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-10407
Project Name	Yennora Liquid Waste Treatment Plant
Development	Expansion and operation of a liquid waste treatment facility processing up to 110,000 tonnes per annum (tpa) of liquid waste, comprising up to 60,000 tpa of industrial liquid waste, 20,000 tpa of sewage sludge, 20,000 tpa of grease trap waste and 10,000 tpa of out-of-date liquid product/food waste destruction. Maximum storage capacity of up to 477 tonnes of waste at any given time.
Location	14-16 Kiora Crescent, Yennora (Lot 49 in DP18211) in the Cumberland local government area
Applicant	Enviro Waste Services Group Pty Ltd
Date of Issue	04/06/2020
General Requirements	The Environmental Impact Statement (EIS) for the development must meet the form 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: - an accurate history of the site, including development consents; - 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 in the vicinity of the site; - plans of any proposed building works; and - infrastructure upgrades or items required to facilitate the development, including measures to ensure these upgrades are appropriately maintained. · consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments · consideration of issues discussed in Attachment 2 (public authority responses to key issues) · 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 and · 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: · high quality files of maps and figures of the subject site and proposal · a report from a qualified quantity surveyor providing: - a detailed calculation of the capital investment value (CIV) of the proposal (as defined in clause 3 of the Environmental Planning and Assessment Regulation 2000) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate the applicable GST component of the CIV - an estimate of the jobs that will be created by the development during the construction and operational phases of the proposed development and - certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must include an assessment of the potential impacts of the proposal (including cumulative impacts) and develop appropriate measures to avoid, mitigate, manage and/or offset these impacts. The EIS must address the following specific matters: **1. Statutory and strategic context** – including: - detailed justification for the proposal and the suitability of the site - detailed justification that the proposed land use is permissible with consent - details of any proposed consolidation of land - a detailed description of the history of the site, including the relationship between the proposed development and all development consents and approved plans previously and/or currently applicable to the site - demonstration that the proposal is consistent with all relevant planning strategies, environmental planning instruments, adopted precinct plans, draft district plan(s) and adopted management plans, and justification for any inconsistencies. **2. 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; and - a detailed justification that the site can accommodate the proposed processing capacity, storage of the liquid waste and waste product destruction shredding plant, having regard to the scope of the operations of the existing facility and its environmental impacts and relevant mitigation measures. **3. Community and Stakeholder Engagement** – including: - a detailed 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 the consultation, including a justification for this approach - a report on the results of the implementation of the strategy including issues raised by the community and surrounding owners and occupiers that may be impacted by the proposal - details of how issues raised during community and stakeholder consultation have been addressed and whether they have resulted in changes to the proposal and - details of the proposed approach to future community and stakeholder engagement based on the results of the consultation.

4. **Waste Management** – including:
   - a description of each of the waste streams that would be accepted at the site including maximum daily, weekly 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 flow diagrams for each waste stream), including a description of the technology to be installed, resource outputs and the quality control measures that would be implemented
   - details of how waste would be stored (including the maximum daily storage capacity of the site) 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
   - detail the developments waste tracking system for incoming and outgoing waste
   - detail the quality of waste produced and final dispatch locations
   - details of the waste management strategy for ongoing operational waste generated
   - details of the quantities and classification of all waste streams to be generated on site during the development
   - details of waste storage, handling and disposal during the development
   - details of 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.

5. **Air Quality and Odour** – including:
   - a quantitative assessment of the potential air quality, dust and odour impacts of the development in accordance with relevant Environment Protection Authority guidelines
   - the details of buildings and air handling systems and strong justification for any material handling, processing or stockpiling external to buildings
   - details of proposed mitigation, management and monitoring measures
6. **Traffic and Transport** – including:
   - details of all traffic types and volumes likely to be generated during construction and operation, including a description of key access / haul routes
   - an assessment of the predicted impacts of this 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 model
   - plans demonstrating how all vehicles likely to be generated during construction and operation and awaiting loading, unloading or servicing can be accommodated on the site to avoid queuing in the street network
   - details and plans of any proposed the internal road network, loading dock servicing and provisions, on-site parking provisions, and sufficient pedestrian and cyclist facilities, in accordance with the relevant Australian Standards
   - details of the largest vehicle anticipated to access and move within the site, including swept path analysis
   - details of how all heavy vehicles will be able to leave the site in a forward direction
   - swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site
   - details of road upgrades, infrastructure works or new roads or access points required for the development if necessary.
7. **Soils and Water** – including:

- an assessment of potential surface and groundwater impacts associated with the development, including potential impacts on watercourses, riparian areas, groundwater, and groundwater-dependent communities nearby
- a detailed site water balance including a description of the water demands and breakdown of water supplies, and any water licensing requirements
- 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
- description of the measures to minimise water use
- detailed flooding assessment
- description of the proposed erosion and sediment controls during construction
- 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 waters and monitoring activities and methodologies) and
- characterisation of the nature and extent of any contamination on the site and surrounding area

