicant to be fully aware of these legislative requirements and ensure their operations are compliant.

ATTACHMENT B: EIS REQUIREMENTS FOR

Recycling waste facility - 81-87 Gow Streeet, Padstow - SSD-10450

How to use these requirements

The EPA requirements have been structured in accordance with the DIPNR EIS Guidelines, as follows. It is suggested that the EIS follow the same structure:

A. Executive summary

B. The proposal

C. The location

D. Identification and prioritisation of issues

E. The environmental issues

F. List of approvals and licences

G. Compilation of mitigation measures

H. Justification for the proposal

A Executive summary

The executive summary should include a brief discussion of the extent to which the proposal achieves identified environmental outcomes.

B The proposal

1. Objectives of the proposal

- The objectives of the proposal should be clearly stated and refer to:
  a) the size and type of the operation, the nature of the processes and the products, by-products and wastes produced;
  b) a life cycle approach to the production, use or disposal of products;
  c) the anticipated level of performance in meeting required environmental standards and cleaner production principles;
  d) the staging and timing of the proposal and any plans for future expansion;
  e) the proposal's relationship to any other industry or facility.

2. Description of the proposal

General

- Outline the production process including:
  a) the environmental "mass balance" for the process – quantify in-flow and out-flow of materials, any points of discharge to the environment and their respective destinations (sewer, stormwater, atmosphere, recycling, landfill etc);
  b) any life-cycle strategies for the products.
- Outline cleaner production actions, including:
  a) measures to minimise waste (typically through addressing source reduction);
  b) proposals for use or recycling of by-products;
  c) proposed disposal methods for solid and liquid waste;
  d) air management systems including all potential sources of air emissions, proposals to re-use or treat emissions, emission levels relative to relevant standards in regulations, discharge points;
  e) water management system including all potential sources of water pollution, proposals for re-use, treatment etc, emission levels of any wastewater discharged, discharge points, summary of options explored to avoid a discharge, reduce its frequency or reduce its impacts, and rationale for selection of option to discharge;
  f) soil contamination treatment and prevention systems.
- Outline construction works including:
  a) actions to address any existing soil contamination;
  b) any earthworks or site clearing; re-use and disposal of cleared material (including use of spoil on-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.

- Include a site diagram showing the site layout and location of environmental controls.

Air

- Identify all sources or potential sources of air emissions from the development.

  Note: emissions can be classed as either:

  - *point (e.g. emissions from stack or vent); or*
  - *fugitive (from wind erosion, leakages or spillages, associated with loading or unloading, conveyors, storage facilities, plant and yard operation, vehicle movements (dust from road, exhausts, loss from load), land clearing and construction works).*

- Provide details of the project that are essential for predicting and assessing air impacts including:

  a) the quantities and physio-chemical parameters (e.g. concentration, moisture content, bulk density, particle sizes etc) of materials to be used, transported, produced or stored;

  b) an outline of procedures for handling, transport, production and storage;

  c) the management of solid, liquid and gaseous waste streams with potential to generate emissions to air.

Noise and vibration

- Identify all noise sources or potential sources from the development (including both construction and operation phases). Detail all potentially noisy activities including ancillary activities such as transport of goods and raw materials.
- Specify the times of operation for all phases of the development and for all noise producing activities.
- For projects with a significant potential traffic noise impact provide details of road alignment (include gradients, road surface, topography, bridges, culverts etc), and land use along the proposed road and measurement locations – diagrams should be to a scale sufficient to delineate individual residential blocks.

Water

- Provide details of the project that are essential for predicting and assessing impacts to waters including:

  a) the quantity and physio-chemical properties of all potential water pollutants and the risks they pose to the environment and human health, including the risks they pose to Water Quality Objectives in the ambient waters (as defined on http://www.environment.nsw.gov.au/ieo/index.htm, using technical criteria derived from *the Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, ANZECC 2000);

  b) the management of discharges with potential for water impacts;

  c) drainage works and associated infrastructure; land-forming and excavations; working capacity of structures; and water resource requirements of the proposal.

- Outline site layout, demonstrating efforts to avoid proximity to water resources (especially for activities with significant potential impacts e.g. effluent ponds) and showing potential areas of modification of contours, drainage etc.
- Outline how total water cycle considerations are to be addressed showing total water balances for the development (with the objective of minimising demands and impacts on water resources). Include 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.

Waste and chemicals

Provide details of the quantity and type of both liquid waste and non-liquid waste generated, handled, processed or disposed of at the premises. Waste must be classified according to the EPA's *Waste Classification Guidelines 2014 (as amended from time to time)*

- Provide details of liquid waste and non-liquid waste management at the facility, including:
  a) the transportation, assessment and handling of waste arriving at or generated at the site;
  b) any stockpiling of wastes or recovered materials at the site;
  c) any waste processing related to the facility, including reuse, recycling, reprocessing (including composting) or treatment both on- and off-site;
  d) the method for disposing of all wastes or recovered materials at the facility;
  e) the emissions arising from the handling, storage, processing and reprocessing of waste at the facility;
  f) the proposed controls for managing the environmental impacts of these activities.
- Provide details of spoil disposal with particular attention to:
  a) the quantity of spoil material likely to be generated;
  b) proposed strategies for the handling, stockpiling, reuse/recycling and disposal of spoil;
  c) the need to maximise reuse of spoil material in the construction industry;
  d) identification of the history of spoil material and whether there is any likelihood of contaminated material, and if so, measures for the management of any contaminated material;
  e) designation of transportation routes for transport of spoil.
- Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes.
- Provide details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.
- Reference should be made to the guidelines: EPA's *Waste Classification Guidelines 2014 (as amended from time to time)*

ESD

- Demonstrate that the planning process and any subsequent development incorporates objectives and mechanisms for achieving ESD, including:
  a) an assessment of a range of options available for use of the resource, including the benefits of each option to future generations;
  b) proper valuation and pricing of environmental resources;
  c) identification of who will bear the environmental costs of the proposal.

