Planning, Industry & Environment

Mr Raed Ykmour
Managing Director
Cobra Waste Solutions Pty Ltd
30 Bent Street
ST MARYS 2760

09/10/2020

Dear Mr Ykmour

Cobra Waste Solutions Resource Recovery Facility (SSD-9320662)
Planning Secretary's Environmental Assessment Requirements

Please find attached a copy of the Planning Secretary's environmental assessment requirements (SEARs) for the preparation of an environmental impact statement (EIS) for the Development Application (DA). These requirements have been prepared in consultation with relevant public authorities based on the information you have provided to date. I have also attached a copy of the public authorities' comments for your information. Please note that the Planning Secretary may modify these requirements at any time.

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

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

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

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

- confirm the applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*); and

- determine the number of copies (hard-copy and CD/DVD) of the DA and EIS that will be required for reviewing purposes.

If your development is likely to have a significant impact on matters of National Environmental Significance, it will require an approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This approval would be in addition to any approvals required under NSW legislation and it is your responsibility to contact the Commonwealth Department of the Environment and Energy to determine if an approval under the EPBC Act is required (http://www.environment.gov.au or 6274 1111).

If you have any questions, please contact Ellen Luu on 02 8275 1037 / at ellen.luu@planning.nsw.gov.au.

Yours sincerely,

Chris Ritchie
Director
Industry Assessments

as delegate for the Planning Secretary

Attachment 1: Planning Secretary's Environmental Assessment Requirements

Attachment 2: Public Authorities' Comments

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-9320662
Project Name	Cobra Waste Solutions Resource Recovery Facility
Development	The operation of a resource recovery facility with capacity to process up to 150,000 tonnes per annum (tpa) of general solid waste (non-putrescible) consisting of construction and demolition waste and commercial and industrial waste with a maximum storage capacity of 1,500 tonnes at any given time.
Location	30 Loftus Road, Yennora; Lot 8 DP 1233715 within Cumberland Local Government Area
Applicant	Cobra Waste Solutions Pty Ltd
Date of Issue	09/10/2020
General Requirements	The environmental impact statement (EIS) for the development must meet the form and content requirements of 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 - contributions required to offset the proposal 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: · **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 - 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. This includes, but is not limited to: o State Environmental Planning Policy (Infrastructure) 2007 o State Environmental Planning Policy (State and Regional Development) 2011 o State Environmental Planning Policy No. 55 – Remediation of Land o Holroyd Local Environmental Plan 2013 o Draft Cumberland Local Environmental Plan 2020 o Greater Sydney Region Plan: A Metropolis of Three Cities o Our Greater Sydney 2056: Central City District Plan o Future Transport Strategy 2056. · **Suitability of the Site –** including: - a detailed justification that the site can accommodate the proposed resource recovery facility, having regard to the scope of the operations of the existing facility and its environmental impacts and relevant mitigation measures. · **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.

- **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 and the maximum size for stockpiles
  - 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 construction and ongoing operational waste generated
  - the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-2021* and
  - details of consistency with the EPA's Standards for Managing Construction Waste in NSW (November 2018).
- **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
  - details of proposed mitigation, management and monitoring measures.
- **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.
- **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 and

- details and justification of the proposed noise mitigation, management and monitoring measures.

· **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
  - swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site and
  - details of road upgrades, infrastructure works or new roads or access points required for the development if necessary.

· **Fire and Incident Management** – including:
  - identification of the aggregate quantities of combustible waste products to be stockpiled at any one time
  - 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 Fire Safety Guideline – Fire Safety in Waste Facilities (February 2020) and
  - detailed information relating to the proposed structures addressing relevant levels of compliance with Volume One of the National Construction Code (NCC).

· **Hazards and Risk-** including a preliminary risk screening in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and the Department's Applying SEPP 33, with clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. If the preliminary risk screening indicates that the development is "potentially hazardous", a Preliminary Hazard Analysis (PHA) must be prepared in accordance with the Department's Hazardous Industry Planning Advisory Paper No. 6, 'Hazard Analysis' and Multi-level Risk Assessment.