8. **Noise and Vibration** – including:
   - a quantitative noise and vibration impact assessment undertaken by a suitably qualified person in accordance with the relevant Environment Protection Authority guidelines and including an assessment of nearby sensitive receivers
   - cumulative impacts of other developments
   - details and justification of the proposed noise mitigation, management and monitoring measures.
9. **Urban design and visual** – including:
   - consideration of the layout and design of the development having regard to the surrounding vehicular, pedestrian and cycling networks
   - detailed plans showing suitable landscaping which incorporates endemic species.
10. **Fire and Incident Management** – including:
    - 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
    - details regarding the fire hydrant system and its minimum water supply capabilities appropriate to the site's largest stockpile fire load
    - details of size and volume of stockpiles and their management and separation to minimise fire spread and facilitate emergency vehicle access
    - consideration of consistency with NSW Fire & Rescue draft Fire Safety Guideline – Fire Safety in Waste Facilities (November 2018) and
    - detailed information relating to the proposed structures addressing relevant levels of compliance with Volume One of the National Construction Code (NCC).
11. **Hazards and Risk** – including a preliminary risk screening completed in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development* and Applying SEPP 33 (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is "potentially hazardous" a Preliminary Hazard Analysis (PHA) must be prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011).
12. **Human Health** – an assessment of the potential impacts to employees at the

	facility and any off-site impacts including: - details of measures to manage the exposure of employees to contaminants including the use of appropriate personal protective equipment and engineering controls at the facility to reduce exposure - details of health monitoring of employees and awareness and education measures - preventative measures for community exposure from the off-site transfer of contaminants; and - details of work health and safety system consistent with the requirements of the *Work Health and Safety Regulation 2011* 13. **Greenhouse gas and energy efficiency –** including an assessment of the energy use of the proposal and all reasonable and feasible measures that would be implemented on site to minimise the proposal's greenhouse gas emissions. 14. **Cultural Heritage and Aboriginal Cultural Heritage** – including an assessment of Aboriginal cultural heritage values that satisfies the due diligence requirement of the *National Parks and Wildlife Act 1974*. 15. **Biodiversity** – including an assessment of the proposal's biodiversity impacts in accordance with the *Biodiversity Conservation Act 2016*, including the preparation of a Biodiversity Development Assessment Report (BDAR) where required under the Act, except where a waiver for preparation of a BDAR has been granted. 16. **Contamination** – including an assessment of site suitability under the provisions of State Environmental Planning Policy No. 55 – Remediation of Land.
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: · Cumberland Council · Department of Planning, Industry and Environment, specifically the: - Environment, Energy and Science Group, including the Climate Change and Sustainability Branch - Water Group · Environment Protection Authority · Transport for NSW (including the former Roads and Maritime Services) · NSW Fire & Rescue · AusGrid · Sydney Water · surrounding local landowners 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.
Further consultation after 2 years	If you do not lodge a Development Application and EIS for the development within two (2) years of the issue date of these SEARs, you must consult further with the 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, **Attachment 1** contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.

ATTACHMENT 1
Technical and Policy Guidelines

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
http://www.shop.nsw.gov.au/index.jsp
http://www.australia.gov.au/publications
http://www.epa.nsw.gov.au/
http://www.environment.nsw.gov.au/
http://www.dpi.nsw.gov.au/

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 existing building, which clearly show all proposed buildings · detailed plans of proposed access driveways, internal roads, carparking and external alterations services infrastructure. 4. Schedule of materials, colours and additions. finishes.
Documents to be Submitted
Documents to submit include: · one (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
Traffic, Transport and Access	
	Roads Act 1993
	State Environmental Planning Policy (Infrastructure) 2007
	Guide to Traffic Generating Development (RTA, 2002 as updated)
	Road Design Guide (RMS, 2015-2017)
	Guide to Traffic Management – Pt 12: Traffic Impacts of Development (Austroads, 2016)
	Guidelines for Planning and Assessment of Road Freight Access in Industrial Areas (Austroads, 2014)
	Bicycle Parking Facilities: Guidelines for Design and Installation (AS 2890.3:2015)
	Integrated Public Transport Service Planning Guidelines: Sydney Metropolitan Area (TfNSW, 2013)
	Future Transport Strategy 2056 (TfNSW, 2018)
	Greater Sydney Services and Infrastructure Plan (TfNSW, 2018)
	NSW Freight & Ports Plan 2018-2023 (TfNSW, 2018)
Soils and Water	
Erosion and Sediment	Managing Urban Stormwater: Soils & Construction (Landcom, 2004)
	Soil and Landscape Issues in Environmental Impact Assessment (DLWC, 2000)
	Wind Erosion – 2nd Edition (DIPNR, 2003)
Groundwater	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC, 2000)
	NSW State Groundwater Policy Framework Document (DLWC, 1997)
	NSW Aquifer Interference Policy (NOW, 2012)
	Water Sharing Plan for the Greater Metropolitan Region Groundwater Sources (NOW, 2011)
	Storing and Handling Liquids: Environmental Protection (DECC, 2007)
Stormwater	Managing Urban Stormwater: Strategic Framework. Draft (EPA, 1996)
	Managing Urban Stormwater: Council Handbook. Draft (EPA, 1997)
	Managing Urban Stormwater: Treatment Techniques (DEC, 2006)
	Managing Urban Stormwater: Source Control. Draft (EPA, 1998)
	Managing Urban Stormwater: Harvesting and Reuse (DEC, 2006)
Wastewater	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC, 1997)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Use of Reclaimed Water (ARMCANZ/ANZECC, 2000)
	National Water Quality Management Strategy – Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) (EPHC, NRMMC & AHMC,

	2006)
	National Water Quality Management Strategy – Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 2) (EPHC, NRMMC & AHMC, 2009)
Contamination	State Environmental Planning Policy No. 55 – Remediation of Land
Hazards and Risk	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
	Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DoP, 2011)
	AS/NZS 4360:2004 Risk Management
	Contaminated Sites – Guidelines on Significant Risk of Harm from Contaminated Land and the Duty to Report (EPA 2003)
	Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning (DUAP)
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
Biodiversity	
	Biodiversity Conservation Act 2016
	Biodiversity Assessment Method (OEH, 2017)
Heritage	
	Heritage Act 1977
	NSW Heritage Manual (HO and DUAP, 1996)
	The Burra Charter (ICOMOS Australia, 2013)
	Statements of Heritage Impact (HO and DUAP, 2002)
	Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW, 2010)
	Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (DECCW, 2011)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010)
Noise and Vibration	
	Assessing Vibration: A Technical Guide (DEC, 2006)
	Noise Policy for Industry (EPA, 2017)
	Environmental Criteria for Road Traffic Noise (EPA, 1999)
	Noise Guide for Local Government (EPA, 2013)
	Interim Construction Noise Guideline (DECC, 2009)
Air Quality	
Air Quality	Protection of the Environment Operations (Clean Air) Regulation 2002
	Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales (DEC, 2007)

	Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales (EPA, 2016)
Odour	Assessment and Management of Odour from Stationary Sources in NSW (DEC 2006)
Greenhouse Gas	AGO Factors and Methods Workbook (AGO, 2018)
	Guidelines for Energy Savings Action Plans (DEUS, 2005)
Waste	
	Waste Avoidance and Resource Recovery Strategy 2014-2021 (EPA)
	The National Waste Policy: Less Waste More Resources 2009
	Waste Classification Guidelines (EPA 2008)
	Environmental guidelines: Composting and Related Organics Processing Facilities (DEC 2004)
	Environmental guidelines: Use and Disposal of Biosolid Products (EPA 1997)
	Composts, soil conditioners and mulches (Standards Australia, AS 4454)
	NSW Energy from Waste Policy Statement (EPA 2015)
	Standards for Managing Construction Waste in NSW (EPA 2018)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (AS 2482)
Social	
	Social Impact Assessment Guideline (DPE, 2017)

ATTACHMENT 2
Government Authority Responses to Request for Key Issues

CUMBERLAND COUNCIL

Dear Sir/Madam,

Re: Major Projects – New Request for Advice - Yennora Liquid Waste Treatment Plant (SSD-10407)

Please find below comments from Cumberland Council below:

Environmental Health Unit:

A Scoping Report has been prepared by Benbow Environmental (report reference - 191251_Scoping_Rev4, dated November 2019). The Consultant has advised the following:

The applicant seeks approval for the following additions to an existing liquid waste treatment facility:

Increase the waste processing capacity to 100,000 Tonnes of waste per year – This requires changes to their existing EPA License and is considered integrated development under the EP&A Act and Regulation.
Increase the maximum waste storage capacity to 200 tonnes per year.
Increase operating hours to 24 hours per day/7 days per week.
No construction work will allegedly take place. The applicant proposes that the existing equipment on site and the proposed changes to the hours of operation is enough to cater to the increased processing capacity of 100,000 tonnes of waste per year.

Note: The business currently has approval to process 900 tonnes per year with a maximum storage capacity of 110 tonnes per year.

Noise Impact Assessment

Benbow Environmental have advised in their scoping report that a Noise impact assessment was undertaken and found that the proposed changes to the site activity will not have an impact on surrounding receivers. I could not locate a copy of the report on Council's file and as such, an assessment of the report could not be undertaken. It is requested that a copy of the report be provided to Council for further review. It is expected that the report will be submitted as part of the EIS.

The applicant must ensure that the acoustic assessment makes reference to the EPA's Noise Policy for Industry. The report must include although is not limited to:

Long term unattended background noise monitoring at the closest sensitive receivers. The consultant must also refer to the impact of the premises on neighbouring industrial receivers in addition to residential receivers. The background noise monitoring should be conducted at times where the current equipment used on site is not in operation.
It should include all noise from the site including additional vehicle movements and the use of equipment/machinery on site on a 24/7 basis.

Environmental Impact Statement (EIS)

The Scoping Report prepared by Benbow Environmental (report reference - 191251_Scoping_Rev4, dated November 2019) states that Benbow Environmental has been engaged by Enviro Waste Services Group Pty Ltd (Enviro Waste) to undertake an Environmental Impact Statement (EIS). It is understood that the current scoping report sets out the relevant matters to be addressed in the EIS, and that an EIS will be provided to Council once the Department has issued the SEARs. A more detailed review of the issues raised in this memo will be undertaken once the EIS has been provided to Council for review and comment, along with the other technical reports alluded to in previous comments.

Waste Management Plan and Contaminated Waste

A Waste Management Plan will need to be prepared and submitted to Council for review. The waste management plan must include although is not limited to reporting on the type of waste received, how it is processed, transported, managed and stored/stockpiled on site and include all measures that the business aims to manage the environmental impact of these activities.

The consultant has advised that contaminated waste is brought and processed on site. Details of this contaminated waste and how it is managed must also be included in the EIS so that an assessment can be made of the potential risk/mitigation measures to be installed at the facility. It is understood that contaminants which are currently processed on site include:

Residues from industrial waste treatment/disposal operations – landfill leachates;
Liquid waste material in glass, plastic or aluminium containers;
Surface active agents (surfactants) containing principally organic constituents and which may contain metals and inorganic materials;
Waste oil/hydrocarbons mixtures/emulsions in water;
Sewage sludge & residues; and
Grease trap waste

Odour Impact Assessment and Dust Control

The consultant has advised that “A full quantitative odour assessment (OIA) has been conducted for the operation of the proposed liquids waste recycling facility in accordance with the “Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales” (EPA 2016).”

A copy of the odour impact assessment could not be located on Council’s file. EHU can therefore not comment on the report to determine the odour/air quality impact on surrounding sensitive receivers. It is recommended that this is submitted to the EHU for review. It is expected that the report will be submitted as part of the EIS.

The consultant also stated that “Dust is not considered as a potential emission that would be generated from the proposed development and therefore was not assessed.” Given the site is a waste facility and will store to an extent, some solid wastes. It is recommended that an assessment be undertaken on the presence of airborne dust and its management if

applicable. Wherever possible dust should be controlled through the use of physical means (such as a physical building structure) and dust should not create in external areas of the premises with only mechanical means of control such as water sprays.

Environmental Management Plan

An environmental management plan (EMP) should be prepared and submitted to Council for review. It is expected that the report will be submitted as part of the EIS. The EMP must be written in accordance with the Department of Environment – Environmental Management Plan Guidelines 2014.