3. Rehabilitation

- Outline considerations of site maintenance, and proposed plans for the final condition of the site (ensuring its suitability for future uses).

4. Consideration of alternatives and justification for the proposal

- Consider the environmental consequences of adopting alternatives, including alternative:
  a) sites and site layouts;
  b) access modes and routes;
  c) materials handling and production processes;
  d) waste and water management;
  e) impact mitigation measures;
  f) energy sources.
- Selection of the preferred option should be justified in terms of:
  a) ability to satisfy the objectives of the proposal;
  b) relative environmental and other costs of each alternative;
  c) acceptability of environmental impacts and contribution to identified environmental objectives;
  d) acceptability of any environmental risks or uncertainties;
  e) reliability of proposed environmental impact mitigation measures;
  f) efficient use (including maximising re-use) of land, raw materials, energy and other resources.

C The location

1. General

- Provide an overview of the affected environment to place the proposal in its local and regional environmental context including:
  a) meteorological data (e.g. rainfall, temperature and evaporation, wind speed and direction);
  b) topography (landform element, slope type, gradient and length);
  c) surrounding land uses (potential synergies and conflicts);
  d) geomorphology (rates of landform change and current erosion and deposition processes);
  e) soil types and properties (including erodibility, engineering and structural properties, dispersibility, permeability, presence of acid sulfate soils and potential acid sulfate soils);
  f) ecological information (water system habitat, vegetation, fauna);
  g) availability of services and the accessibility of the site for passenger and freight transport.

2. Air

- Describe the topography and surrounding land uses. Provide details of the exact locations of dwellings, schools and hospitals. Where appropriate provide a perspective view of the study area such as the terrain file used in dispersion models.
- Describe surrounding buildings that may effect plume dispersion.
- Provide and analyse site representative data on following meteorological parameters:
  a) temperature and humidity;
  b) rainfall, evaporation and cloud cover;
  c) wind speed and direction;
  d) atmospheric stability class;
  e) mixing height (the height that emissions will be ultimately mixed in the atmosphere);
  f) katabatic air drainage;
  g) air re-circulation.

3. Noise and vibration

- Identify any noise sensitive locations likely to be affected by activities at the site, such as residential properties, schools, churches, and hospitals. Typically the location of any noise sensitive locations in relation to the site should be included on a map of the locality.
- Identify the land use zoning of the site and the immediate vicinity and the potentially affected areas.

4. Water

- Describe the catchment including proximity of the development to any waterways and provide an assessment of their sensitivity/significance from a public health, ecological and/or economic perspective. The Water Quality and River Flow Objectives on the website: http://www.environment.nsw.gov.au/ieo/index.htm should be used to identify the agreed environmental values and human uses for any affected waterways. This will help with the description of the local and regional area.

5. Soil Contamination Issues

- Provide details of site history – if earthworks are proposed, this needs to be considered with regard to possible soil contamination, for example if the site was previously a landfill site or if irrigation of effluent has occurred.

D Identification and prioritisation of issues / scoping of impact assessment

- Provide an overview of the methodology used to identify and prioritise issues. The methodology should take into account:
  a) relevant NSW government guidelines;
  b) industry guidelines;
  c) EISs for similar projects;
  d) relevant research and reference material;
  e) relevant preliminary studies or reports for the proposal;
  f) consultation with stakeholders.
- Provide a summary of the outcomes of the process including:
  a) all issues identified including local, regional and global impacts (e.g. increased/ decreased greenhouse emissions);
  b) key issues which will require a full analysis (including comprehensive baseline assessment);
  c) issues not needing full analysis though they may be addressed in the mitigation strategy;
  d) justification for the level of analysis proposed (the capacity of the proposal to give rise to high concentrations of pollution compared with the ambient environment or environmental outcomes is an important factor in setting the level of assessment).

E The environmental issues

1. General

- The potential impacts identified in the scoping study need to be assessed to determine their significance, particularly in terms of achieving environmental outcomes, and minimising environmental pollution.
- Identify gaps in information and data relevant to significant impacts of the proposal and any actions proposed to fill those information gaps so as to enable development of appropriate management and mitigation measures. This is in accordance with ESD requirements.

Note: The level of detail should match the level of importance of the issue in decision making which is dependent on the environmental risk.

Describe baseline conditions

- Provide a description of existing environmental conditions for any potential impacts.

Assess impacts

- For any potential impacts relevant for the assessment of the proposal provide a detailed analysis of the impacts of the proposal on the environment including the cumulative impact of the proposal on the receiving environment especially where there are sensitive receivers.
- Describe the methodology used and assumptions made in undertaking this analysis (including any modelling or monitoring undertaken) and indicate the level of confidence in the predicted outcomes and the resilience of the environment to cope with the predicted impacts.
- The analysis should also make linkages between different areas of assessment where necessary to enable a full assessment of environmental impacts e.g. assessment of impacts on air quality will often need to draw on the analysis of traffic, health, social, soil and/or ecological systems impacts; etc.
- The assessment needs to consider impacts at all phases of the project cycle including: exploration (if relevant or significant), construction, routine operation, start-up operations, upset operations and decommissioning if relevant.
- The level of assessment should be commensurate with the risk to the environment.