Note: *The proposed development is located close to Jemena's "Sydney Primary Main 550mm" gas pipeline (APGA Australian Pipeline Database (APD)). This pipeline is not licenced under the Pipelines Act 1967, but is understood to be operated in accordance with Australian Standards 2885 Pipelines – Gas and liquid petroleum (AS 2885). From the APD, it is noted that the entire proposed development area is within the measurement length (ML) specified in AS 2885 for this pipeline. The Applicant must consult with Jemena Limited to ensure that the existing pipeline can continue to operate in accordance with AS 2885 at all*

	stages off the SSD (including construction and operation). · **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. · **Ecologically sustainable development –** including a description of how the development will incorporate the principles of ecologically sustainable development in the design, construction and ongoing operation of the development. · **Planning agreement/development contributions** – demonstration that satisfactory arrangements have been or would be made to provide, or contribute to the provision of, necessary local and regional infrastructure required to support the development.
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 City Council · Environment Protection Authority · NSW Fire and Rescue · Environment, Energy and Science Group · Transport for NSW · Sydney Water · Jemena Limited · surrounding local landowners and stakeholders · any other public transport, utilities or community service providers. 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) hard copy and 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)
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
CITY COUNCIL

Our Ref: OA2020/0010
DPIE Ref: SSD-9320662

06 October 2020

NSW Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Attention: Susan Fox

Dear Sir/Madam,

Subject:	**Request for Comments - State Significant Development (SSD)**
Application No:	**SSD-9320662**
Property:	**30 Loftus Road, YENNORA NSW 2161**
Proposal:	**Cobra Waste Solutions Resource Recovery Facility – Operation of a Resource Recovery Facility to process up to 150,000 tonnes per annum of general solid waste (non-putrescible), consisting of construction and demolition waste and commercial and industrial waste**

Reference is made to the Department of Planning, Industry & Environment referral dated 18 September 2020 regarding the abovementioned application. The application was referred to Cumberland City Council **(Council)** to provide details of key matters and assessment requirements for inclusion in the Secretary's Environmental Assessment Requirements (SEARs).

Council has reviewed the submitted information, and requests that the following matters be addressed.

PLANNING

1. The Environmental Impact Statement (EIS) shall further detail the proposed development, specifically the process following the sorting and separation of materials, and storage on-site.

2. The application constitutes *Integrated Development* under the *Protection of the Environment Operations Act 1997* **(POEO Act)**, pursuant to Clause 4.46 of the Environmental Planning and Assessment Act, 1979 **(the Act)**, which shall be discussed in the EIS. Particular reference is made to *Schedule A – Scheduled Activities* of the POEO Act, Clause 34 – Resource Recovery, and Clause 42 – Waste Storage.

   Note: As further information is required to ascertain the full extent of the proposal, as noted under Point 1 above, Clause 39 - Waste Disposal (Application to Land), Clause 40 – Waste Disposal (Thermal Treatment), and Clause 41 – Waste Processing (Non-Thermal Treatment), may also be applicable.

3. The application constitutes *Designated Development,* pursuant to the *Schedule 3 – Designated Development* of the *Environmental Planning and Assessment Regulations, 2000* **(the Regs)**, which shall be discussed in the EIS*.* Particular reference is made to Clause 32 – Waste Management Facilities or Works.

4. As assessment of the Holroyd Local Environmental Plan 2013, and Draft Cumberland Local Environmental Plan 2020 shall be undertaken and discussed in the EIS.

5. The EIS shall provide confirmation on the application number of the original warehouse building, to which the application relies upon, including a copy of the consent/s and endorsed plans and documents.

ENGINEERING

Flooding

6. The subject site is located within the Flood Risk precinct. In this regard, a Flood Advice Letter shall be obtained from Council.

7. The subject development shall comply with the Flood Advice Letter, and should be designed in accordance with Part A, Section 8.0 - Stormwater Management of the Holroyd Development Control Plan 2013 **(HDCP)**.

8. Stormwater runoff from the manoeuvring area, including access ways, will have to undergo some form of industrial standard primary treatment / separation prior to disposal into existing stormwater systems. In this regard, a stormwater treatment device capable of removing litter, oil, grease and sediment, shall be provided prior to discharge to the stormwater system.

9. Parking spaces shall be clear of the medium flood risk area.

10. Parking spaces shall be clear of Easement F2.

Stormwater

11. The development should be designed in accordance with Part A, Section 7.0 - Stormwater Management of the HDCP.

12. The stormwater plan shall be prepared by suitably qualified hydraulic engineer.

13. Overland flows up to the 1% Annual Exceedance Probability (AEP) storm, shall be addressed in accordance with Council's standards and specifications, and the Upper Parramatta Catchment Trust's O.S.D. Handbook

14. Stormwater runoff shall be minimised via reuse and recycling.

Traffic / Parking

15. A Traffic Impact Assessment (TIA) report shall be prepared. The TIA report shall address the impacts of the proposed development, and should include, but is not limited to; queuing, parking, traffic generation, entry and exit.