The EMP must include although is not limited to how the following pollution risks will be managed:

Stormwater pollution;
Acoustic amenity;
Air/odour pollution including dust mitigation measures;
Emergency management and spill response procedures;
Any required contamination management/control measures required to be installed at the site; and
Any other source of pollution that is identified as a risk onsite.

Trade Waste Agreement

It is unclear whether the current trade waste agreement with Sydney Water accurately reflects the waste water predicted to enter the sewer system with the new proposal. Information should be submitted demonstrating the trade waste agreement will cover all of the new loads.

Site Plans

The scoping report states that the applicant does not propose any constructional changes to the site and advises that the existing setup will accommodate for the additional waste. It is advised that the business submit to Council processing details and a site layout plan as to how the business will be able to accommodate for the additional 99,100 tonnes of additional waste per year without the addition of new equipment used for processing or additional space.

Detailed existing and future site plans should be submitted to demonstrate the location of all equipment/machinery (and details as to what this equipment/machinery is used for), as well as the details of any stockpile locations of waste/material, parking of vehicles/trucks and any other equipment internally or externally used at this site.

Stormwater Pollution

Details of the site's entire stormwater management and drainage plan setup should be submitted to Council for review. In addition to this, the location of any waste processing, storage, transportation of waste, parking of vehicles which will be carried out in close proximity to the sites stormwater system should be outlined on the plans.

Other information which must be provided:

Are all operations restricted to inside the buildings onsite? I.e. will there be any activities carried out outside the buildings, such as the need to have trucks waiting on the street prior to entry to the site. This could impact on whether any contaminated material to be processed onsite could enter the roadway area.

Traffic

The applicant is to liaise with RMS in accordance with Schedule 3 – Traffic Generating under the Infrastructure SEPP.

Onsite Inspection

A site inspection at 14 Kiora Crescent was completed on 6 January 2020 at approximately 10:15am. I spoke with the operations manager on site John Paul Hawach.

At the time of the inspection, all activities pertaining to waste disposal were carried out inside a shed at the premises. The site consisted of a large shed (where all equipment used to filter and dispose of liquid waste was located) and a concrete hardstand.

Odours, dust, waste, excessive noise was not observed at the road at the time of the inspection. Upon entering the premises, there was a strong odour present as well as noise from vehicles and machinery in use at the time.

It should be noted that an additional property across the road located at 5 Kiora Crescent Yennora (Lot 10/DP 1233715) was used to store IBC's (large plastic containers) some of which were empty although some of which contained some oils and other products used to service their trucks. The operations manager advised that this area was also used to park and service the business's vehicles as needed. The site consisted of some sealed areas however there were also some unsealed areas which were used to park vehicles. This site is also leased out to two other companies. EHU advises that this site be assessed as a part of the application.


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Liquid Waste Facility
PH. 9721 2028


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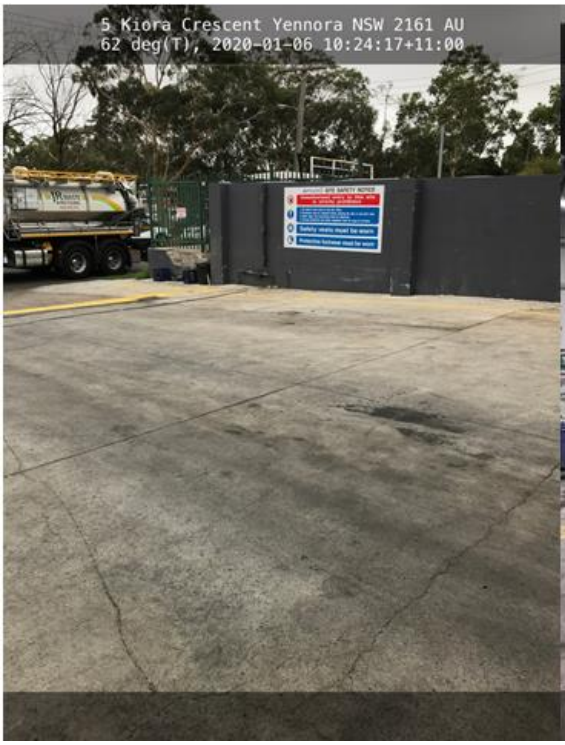
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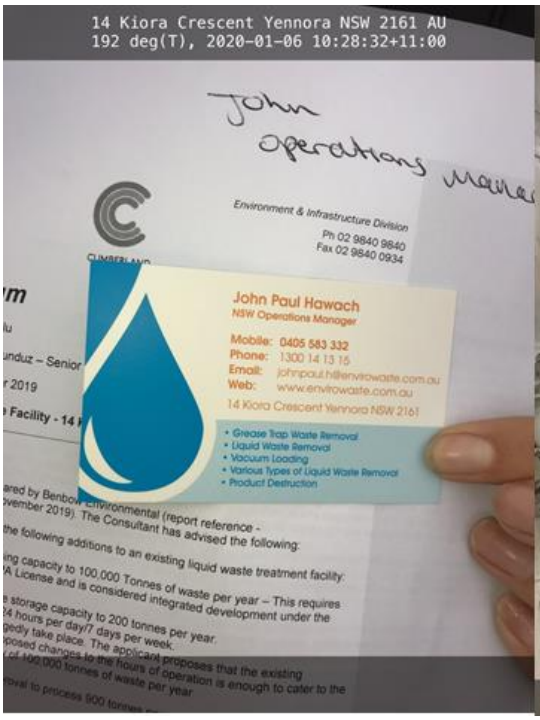
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John
operations
Environment & Infrastructure Division
Ph 02 9840 9840
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John Paul Hawach
NSW Operations Manager
Mobile: 0405 583 332
Phone: 1300 14 13 16
Email: johnpaul.h@envirowaste.com.au
Web: www.envirowaste.com.au
14 Kiora Crescent Yennora NSW 2161
• Grease Trap Waste Removal
• Liquid Waste Removal
• Vacuum Loading
• Various Types of Liquid Waste Removal
• Product Destruction