Describe management and mitigation measures

- Describe any mitigation measures and management options proposed to prevent, control, abate or mitigate identified environmental impacts associated with the proposal 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.
- Proponents are expected to implement a 'reasonable level of performance' to minimise environmental impacts. The proponent must indicate how the proposal meets reasonable levels of performance. For example, reference technology based criteria if available, or identify good practice for this type of activity or development. A 'reasonable level of performance' involves adopting and implementing technology and

management practices to achieve certain pollutant emissions levels in economically viable operations. Technology-based criteria evolve gradually over time as technologies and practices change.

- Use environmental impacts as key criteria in selecting between alternative sites, designs and technologies, and to avoid options having the highest environmental impacts.
- Outline any proposed approach (such as an Environmental Management Plan) that will demonstrate how commitments made in the EIS will be implemented. Areas that should be described include:

  a) operational procedures to manage environmental impacts;

  b) monitoring procedures;

  c) training programs;

  d) community consultation;

  e) complaint mechanisms including site contacts;

  f) strategies to use monitoring information to improve performance;

  g) strategies to achieve acceptable environmental impacts and to respond in event of exceedences.

2. Air

Describe baseline conditions

- Provide a description of existing air quality and meteorology, using existing information and site representative ambient monitoring data.

Assess impacts

- Identify all pollutants of concern and estimate emissions by quantity (and size for particles), source and discharge point.
- Estimate the resulting ground level concentrations of all pollutants. Where necessary (e.g. potentially significant impacts and complex terrain effects), use an appropriate dispersion model to estimate ambient pollutant concentrations. Discuss choice of model and parameters with the EPA.
- Describe the effects and significance of pollutant concentration on the environment, human health, amenity and regional ambient air quality standards or goals.
- Describe the contribution that the development will make to regional and global pollution, particularly in sensitive locations.
- For potentially odorous emissions provide the emission rates in terms of odour units (determined by techniques compatible with EPA procedures). Use sampling and analysis techniques for individual or complex odours and for point or diffuse sources, as appropriate.

  Note: With dust and odour, it may be possible to use data from existing similar activities to generate emission rates.

- Reference should be made to relevant guidelines, including but not limited to *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (DEC, 2016)*; Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* (DEC, 2007)*; Assessment and Management of Odour from*

Stationary Sources in NSW (DEC, 2006)*; Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006); Load Calculation Protocol for use by holders of NSW Environment Protection Licences when calculating Assessable Pollutant Loads* (DECC, 2009).

Describe management and mitigation measures

- Outline specifications of pollution control equipment (including manufacturer's performance guarantees where available) and management protocols for both point and fugitive emissions. Where possible, this should include cleaner production processes.

3. Noise and vibration

Describe baseline conditions

- Determine the existing background (LA90) and ambient (LAeq) noise levels, as relevant, in accordance with the *NSW Noise Policy for Industry*.
- Determine the existing road traffic noise levels in accordance with the *NSW Road Noise Policy*, where road traffic noise impacts may occur.
- The noise impact assessment report should provide details of all monitoring of existing ambient noise levels including:
  a) details of equipment used for the measurements;
  b) a brief description of where the equipment was positioned;
  c) a statement justifying the choice of monitoring site(s), including the procedure used to choose the site(s), having regards to Fact Sheets A and B of the *NSW Noise Policy for Industry;*
  d) details of the exact location of the monitoring site and a description of land uses in surrounding areas;
  e) a description of the dominant and background noise sources at the site;
  f) day, evening and night assessment background levels for each day of the monitoring period;
  g) the final Rating Background Level (RBL) value;
  h) graphs of the measured noise levels for each day should be provided;
  i) a record of periods of affected data (due to adverse weather and extraneous noise), methods used to exclude invalid data and a statement indicating the need for any re-monitoring.

Assess impacts

- Determine the project noise trigger levels for the site. For each identified potentially affected receiver, this should include:
  a) determination of the project intrusive noise level for each identified potentially affected receiver;
  b) selection and justification of the appropriate amenity category for each identified potentially affected receiver;
  c) determination of the project amenity noise level for each receiver;

d) determination of the appropriate maximum noise level event assessment (sleep disturbance) trigger level.

- Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. Determine expected noise level and noise character likely to be generated from noise sources during:

  a) site establishment;

  b) construction;

  c) operational phases

  d) transport including traffic noise generated by the proposal;

  e) other services.

  Note: The noise impact assessment report should include noise source data for each source in 1/1 or 1/3 octave band frequencies including methods for references used to determine noise source levels. Noise source levels and characteristics can be sourced from direct measurement of similar activities or from literature (if full references are provided).

- Determine the noise levels likely to be received at the reasonably most affected location(s) (these may vary for different activities at each phase of the development).
- The noise impact assessment report should include:

  a) a plan showing the assumed location of each noise source for each prediction scenario;

  b) a list of the number and type of noise sources used in each prediction scenario to simulate all potential significant operating conditions on the site;

  c) any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers, etc;

  d) methods used to predict noise impacts including identification of any noise models used;

  e) the weather conditions considered for the noise predictions;

  f) the predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario;

  g) for developments where a significant level of noise impact is likely to occur, noise contours for the key prediction scenarios should be derived;

  h) an assessment of the need to include modification factors as detailed in Fact Sheet C of the *NSW Noise Policy for Industry*.

- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional feasible and reasonable mitigation measures.
- The noise impact assessment report should include details of any mitigation proposed including the attenuation that will be achieved and the revised noise impact predictions following mitigation:

  a) Where relevant noise/vibration levels cannot be met after application of all feasible and reasonable mitigation measures the residual level of noise impact needs to be quantified;

- For the assessment of existing and future traffic noise, details of data for the road should be included such as assumed traffic volume; percentage heavy vehicles by time of day; and details of the calculation process. These details should be consistent with any traffic study carried out in the EIS.

- Where blasting is intended an assessment in accordance with the *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration* (ANZECC, 1990) should be undertaken. The following details of the blast design should be included in the noise assessment:
  a) bench height, burden spacing, spacing burden ratio;
  b) blast hole diameter, inclination and spacing;
  c) type of explosive, maximum instantaneous charge, initiation, blast block size, blast frequency.

Describe management and mitigation measures

- Determine the most appropriate noise mitigation measures and expected noise reduction including both noise controls and management of impacts for both construction and operational noise. This will include selecting quiet equipment and construction methods, noise barriers or acoustic screens, location of stockpiles, temporary offices, compounds and vehicle routes, scheduling of activities, etc.
- For traffic noise impacts, provide a description of the ameliorative measures considered (if required), reasons for inclusion or exclusion, and procedures for calculation of noise levels including ameliorative measures. Also include, where necessary, a discussion of any potential problems associated with the proposed ameliorative measures, such as overshadowing effects from barriers. Appropriate ameliorative measures may include:
  a) use of alternative transportation modes, alternative routes, or other methods of avoiding the new road usage;
  b) control of traffic (eg: limiting times of access or speed limitations);
  c) resurfacing of the road using a quiet surface;
  d) use of (additional) noise barriers or bunds;
  e) treatment of the façade to reduce internal noise levels buildings where the night-time criteria is a major concern;
  f) more stringent limits for noise emission from vehicles (i.e. using specially designed ‘quite’ trucks and/or trucks to use air bag suspension;
  g) driver education;
  h) appropriate truck routes;
  i) limit usage of exhaust brakes;
  j) use of premium muffles on trucks;
  k) reducing speed limits for trucks;
  l) ongoing community liaison and monitoring of complaints;
  m) phasing in the increased road use.

4. Water

Describe baseline conditions

- Describe existing surface and groundwater quality – an assessment needs to be undertaken for any water resource likely to be affected by the proposal and for all conditions (e.g. a wet weather sampling program is needed if runoff events may cause impacts).

  Note: Methods of sampling and analysis need to conform with an accepted standard (e.g. Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC 2004) *or be approved and analyses undertaken by accredited laboratories).*

- Provide site drainage details and surface runoff yield.
- State the ambient Water Quality and River Flow Objectives for the receiving waters. These refer to the community's agreed environmental values and human uses endorsed by the Government as goals for the ambient waters. These environmental values are published on the website: http://www.environment.nsw.gov.au/ieo/index.htm. The EIS should state the environmental values listed for the catchment and waterway type relevant to your proposal. NB: A consolidated and approved list of environmental values are not available for groundwater resources. Where groundwater may be affected the EIS should identify appropriate groundwater environmental values and justify the choice.
- 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/publications/quality/nwqms-guidelines-4-vol1.html) (Note that, as at 2004, the NSW Water Quality Objectives booklets and website contain technical criteria derived from the 1992 version of the ANZECC Guidelines. The Water Quality Objectives remain as Government Policy, reflecting the community's environmental values and long-term goals, but the technical criteria are replaced by the more recent ANZECC 2000 Guidelines). NB: While specific guidelines for groundwater are not available, the ANCECC 2000 Guidelines endorse the application of the trigger values and decision trees as a tool to assess risk to environmental values in groundwater.
- State any locally specific objectives, criteria or targets, which have been endorsed by the government e.g. the Healthy Rivers Commission Inquiries or the NSW Salinity Strategy (DLWC, 2000) (http://www.environment.nsw.gov.au/salinity/government/nswstrategy.htm).
- Where site specific studies are proposed to revise the trigger values supporting the ambient Water Quality and River Flow Objectives, and the results are to be used for regulatory purposes (e.g. to assess whether a licensed discharge impacts on water quality objectives), then prior agreement from the EPA on the approach and study design must be obtained.
- Describe the state of the receiving waters and relate this to the relevant Water Quality and River Flow Objectives (i.e. are Water Quality and River Flow Objectives being achieved?). Proponents are generally only expected to source available data and information. However, proponents of large or high risk developments may be required to collect some ambient water quality / river flow / groundwater data to enable a suitable level of impact assessment. Issues to include in the description of the receiving waters could include:

  a) lake or estuary flushing characteristics;

  b) specific human uses (e.g. exact location of drinking water offtake);

  c) sensitive ecosystems or species conservation values;

  d) a description of the condition of the local catchment e.g. erosion levels, soils, vegetation cover, etc;

e) an outline of baseline groundwater information, including, but not restricted to, depth to watertable, flow direction and gradient, groundwater quality, reliance on groundwater by surrounding users and by the environment;

f) historic river flow data where available for the catchment.