16. Left turn manoeuvring of trucks shall not encroach the centre of the road.

17. The parking layout shall comply with AS2890.1 and AS2890.6.

18. The loading area design shall comply with AS2890.2.

19. Sight distance at the entry / exit points shall be demonstrated to comply with AS2890.1. Details such as heights of fencing, parked vehicles on the road, or other structures adjacent to the driveway, shall be considered in the assessment.

ENVIRONMENTAL HEALTH

20. The proposed development incorporates scheduled activities as defined under the *Protection of the Environment Operations Act 1997*. Based on the information provided, and the amount of waste to be processed at the facility, an Environment Protection Licence **(EPL)** from the NSW Environment Protection Authority **(EPA)** will be required. The facility will need to comply with any licence requirements as issued by the EPA.

TREE MANAGEMENT

21. All trees that are to remain, are appropriately protected as per AS4970 – 2009 Protection of trees on development. During construction or any time during the development, any pruning works should be carried out in accordance with AS4373.

WASTE MANAGEMENT

22. Details of the ongoing management of waste generated by the office and employees shall be provided.

BUILDING CERTIFICATION

23. A Construction Certificate is required for the installations proposed, and an Occupation Certificate is required prior to the occupation of the premises. Details of the installations and fire safety compliance for the proposal shall be provided to the Certifier for assessment.

Should you have any further enquiries please do not hesitate to contact William Attard on 8757 9924 in relation to this matter.

Yours faithfully,

Michael Lawani
Coordinator Major Development Assessment

OUT20/11325

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

susan.fox@planning.nsw.gov.au

Dear Ms Fox

Cobra Waste Solutions Resource Recovery Facility (SSD-9320662)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 18 September 2020 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following recommendations are provided by DPIE Water and NRAR.

The SEARS should include:

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

Any further referrals to DPIE – NRAR & Water can be sent by email to: landuse.enquiries@dpie.nsw.gov.au.

Yours sincerely

Alistair Drew
Project Officer, Assessments
Water – Strategic Relations
22 September 2020

Our ref: DOC20/788728
Senders ref: SSD-9320662

Ms Susan Fox
Planning and Assessment Group
Department of Planning, Industry and Environment
4PSQ, 12 Darcy Street
PARRAMATTA NSW 2150

Dear Ms Fox

Subject: EES comments on Request for SEARs – Cobra Waste Solutions – Resource Recovery Facility – 30 Loftus Road Yennora– SSD-9320662

Thank you for your email of 18 September 2020 requesting advice in relation to this State Significant Development. The Environment, Energy and Science Group (EES) has reviewed the Scoping Report and provides the following comments and recommendations in Attachment A.

Please note that from 1 July 2020, Aboriginal cultural heritage (ACH) regulation, including advice on major projects, is now managed by the Heritage NSW. The new contact for the ACH regulation team is heritagemailbox@environment.nsw.gov.au.

Biodiversity

Please be advised EES is currently considering a BDAR Waiver request for this SSD. The determination on this request will be forwarded separately.

Flooding

The flood assessment (including associated management of any flood risks) should address the attached EES SEARs Requirements in relation to mainstream and/or overland flooding for the full range of floods.

Landscaping

The BDAR waiver report notes there are recently planted mature-size gum trees on the northern and western boundary of the site and this vegetation is to be retained (page 10). EES notes the Site Plan and Truck Movement plan attached to the Scoping Report show trees along the western boundary but none along the northern boundary. The EIS should clarify this.

If a Landscape Plan is to be prepared for the site, EES recommends it includes details on:

- existing vegetation at the site (location, plant species, number of trees etc)
- plant species to be planted - the plant species should comprise local provenance species (trees, shrubs and groundcovers) from the native vegetation community that once occurred on the site (rather than use non-local native species or exotics)
- the proposed removal of any trees - any trees removed are replaced at a ratio greater than 1:1
- the pot size of any trees to be planted - advanced sized trees should be used to increase urban tree canopy cover
- the area/space required to allow planted trees to grow to maturity

- the plant maintenance regime.

Non-conforming loads

The Scoping Report states the proposal supports the reduction in illegal dumping by providing a facility that accepts unwanted wastes (section 2, page 3). It indicates records of all truck loads entering the facility would be maintained at the weighbridge and trucks with conforming loads would be weighed on the weighbridge then directed inside the building while non-conforming loads would be rejected and turned away (section 3.3, page 6).