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Strategic:

The site is identified as having a flood risk (floor level control building requirement). It is also in proximity to an area of stormwater overflow flood risk. This flood risk should be addressed in the EIS including, as appropriate, any measures to manage and mitigate this risk should a flood event occur.
The documentation does not confirm if any additional external lighting, for security or to support safety of operations including vehicle movements, will be required. This should be addressed and, if required, to assess the impact of the external lighting.
There is expected to be a considerable increase in traffic movements for the site (including outside current operational hours), and it is noted there are other transport/logistics businesses nearby and this is a dead-end street having one access point off Norie St. The individual and cumulative traffic & parking impacts of the proposal should be assessed as part of the detailed traffic & parking assessment (noted as to be undertaken in the submitted scoping report).

Background / Proposed development

The subject site is zoned IN1 General Industrial and located on the south of the Yennora Intermodal Terminal, approx. 260m away. An additional permitted use for sex service premises applies to the certain precinct area within this IN1 General Industrial in Yennora. The proposed development consists of increasing a capacity of the waste processing quantity to 100,000 tonnes per annum (from 900 tonnes p.a) and store up to a maximum of 200 tonnes (from 110 tonnes) of liquid at any one time. No construction work is proposed for the expansion of the existing waste management facility. It is proposed to utilise the existing equipment with an increased capacity to the extended operational hours. The facility proposes to operate 24 hours a day, seven days a week. The proposal does not propose a change of use or a rezoning of the land.

Alignment to the strategic planning framework

(Greater Sydney Region Plan, Central City District Plan and Cumberland 2030: Our Local Strategic Planning Statement)

The existing and proposed development (waste management) is generally aligned to region, district plan and Cumberland LSPS. See details below.

- The Greater Sydney Region Plan (p.130) recommends safeguarding industries (such as waste handling facilities and freight activities) from residential encroachment which are impacted by noise, light and odours. Note that there is no residential development adjacent to the site. Its Objective 23 supports retention of local recycling and waste management facilities that are within industrial and urban services land. And at the same time it requires to address ongoing environmental issues such as odour, noise, truck movement and dust. Strategy 35.1 also recommends a protection of existing and identify new locations for waste recycling and management.

- The Central City District Plan encourages initiatives for re-use and recycle to support a circular economy and innovative solutions to reduce the volume of waste and waste transport requirements.

- The draft LSPS (p. 80), the Central City District Plan and the Cumberland Employment and Innovation Lands Strategy (EILS) identify the Yennora Intermodal Terminal as a protected freight corridor, with an opportunity for improved accessibility. Note that a future Western Sydney Freight through this industrial precinct is planned under the Future Transport Strategy, to improve accessibility for freight, warehousing and logistics businesses.

Consistency of the proposed development with SEPP

SEPP No 33 – Hazardous and Offensive Development
Issue – The proposed greater increase in waste management capacity can be considered as a potentially hazardous industry. A preliminary hazard analysis may be required. See comments below.

- The current use of the site is a waste management facility that can process 900 tonnes per annum of waste liquids, with a maximum of 110 tonnes of liquid that can be stored at any one time. The proposal is to increase the processing quantity to 100,000 tonnes per annum and increase the maximum quantity to be stored at any one time to 200 tonnes.

- The proposed increase in capacity of the site can be viewed as a potentially hazardous industry. This greater increase in capacity could potentially pose a significant risk to its locality (to human health, life or property or to the biophysical environment) if such measures are not mitigated or monitored. The preparation of a preliminary hazard analysis is required for site if identified as a potentially hazardous industry.

SEPP No 55 – Remediation of Land
Issue – State 1 Preliminary Investigation may be required. See comments below.

Given the site's existing use as a waste management facility involving a waste treatment and a disposal, and its proposal to increase the capacity, the site can be potentially considered as a contaminated land. Whilst the proposal does not involve a rezoning or a change of use, the proposed greater increase in capacity of waste management, could further impact on the subject land or land immediately adjacent to the site. As per the contaminated land planning guidelines, Stage 1 – Preliminary Investigation may be required to determine whether the proposed greater increase in capacity for the subject site is adequate.

SEPP (Infrastructure) 2007s
Proposal needs to be referred to RMS.
According to this SEPP, Schedule 3 – 'Waste or resource management facility' that involves with any size or capacity increase under the Traffic-generating development, the proposal need to be referred to Roads and Maritime Services.

SEPP (State and Regional Development) 2011
Schedule 1 State significant development – general, Clause 23
According to this SEPP, the proposal is determined as a State significant development (SSD) under Clause 23, Schedule 1.

Development Engineering:

Flooding

Subject site is affected by flooding. In this regard, flood advice letter from Council shall be obtained. Development shall comply with flood advice letter.

Traffic

Submitted information is not adequate for the assessment. It appears proposed modification will have adverse impact on the street traffic and on street parking. Following matters shall be addressed:

Proposed swept path analysis is not acceptable. The swept path analysis shows that the turning path encroaches into Council footpath and nature strip.

Reverse manoeuvring in Council's land is not acceptable. It will compromise the safety. Vehicles should enter and leave the site in a forward direction.

Proposed 4 point turn truck manoeuvring movement is not acceptable. Manoeuvring shall be limited to three point turn.

Truck swept path interferes with the car parking space.

Parking space not available within the site for the delivery trucks to prevent any queuing or on street parking of trucks/delivery vehicles. Increase in traffic movement will have adverse impact on street traffic and the adjoining developments.

Parking and loading design shall comply with Australian standard AS2890.1 and AS2890.2.
Stormwater

Existing and proposed stormwater details have not been submitted for assessment.