Assess impacts

- No proposal should breach clause 120 of the *Protection of the Environment Operations Act* 1997 (i.e. pollution of waters is prohibited unless undertaken in accordance with relevant regulations).
- Identify and estimate the quantity of all pollutants that may be introduced into the water cycle by source and discharge point including residual discharges after mitigation measures are implemented.
- Include a rationale, along with relevant calculations, supporting the prediction of the discharges.
- Describe the effects and significance of any pollutant loads on the receiving environment. This should include impacts of residual discharges through modelling, monitoring or both, depending on the scale of the proposal. Determine changes to hydrology (including drainage patterns, surface runoff yield, flow regimes, wetland hydrologic regimes and groundwater).
- Describe water quality impacts resulting from changes to hydrologic flow regimes (such as nutrient enrichment or turbidity resulting from changes in frequency and magnitude of stream flow).
- Identify any potential impacts on quality or quantity of groundwater describing their source.
- Identify potential impacts associated with geomorphological activities with potential to increase surface water and sediment runoff or to reduce surface runoff and sediment transport. Also consider possible impacts such as bed lowering, bank lowering, instream siltation, floodplain erosion and floodplain siltation.
- Identify impacts associated with the disturbance of acid sulfate soils and potential acid sulfate soils.
- Containment of spills and leaks shall be in accordance with EPA's guidelines section 'Bunding and Spill Management' at http://www.epa.nsw.gov.au/mao/bundingspill.htm and the most recent versions of the Australian Standards referred to in the Guidelines. Containment should be designed for no-discharge.
- The significance of the impacts listed above should be predicted. When doing this it is important to predict the ambient water quality and river flow outcomes associated with the proposal and to demonstrate whether these are acceptable in terms of achieving protection of the Water Quality and River Flow Objectives. In particular the following questions should be answered:

  a) will the proposal protect Water Quality and River Flow Objectives where they are currently achieved in the ambient waters; and

  b) will the proposal contribute towards the achievement of Water Quality and River Flow Objectives over time, where they are not currently achieved in the ambient waters.

- Consult with the EPA as soon as possible if a mixing zone is proposed (a mixing zone could exist where effluent is discharged into a receiving water body, where the quality of the water being discharged does not immediately meet water quality objectives. The mixing zone could result in dilution, assimilation and decay of the effluent to allow water quality objectives to be met further downstream, at the edge of the mixing zone). The EPA will advise the proponent under what conditions a mixing zone will and will not be acceptable, as well as the information and modelling requirements for assessment.

  Note: The assessment of water quality impacts needs to be undertaken in a total catchment management context to provide a wide perspective on development impacts, in particular cumulative impacts.

- Where a licensed discharge is proposed, provide the rationale as to why it cannot be avoided through application of a reasonable level of performance, using available technology, management practice and industry guidelines.
- Where a licensed discharge is proposed, provide the rationale as to why it represents the best environmental outcome and what measures can be taken to reduce its environmental impact.
- Reference should be made to relevant guidelines, including but not limited to *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004), *Guidelines for Fresh and Marine Water Quality* ANZECC 2000), *Environmental Guidelines: Use of effluent by Irrigation* (DEC, 2004).

Describe management and mitigation measures

- Outline stormwater management to control pollutants at the source and contain them within the site. Also describe measures for maintaining and monitoring any stormwater controls.
- Outline erosion and sediment control measures directed at minimising disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment. Also include measures to maintain and monitor controls as well as rehabilitation strategies.
- Describe waste water treatment measures that are appropriate to the type and volume of waste water and are based on a hierarchy of avoiding generation of waste water; capturing all contaminated water (including stormwater) on the site; reusing/recycling waste water; and treating any unavoidable discharge from the site to meet specified water quality requirements.
- Outline pollution control measures relating to storage of materials, possibility of accidental spills (e.g. preparation of contingency plans), appropriate disposal methods, and generation of leachate.
- Describe hydrological impact mitigation measures including:
  a) site selection (avoiding sites prone to flooding and waterlogging, actively eroding or affected by deposition);
  b) minimising runoff;
  c) minimising reductions or modifications to flow regimes;
  d) avoiding modifications to groundwater.
- Describe groundwater impact mitigation measures including:
  a) site selection;
  b) retention of native vegetation and revegetation;
  c) artificial recharge;
  d) providing surface storages with impervious linings;
  e) monitoring program.
- Describe geomorphological impact mitigation measures including:
  a) site selection;
  b) erosion and sediment controls;
  c) minimising instream works;
  d) treating existing accelerated erosion and deposition;
  e) monitoring program.

- Any proposed monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in NSW* (DEC 2004).

5. Soils and contamination

Describe baseline conditions

- Provide any details (in addition to those provided in the location description - Section C) that are needed to describe the existing situation in terms of soil types and properties and soil contamination.

Assess impacts

- Identify any likely impacts resulting from the construction or operation of the proposal, including the likelihood of:
  a) disturbing any existing contaminated soil;
  b) contamination of soil by operation of the activity;
  c) subsidence or instability;
  d) soil erosion;
  e) disturbing acid sulfate or potential acid sulfate soils.
- Reference should be made to relevant guidelines including but not limited to *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites* (OEH, 2011)*; Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997* (EPA, 2015)>.