Development shall demonstrate compliance with Part a Section 7.0 Stormwater Management of Council DCP 2013.

Should you require any further information on this matter, please contact Sohail Faridy on 8757 9915 or Sohail.faridy@cumberland.nsw.gov.au

Regards,

Sohail Faridy
Coordinator Development Assessment

Our ref: DOC20/385024
Senders ref: SSD 10407 (Cumberland)

Susan Fox
Planning and Assessment Group
Industry Assessments
Department of Planning, Industry and Environment
Locked Bag 5022
Parramatta NSW 2124

Dear Ms Fox,

Request for Modified SEARs for Yennora Liquid Waste Treatment Plant, 14-16 Kiora Crescent, Yennora (SSD 10407) (Cumberland)

Thank you for your letter received on 20 May 2020, requesting input from Environment, Energy and Science Group (EES) in the Department of Planning, Industry and Environment on the request for Modified SEARs for Yennora Liquid Waste Treatment Plant, 14-16 Kiora Crescent, Yennora (SSD 10407) (Cumberland).

The SEARs were previously modified because the facility has approval to process 900 tonnes per annum of waste liquids, with a maximum of 100 tonnes of liquid that can be stored at any one time. The modification will increase the processing quantity to 100,000 tonnes per annum and increase the maximum quantity to be stored at any one time to 200 tonnes. The modification also includes the neighbouring property, 14 Kiora Crescent, Yennora.

However, now the SEARs are being further modified because following the modification above, a Council and Environmental Protection Authority inspection revealed that additional activities being undertaken at 16 Kiora Crescent would also require approval, out-of-date, expired and/or perishable liquid food waste processing.

EES has reviewed the revised scoping report prepared by Benhow Environmental (Revision 6) dated April 2020 and provides the following comments and recommendations at **Attachment A.**

Aboriginal Cultural Heritage

EES recommends the SEARs include the attached Aboriginal cultural heritage requirements.

Biodiversity

EES recommends the SEARs include the attached biodiversity requirements.

Flooding

EES recommends the SEARs include the attached flooding requirements.

Soil and Water

EES recommends the SEARs include the attached water and soils requirements.

Should you have any queries regarding this matter, please contact Bronwyn Smith, Senior Conservation Planning Officer on 9873 8604 or bronwyn.smith@environment.nsw.gov.au

Yours sincerely

20/05/20

Susan Harrison
Senior Team Leader Planning
Greater Sydney Branch
Climate Change and Sustainability

Attachment A – EES Environmental Assessment Requirements – Yennora Liquid Waste Treatment Plant located at 14 - 16 Kiora Crescent, Yennora SSD 10407(Cumberland)

Aboriginal cultural heritage
1. Identify and describe the Aboriginal cultural heritage values that exist across the whole area that would 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). 2. 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. 3. Impacts on Aboriginal cultural heritage values are to be assessed and documented in the ACHAR. The ACHAR must demonstrate attempts to avoid impact upon cultural heritage values and identify any conservation outcomes. Where impacts are unavoidable, the ACHAR must outline measures proposed to mitigate impacts. Any objects recorded as part of the assessment must be documented and notified to OEH. Note that due diligence is not an appropriate assessment, an ACHAR is required.
Biodiversity
4. 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). 5. 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.

6. 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.
7. The BDAR must be submitted with all spatial data associated with the survey and assessment as per Appendix 11 of the BAM.
8. 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.

Water and soils

9. 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

10. 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

11. 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).

12. 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

13. 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.
14. 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.
15. 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.
16. 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.

17. 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)

Department of Planning, Industry & Environment

Attention: Susan Fox

Notice Number **1593218**

Date **1 April 2020**

RE: Proposed Expansion of the Enviro Waste Services Group Yennora Liquid Waste Treatment Plant

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 23 March 2020. The application seeks to increase the processing quantity to 100,000 tonnes per annum and increase the maximum quantity to be stored at any one time to 200 tonnes at 14 Kiora Crescent, Yennora NSW 2161 and use the neighbouring site at 16 Kiora Crescent Yennora NSW 2161 for improved access, truck manoeuvring and parking.

The EPA conducted an inspection of 14 and 16 Kiora Crescent, Yennora to gain a better understanding of the proposal. The inspection found that the scoping report prepared by Benbow Consulting (March 2020) did not accurately reflect existing operations, and was generally, not supportive of additional waste being received and processed at the site, for the following reasons:

- Enviro Waste Services Group Pty Ltd (EWS) was using 16 Kiora Crescent, Yennora as a liquid food waste recovery facility without lawful authority. The scoping report advises that 16 Kiora Crescent, Yennora was being used for office purposes.
- EWS was also using 5 Kiora Crescent, Yennora as a liquid food waste recovery facility without lawful authority. Waste oil/ hydrocarbon mixtures and residual waste in intermediate bulk containers were also stored in containers at 5 Kiora Crescent, Yennora.
- At least 4 waste transport vehicles were parked at 5 Kiora Crescent, Yennora awaiting to drop off their waste loads at 14 Kiora Crescent, Yennora.
- Limited available storage space for containers of waste at 14 Kiora Crescent, Yennora.

The EPA has instructed EWS to immediately cease waste activities at 14 and 5 Kiora Crescent, Yennora.

The EPA advises that the proposal must reflect the true nature and scale of the operations, and if EWS intends to undertake hazardous or liquid waste storage and processing activities at properties other than 14 Kiora Crescent, Yennora, this must be clearly described and assessed in the EA.

The EPA has considered the details of the proposal and has identified the information it requires to issue its general terms of approval in Attachment A. In summary, the EPA's key information requirements for the proposal include:

1. Clarity on the volumes of each waste type, the manner in which each waste type will be received and stored at the premises, and individual storage tank capacities (existing and proposed).