Describe management and mitigation measures

- Describe and assess the effectiveness or adequacy of any soil management and mitigation measures during construction and operation of the proposal including:
  a) erosion and sediment control measures;
  b) proposals for site remediation – see *Managing Land Contamination, Planning Guidelines SEPP 55 – Remediation of Land* (Department of Urban Affairs and Planning and Environment Protection Authority, 1998);
  c) proposals for the management of these soils – see *Acid Sulfate Soil Manual* (Acid Sulfate Soil Advisory Committee 1998) and *Acid Sulfate Soils Assessment Guidelines* (Acid Sulfate Soil Advisory Committee 1998).

6. Waste and chemicals

Describe baseline conditions

- Describe any existing waste or chemicals operations related to the proposal.

Assess impacts

- Assess the adequacy of proposed measures to minimise natural resource consumption and minimise impacts from the handling, transporting, storage, processing and reprocessing of waste and/or chemicals.
- Reference should be made to: the EPA's *Waste Classification Guidelines 2014 (as in force from time to time).*
- If the proposal is an energy from waste facility it must:
    - demonstrate that the proposed operation will comply with the NSW EPA's Energy from Waste Policy Statement;
    - describe of the classes and quantities of waste that would be thermally treated at the facility;
    - 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;
    - detail 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;
    - detail the location and size of stockpiles of unprocessed and processed recycled waste at the site;
    - demonstrate any waste material (e.g. biochar, ash) produced from the waste to energy 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 order and /or exemption by the EPA;
    - detail procedures for the management of other solid, liquid and gaseous waste streams;
    - describe how waste would be treated, stored, used, disposed and handled on site, and transported to and from the site, and the potential impacts associated with these issues, including current and future offsite waste disposal methods; and
    - 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*.

Describe management and mitigation measures

- Outline measures to minimise the consumption of natural resources.
- Outline measures to avoid the generation of waste and promote the re-use and recycling and reprocessing of any waste.
- Outline measures to support any approved regional or industry waste plans.

7. Cumulative impacts

- Identify the extent that the receiving environment is already stressed by existing development and background levels of emissions to which this proposal will contribute.
- Assess the impact of the proposal against the long term air, noise and water quality objectives for the area or region.

- Identify infrastructure requirements flowing from the proposal (e.g. water and sewerage services, transport infrastructure upgrades).
- Assess likely impacts from such additional infrastructure and measures reasonably available to the proponent to contain such requirements or mitigate their impacts (e.g. travel demand management strategies).

F. List of approvals and licences

- Identify all approvals and licences required under environment protection legislation including details of all scheduled activities, types of ancillary activities and types of discharges (to air, land, water).

G. Compilation of mitigation measures

- Outline how the proposal and its environmental protection measures would be implemented and managed in an integrated manner so as to demonstrate that the proposal is capable of complying with statutory obligations under EPA licences or approvals (e.g. outline of an environmental management plan).
- The mitigation strategy should include the environmental management and cleaner production principles which would be followed when planning, designing, establishing and operating the proposal. It should include two sections, one setting out the program for managing the proposal and the other outlining the monitoring program with a feedback loop to the management program.

H. Justification for the Proposal

- Reasons should be included which justify undertaking the proposal in the manner proposed, having regard to the potential environmental impacts.

ATTACHMENT C: GUIDANCE MATERIAL

Title	Web address
Relevant Legislation	
Contaminated Land Management Act 1997	http://www.legislation.nsw.gov.au/#/view/act/1997/140
Environmentally Hazardous Chemicals Act 1985	http://www.legislation.nsw.gov.au/#/view/act/1985/14
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/#/view/act/1979/203
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/#/view/act/1997/156
Water Management Act 2000	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/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
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

Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000)	http://www.epa.nsw.gov.au/resources/clm/20110650consultantsglines.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/95059sampgdlne.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
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html
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/approvedmethods-water.pdf

Susan Fox

From: Paul Nakhle <pnakhle@ausgrid.com.au> on behalf of Development <development@ausgrid.com.au>
Sent: Monday, 4 May 2020 5:21 PM
To: Susan Fox
Subject: Re: SSD-10450 Padstow Resource Recovery Facility - Request for input into Planning Secretary's Environmental Assessment Requirements
Attachments: ATT00002.txt; ATT00003.htm

Hi Susan,

Ausgrid recommends the addition of the following to the SEARS under Utilities:

In consultation with relevant agencies prepare a services and utilities impact assessment which:

- assesses the capacity of existing services and utilities and identify any upgrades required to facilitate the development
- assesses the impacts of the proposal on existing utility infrastructure and service provider assets and describe how any potential impacts would be managed."

Paul Nakhle
Portfolio Manager - Asset Protection | Transmission Services | Technical Operations

02 9269 7587 | 0419 631 174
First Floor, Building 2, 25-27 Pomeroy Street, Homebush, NSW, 2140

Susan Fox

From: Brendan.M Hurley <Brendan.M.Hurley@fire.nsw.gov.au>
Sent: Thursday, 23 April 2020 11:51 AM
To: Susan Fox
Cc: Fire Safety; Wayne Schweickle
Subject: Padstow Resource Recovery Facility - Request for input into Planning Secretary's Environmental Assessment Requirements. BFS20/1175

Padstow Resource Recovery Facility - Request for input into Planning Secretary's Environmental Assessment Requirements (SSD-10450)

Dear Susan,

Thank you for your submission for the above development to Fire + Rescue NSW (FRNSW) for review and comment.