2. Explanation as to how existing equipment onsite would be able to achieve a 111x increase in annual production, noting that this appears extreme even with extended operating hours.

3. A comprehensive air and odour quality impact assessment (AQIA) prepared in accordance with the *Approved Methods for Modelling and Assessment of Air Pollutants in NSW* (EPA, 2016). Modelling must be undertaken for worst case inputs and peak production periods (noting the proposed increase to annual production capacity is substantially greater than existing operations). The AQIA must benchmark the performance of the proposed air pollution technology against best practice technologies.

4. A noise impact assessment undertaken in accordance with the *NSW Noise Policy for Industry* (EPA, 2017).

5. Fire risk assessment.

6. A traffic and parking assessment. The EPA will not be supportive of a proposal that involves waste transport vehicles queuing outside the premises.

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

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

Yours sincerely

Erwin Benker

Manager Hazardous Materials

Environment Protection Authority

(by Delegation)

ATTACHMENT A: EIS REQUIREMENTS

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 using technical criteria derived from *the Australian and New Zealand Guidelines for Fresh and Marine Water* Quality *(ANZG, 2018).*
  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

  proper valuation and pricing of environmental resources

  b) 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.

4. 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 the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 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.

5. Human Health Risk Assessment

- A human health risk assessment must be undertaken in conjunction with the air quality and odour impact assessment.
- The human health risk assessment must be undertaken in accordance with *Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards* (enHealth) and must include:
  - the inhalation of criteria pollutants and exposure from all pathways i.e., inhalation, ingestion and dermal to specific air toxics; and
  - a demonstration of how the waste to energy facility would be operated in accordance with best practice measures to manage air emissions with consideration to the *EPA's Energy from Waste Policy Statement*.

6. 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.

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 *Australian and New Zealand Guidelines for Fresh and Marine Water (ANZG, 2018)*.
- 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 *Australian and New Zealand Guidelines for Fresh hand Marine Water Quality (ANZG, 2018), and Managing Urban Stormwater: Soils and Construction (Landcom, 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 *Guidelines of 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 B: 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 http://www.epa.nsw.gov.au/resources/air/ammodelling05361.pdf
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	http://www.epa.nsw.gov.au/wastestrategy/warr.htm
Environmental Guidelines: Solid Waste Landfills (EPA, 2016)	http://www.epa.nsw.gov.au/waste/landfill-sites.htm
Draft Environmental Guidelines - Industrial Waste Landfilling (April 1998)	http://www.epa.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf
EPA's Waste Classification Guidelines 2014	http://www.epa.nsw.gov.au/wasteregulation/classify-guidelines.htm
Resource recovery orders and exemptions	http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm
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 http://www.australiangeomechanics.org/resources/downloads/
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Local Government Salinity Initiative Booklets	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZG (2018) Australian and New Zealand Guidelines for Fresh and Marine Water Quality	https://www.waterquality.gov.au/anz-guidelines/about
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

DOC20/370317

Susan Fox
Senior Environmental Assessment Officer
Department of Planning, Industry & Environment
Susan.Fox@planning.nsw.gov.au

Dear Susan

EPA response to request for advice - Enviro Waste Services Group Pty Ltd - 14-16 Kiora Crescent, Yennora (SSD-10407)

I am writing in reply to the Department of Planning, Industry and Environment's (DPIE) request for the NSW Environment Protection Authority (EPA) to provide requirements for the preparation of an Environmental Impact Statement (EIS) for a proposal by Enviro Waste Service Group Pty Ltd (EWS) to increase the liquid waste processing capacity at its existing liquid waste treatment plant at 14 Kiora Crescent, Yennora (SSD-10407).

Secretary Environmental Assessment Requirements (SEARs) were issued for SSD-10407 on 30 January 2020. The EPA understands that the application has been modified as requested by DPIE to include the neighbouring property at 16 Kiora Crescent, Yennora.

The EPA has reviewed the information submitted in the modified application, including the revised Scoping Report prepared by Benbow Environmental dated 24 April 2020, and advises that the EIS requirements it provided to DPIE on 1 April 2020 in response to the previous request for SEARs (Notice No. 1593218) can be applied to this modified application.

If you have any questions regarding the above, please contact Senior Operations Officer, Alexander Spaller on (02) 9995 5894.

William Dove **22.05.2020**

WILLIAM DOVE
Unit Head Regulation - South
Environment Protection Authority

Susan Fox

From: Nathan Everett <Nathan.Everett@fire.nsw.gov.au>
Sent: Tuesday, 7 January 2020 3:39 PM
To: Susan Fox
Cc: Fire Safety; John Hawes
Subject: RE: Request for input to SEARs - Yennora Liquid Waste Treatment Plant (SSD-10407)

Dear Susan,

Request for agency input into SEARs
Yennora Liquid Waste Treatment Plant (SSD 10407)

I refer to the submission of the request for agency input into preparation of the Secretary's Environmental Assessment Requirements (SEARs) for the above facility to Fire & Rescue NSW (FRNSW).

It is understood that Enviro Waste Services Group Pty Ltd (the Applicant) is seeking to increase liquid waste processing and storage quantities to 100,000 and 200 tonnes per annum (tpa) respectively at their treatment facility at Yennora, NSW. A scoping report (the Report) has been prepared and submitted by representatives of the Applicant in support of the expansion.

The following comments and recommendations are provided following a review of relevant parts of the Report.