It is understood that Gow Street Recycling Centre (the proponent) propose to establish a drilling mud dewatering facility at their existing recycling centre located at 81-87 Gow Street, Padstow NSW 2211 (the subject property). Gow Street Recycling Centre currently has consent and holds an Environmental Protection Licence (#10943) for resource recovery and waste storage of building and demolition waste including asphalt waste. This includes a processing capacity of 80,000 tpa, and a maximum storage quantity of 7,300 tonnes at any one time.
The proposal will include a staged development. Stage 1 of the development is the focus of this scoping report and includes establishment of a drilling mud processing plant, with a capacity of 250,000 tonnes per year and storage of a maximum of 120,000 tonnes of liquid waste on site at any one time.

It has been the experience of FRNSW that waste recycling facilities pose unique challenges to firefighters when responding to and managing an incident. Factors such as high and potentially hazardous fuel loads, facility layout, and design of fire safety systems have a significant impact on the ability to conduct firefighting operations safely and effectively. Consultation with organisations such as FRNSW throughout the development process enables the design and implementation of more effective fire safety solutions that help to mitigate the impact of incidents when they occur.

FRNSW submit the following general comments and recommendations for consideration:

- It is understood that a SEPP 33 assessment will be undertaken as part of the development of the Environmental Impact Statement (EIS).
- It is recommended that advice and considerations contained within FRNSW's Fire Safety Guideline – *Fire safety in waste facilities* be addressed. Advice and recommendations contained within the guideline have been developed to enable FRNSW to adequately manage an incident at such facilities.
- It is recommended that advice and considerations contained within FRNSW's Fire Safety Guideline – *Emergency Vehicle Access* be addressed. This is required such that FRNSW are able to safely access all parts of the site where an incident may occur.
- It is recommended that provisions be made for the containment of contaminated fire water run-off based on the worst credible fire scenario for the site. Any system(s) provided is to be automatic in nature and should not rely upon on-site staff or emergency services personnel to access or activate provided systems or valves in the event of fire.
- It is recommended that if the development proposes to incorporate a fire engineered solution (FES), whether a building design having a performance solution in accordance with the *National Construction Code* (*NCC*) or other infrastructure where building codes are not applicable, FRNSW should be engaged in the fire engineering brief (FEB) consultation process at the preliminary design phase, post approval of the development application. FRNSW also recommend that clauses E1.10 and E2.3 be addressed where a FES is required.
- It is recommended that a Condition of Consent be included that would require the fire and life safety measures for the development to be reassessed for adequacy in the event that either; significant changes

are made to the site configuration, processing capacity is increased or there are changes to either the accepted waste streams or a significant increase in streams that are combustible in nature.
- It is recommended that the an emergency plan for the waste facility in accordance with *AS 3745–2010 Planning for emergencies in facilities* be prepared for the development. An external consultant should be engaged to provide specialist advice and services in relation fire safety planning and developing an emergency plan.

If you have any queries regarding the above please contact the Fire Safety Infrastructure Liaison Unit, referencing FRNSW file number BFS20/1175. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Regards
Brendan

A/INSPECTOR BRENDAN HURLEY
TEAM LEADER INFRASTRUCTURE LIAISON
FIRE SAFETY | Fire and Rescue NSW
E: brendan.m.hurley@fire.nsw.gov.au
M: 0438601582
1 Amarina Ave, Greenacre, NSW 2190

20 April 2020

Susan Fox
Senior Environmental Assessment Officer
Industry Assessments
Department of Planning, Industry & Environment
E: susan.fox@planning.nsw.gov.au

Sydney Water input to SEARs for Padstow Resource Recovery Facility (RRF) SSD-10450

Thank you for seeking Sydney Water's input to the Secretary's Environmental Assessment Requirements for the abovementioned development which proposes the construction and operation of a Resource Recovery Facility (RRF).

Sydney Water have reviewed the proposal and provide the following comments for your consideration:

- Sydney Water has a 400mm VC branch carrier wastewater main located within the subject site.
- Sydney Water requests that detailed domestic and industrial water and wastewater demands be specified within the Environmental Impact Statement.
- Indicative stormwater, trade wastewater and water re-use quantities should also be included within the EIS report.
- It is recommended that the proponent engages a Water Servicing Coordinator and meetings are held between the proponent and Sydney Water to ensure that Sydney Water's requirements inform the design process.

Sydney Water also requests that the Department of Planning, Industry and Environment include the following Secretary's Environmental Assessment Requirements relating to the provision of water-related services for the subject site:

Water-related Infrastructure Requirements

1. The proponent of the development should determine service demands following servicing investigations and demonstrate that satisfactory arrangements for drinking water, wastewater, and if required, recycled water services have been made.
2. The proponent must obtain endorsement and/or approval from Sydney Water to ensure that the proposed development does not adversely impact on any existing water, wastewater or stormwater main, or any other Sydney Water asset, including any easement or property. When determining landscaping options, the proponent should take into account that certain

tree species can cause cracking or blockage of Sydney Water pipes and therefore should be avoided.

3. Strict requirements for Sydney Water's stormwater assets (for certain types of development) may apply to this site. The proponent should ensure that satisfactory steps/measures been taken to protect existing stormwater assets, such as avoiding building over and/or adjacent to stormwater assets and building bridges over stormwater assets. The proponent should consider taking measures to minimise or eliminate potential flooding, degradation of water quality, and avoid adverse impacts on any heritage items, and create pipeline easements where required.
4. As this development creates trade wastewater, Sydney Water has trade wastewater requirements which need to be met. By law, the property owner must submit an application requesting permission to discharge trade wastewater to Sydney Water's sewerage system. The proponent must obtain Sydney Water approval for this permit before any business activities can commence. Given this development comprises industrial operations, wastewater may discharge into a sewerage area that is subject to wastewater reuse. Please contact Sydney Water's Business Customer Services to send your permit application or to find out more information. They can be contacted at the following email address: businesscustomers@sydneywater.com.au.