- It is understood that a preliminary screening of the proposed development has been undertaken in accordance with *State Environment Planning Policy No. 33 – Hazardous and Offensive Development* (SEPP 33) with threshold quantities of dangerous goods not being exceeded.
- It is recommended that further details be provided within the EIS in regard to the liquid waste stored and processed at the facility, particularly those streams that may be considered flammable or combustible in nature, or may pose risk to attending emergency services responders in the event of an hazardous materials type incident.
- It is understood that "Fire safeguards and recommendations will be detailed within the EIS". FRNSW recommend that this include an assessment of current fire and life safety measures afforded to the site and that required by the relevant provisions of the National Construction Code (NCC). The assessment should be undertaken by a suitably qualified building code consultant. Furthermore, it should be noted that systems and measures specified by the NCC represent the minimum requirements, and additional measures may be required commensurate with the hazards and risks presented by the development.
- It is recommended that further consideration be given within the EIS to the requirement for the storage of contaminated fire water. Suitable provisions should 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.
- Whilst there is currently no requirement for a Fire Safety Study, FRNSW may request one be undertaken following a review of information provided within the EIS should it is deemed that the development poses unique challenges to the response to and management of an incident.

If you have any queries regarding the above please contact the Fire Safety Infrastructure Liaison Unit, referencing FRNSW file number BFS19/4158. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Regards,
Nathan

QUALIFIED FIREFIGHTER NATHAN EVERETT
FIRE SAFETY OFFICER
FIRE SAFETY INFRASTRUCTURE LIAISON

T: (02) 9742 7533 M: 0436 624 025
1 Amarina Ave, Greenacre, NSW 2190
www.fire.nsw.gov.au

From: Susan Fox <Susan.Fox@planning.nsw.gov.au>
Sent: Thursday, 12 December 2019 10:24 AM
To: Fire Safety <FireSafety@fire.nsw.gov.au>; urbangrowth@sydneywater.com.au; Easements&Development <Easements&Development@transgrid.com.au>
Subject: Request for input to SEARs - Yennora Liquid Waste Treatment Plant (SSD-10407)
Importance: High

Good Morning,

The Department has received a request for the Planning Secretary's Environmental Assessment Requirements (SEARs) for the Yennora Liquid Waste Treatment Plant (SSD-10407) located at 14 Kiora Crescent, Yennora.

The Applicant has indicated the proposal is State significant development (SSD) in accordance with Schedule 1 clause 23(6) of the State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP).

I have attached a copy of the Scoping Report to assist with issuing your comments. I would appreciate it if you could review the documentation and send me your Agency's requirements for the preparation of the Environmental Impact Statement by **Friday, 10 January 2020.**

Please contact me if you have any enquiries.

Susan Fox
Senior Environmental Assessment Officer

Industry Assessments | Department of Planning, Industry and Environment
T 02 9274 6466| **E** susan.fox@planning.nsw.gov.au
320 Pitt Street SYDNEY 2000
www.dpie.nsw.gov.au

The Department of Planning, Industry and Environment acknowledges that it stands on Aboriginal land. We acknowledge the traditional custodians of the land and we show our respect for elders past, present and emerging through thoughtful and collaborative approaches to our work, seeking to demonstrate our ongoing commitment to providing places in which Aboriginal people are included socially, culturally and economically.

CUMBERLAND COUNCIL

Dear Sir/Madam,

Re: Major Projects – New Request for Advice - Envirowaste - 14-16 Kiora Crescent, Yennora

Please see below comments in addition to the previous comments provided by Council and shall therefore be read in conjunction with those comments:

Development Engineering Comments:

The proposed parking detail has not been provided to Council for comments.

Department shall seek further Traffic impact report addressing the following:
a. Appropriate right of way created on the title.
b. Details of the existing development consent verifying that the proposed modifications will not conflict with the approved consent.
c. Development proposal shall include the adjoining site also part of the proposal as driveway modification work should be carried out within 16 Kiora Crescent to facilitate the access.

The following matters raised in Council's previous response letter remain unresolved:

The swept path analysis shows that the turning path encroaches into Council footpath and nature strip.

Reverse manoeuvring in Council's land should not be considered. Vehicles should enter and leave the site in a forward direction.

Manoeuvring shall be limited to three-point turn.

Truck swept path interferes with the car parking space.

No parking spaces are available within the site for the delivery trucks to prevent any queuing or on street parking of trucks/delivery vehicles. Department to consider car parking on site to minimise adverse impacts on the street traffic and the adjoining developments.

Environmental Health Unit

In addition to the previous comments provided by EHU the following recommendations are to be considered by the Department:

Based on aerial photographs on Council's mapping system (intramaps), the property appears to be partly covered by concrete hardstand with the remainder of the site being exposed soil. Should the applicant proceed with the use of this site as a part of their operations, the part of the site used for truck access would need to be constructed of a sealed surface to prevent any potential soil contamination.

The following documentation (as outlined in previous comments) would also need to be adjusted to include the impact of the site located at 16 Kiora Cresent Yennora on surrounding properties:
- Acoustic report
- Environmental Impact Statement
- Waste Management Plano Odour Impact assessment
- Environmental Management Plan
- Site plans
- Details of site stormwater management

Strategic Comments:

No further comments in addition to Council comments regarding the proposal.

Should you require any further information on this matter, please contact Sohail Faridy on 8757 9915 or Sohail.faridy@cumberland.nsw.gov.au

Regards,

Sohail Faridy
Coordinator Development Assessment

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

Dear Ms Fox

Request for Advice - Yennora Liquid Waste Treatment Plant (SSD-10407) (Cumberland)

Thank you for your correspondence via ePlanning Portal (ref: PAE-1557) dated 12 December 2019 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;
    a. Plans demonstrating how all vehicles associated with construction and operation awaiting loading, unloading or servicing can be accommodated on the site to avoid queuing in the street network, and
    b. 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 Roads and Maritime. These should include, but not be limited to:
    a. The Horsley Drive/ Polding Street;
    b. Loftus Road/ Norrie Street, and;
    c. Loftus Road/ Yennora Avenue.
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 assess 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 increase the 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.

Please note for future reference, any further correspondence concerning this project should be sent to development@transport.nsw.gov.au referencing **CD19/10163** in the subject line.

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

8/1/2019

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