Integrated Water Cycle Management

5. The proponent should outline any sustainability initiatives that will minimise/reduce the demand for drinking water, including any alternative water supply and end uses of drinking and non-drinking water that may be proposed, and demonstrate water sensitive urban design (principles are used), and any water conservation measures that are likely to be proposed. This will allow Sydney Water to determine the impact of the proposed development on our existing services and required system capacity to service the development.

If you require any further information, please contact the Growth Planning Team at urbangrowth@sydneywater.com.au.

Yours sincerely,

Kristine Leitch
Growth Intelligence Manager
City Growth and Development, Business Development
Sydney Water, 1 Smith Street, Parramatta NSW 2150

Susan Fox
Industry Assessments
Department of Planning, Industry & Environment
GPO Box 39
Sydney NSW 2001

Dear Ms Fox

New Request for Advice - Padstow Resource Recovery Facility (SSD-10450) (Canterbury-Bankstown)

Thank you for your correspondence via the Major Projects Portal (ref: PAE-2832) dated 17 April 2020 requesting Transport for NSW (TfNSW) provide input to the Secretary's Environmental Assessment Requirements (SEARs) for the subject proposed State Significant Development.

Legislation came into effect on 1 December 2019 that brings together Roads & Maritime Services (Roads and Maritime), and TfNSW. This response reflects the advice from the new organisation.

The supporting documentation provided in support of the proposed development application has been reviewed, and the following comments are provided for inclusion in the SEARs:

A detailed traffic impact assessment should be prepared and include, but not be limited to, the following:

1. Daily and peak traffic movements likely to be generated by the proposed redevelopment (including vehicle type and the likely arrival and departure times) and volumes likely to be generated during construction and operation, including a description of haul route origins and destinations, including;
    a. An inbound and outbound vehicle profile by time of day and day of week (if travel patterns differ across the week);
    b. Site plan and operating plan to demonstrate that the site will be managed such that queues do not develop on Gow Street;
    c. Site plan showing the proposed layout of the processing plant, storage and handling facilities and truck circulation layout that demonstrates the site will accommodate the most productive vehicle types (noting that the surrounding road network accommodates 25/26 metre B-doubles);
    d. Site layout that illustrates how loading and unloading (including waiting areas) will occur in relation to covered and uncovered areas for the different material types;
    e. Map the catchment for this processing centre to demonstrate that it is located in a suitable location to serve the construction industry from the perspective of not generating additional trips over long distances between construction sites, batching plants, this facility and land fill locations;
    f. The rationale for the expansion in fuel storage and clarification of how the storage expansion will be staged between the existing operations; Stage 1 (this proposal) and stage 2;
    g. Details of the driver facilities provided on site;

h. Details of the origin/destination of dangerous goods movements to/from the site; and

i. Swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site for both light and heavy vehicles.

2. All affected intersections should be examined/ modelled and the need/associated funding for upgrading or road improvement works (if required), including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic model as prescribed by TfNSW (former Roads and Maritime). These should include, but not be limited to:

    a. Gow Street at Fairfield Road; and

    b. Gow Street at Gibson Avenue.

    The traffic modelling should consider the scenarios of year 2026, 2031, 2036 and the year until the facility cease operation.

3. Details of the proposed accesses and the parking provisions associated with the proposed redevelopment including compliance with the requirements of the relevant Australian Standards (ie: turn paths, sight distance requirements, aisle widths, etc).

4. Proposed number of car parking spaces and compliance with the appropriate parking codes.

5. To ensure that the above requirements are fully addressed, the traffic impact assessment must properly ascertain the cumulative study area traffic impacts associated with the redevelopment (and any other known proposed developments in the area). This process provides an opportunity to identify a package of traffic and transport infrastructure measures required to support future development. Regional and local intersection and road improvements, vehicular access options for adjoining sites, public transport needs, the timing and cost of infrastructure works and the identification of funding responsibilities associated with the development should be identified.

6. TfNSW requires the Environmental Assessment report to address the implications of the proposed development for non-car travel modes (including public transport use, walking and cycling); the potential for implementing a location-specific sustainable travel plan (eg 'Travelsmart' or other travel behaviour change initiative); and the provision of facilities to support non-car mode share for travel to and from the site. This will entail an assessment of the accessibility of the development site by public transport.

The detailed traffic impact assessment should address the relevant planning provisions, goals and strategic planning objectives in the following:

- Future Transport 2056 and supporting documents;
- Draft NSW Freight and Ports Plans;
- Guide to Traffic Generating Developments 2002(RTA);
    - TDT 2013/04a Guide to Traffic Generating Developments, and;
- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development.

Thank you again for the opportunity to provide feedback on the above development application. Should you require clarification of any issue raised, please don't hesitate to contact Robert Rutledge, Principal Transport Planner, Land Use Planning and Development at Robert.rutledge@transport.nsw.gov.au.

Yours sincerely

1/5/2020

Mark Ozinga
Principal Manager, Land Use Planning & Development
Customer Strategy and Technology

CD20/03374