EES notes the applicant offers recycling and waste services across the Sydney region and suggests the EIS addresses whether the Yennora facility will provide drivers of non-conforming loads with advice/contact details on other recovery facilities where their loads can be taken to assist prevent illegal dumping of the non-conforming loads.

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

Yours sincerely

28/09/20

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

Attachment A – EES Group Standard Environmental Assessment Requirements

Water and soils
1. 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
2. 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
3. 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)

4. 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

5. 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.

6. 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.

7. 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.

8. 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.

9. 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 riverbanks 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)

Susan Fox

From: Brendan.M Hurley <Brendan.M.Hurley@fire.nsw.gov.au>
Sent: Monday, 28 September 2020 11:17 AM
To: Susan Fox
Cc: Fire Safety
Subject: SSD-932066 Yennora Resource Recovery Facility (Cobra Waste Solutions). BFS20/2996

SSD-932066 Yennora Resource Recovery Facility (Cobra Waste Solutions)

Dear Susan,

Fire & Rescue NSW (FRNSW) acknowledge the receipt of your email on the 18th September 2020, requesting input into Planning Secretary's Environmental Assessment Requirements (SEARs) for the Yennora Resource Recovery Facility (Cobra Waste Solutions) located at 30 Loftus Road, Yennora in the Cumberland Local Government Area.

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

FRNSW have reviewed the documentation that was provided in support of the development and will not be providing comment at this time as there is currently insufficient information available regarding the fire safety and emergency response management aspects of the project.

We request that we be given the opportunity to review and provide comment once approvals have been granted and the project has progressed such that there is more relevant detailed information available.

FRNSW note that screening will be carried out under SEPP 33 to determine if the site is deemed potentially hazardous or offensive.

As additional details become available Fire & Rescue NSW requests to be consulted with respect to the proposed fire and life safety systems and their configuration at the project's preliminary and final design phases.

While there is currently no requirement for a fire safety study, FRNSW may request one be undertaken at a later stage should information be provided such it is deemed that the development poses unique challenges to the response to and management of an incident.

Please see the FRNSW fire safety guideline for Fire Safety in Waste Facilities that includes legislated requirements and development considerations (planning).
https://www.fire.nsw.gov.au/gallery/files/pdf/guidelines/guidelines_fire_safety_in_waste_facilities.pdf

If you have any queries regarding the above please contact the Fire Safety Infrastructure Liaison Unit, referencing FRNSW file number BFS20/2996. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Regards
Brendan

INSPECTOR BRENDAN HURLEY
Team Leader Infrastructure Liaison
Fire Safety | Fire and Rescue NSW
E: brendan.m.hurley@fire.nsw.gov.au
M: 0438 601 582
1 Amarina Ave, Greenacre, NSW 2190

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This message has been scanned for viruses.

Our reference: DOC20/776675

Susan Fox
Department of Planning, Industry & Environment

Advice provided via the Major Projects Portal

Dear Susan

HERITAGE NSW – ABORIGINAL CULTURAL HERITAGE REGULATION
SECRETARY'S ENVIRONMENTAL ASSESSMENT REQUIREMENTS (SEARS)

Project: Cobra Waste Solutions Resource Recovery Facility
SSD application no: 9320662

Thank you for requesting our input on the draft Planning Secretary's Environmental Assessment Requirements (SEARs) for the above state significant project.

Heritage NSW has reviewed the available supporting documentation and has no recommendations for SEARs for the proposed development in relation to Aboriginal cultural heritage matters based on the information provided.

If you have any questions regarding these comments, please contact Sam Higgs, at Heritage NSW, on 9995 6824 or sam.higgs@environment.nsw.gov.au.

Yours sincerely

Sam Higgs
Senior Team Leader
Aboriginal Heritage Regulation Branch - North
Heritage NSW

Chris Ritchie
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Susan Fox

Notice Number	1601209
Date	01-Oct-2020

EPA SEARs for Proposed Resource Recovery Facility - Cobra Waste Solutions Warehouse A, 30 Loftus Road, Yennora - SSD-9320662

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 18 September 2020.

The EPA has considered the details of the proposal as provided in the Preliminary Environmental Assessment ('PEA') and has identified the information it requires to issue its general terms of approval in Attachment A. The EPA's key information requirements for the proposal include:

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

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

2. Waste Management – the Environmental Assessment include a detailed assessment of the waste management processes to be undertaken at the Premises. This includes but is not limited to:

- details of the sources of waste to be received at the Premises;
- details of the types and quantities of each type of waste to be received at the Premises;
- details of the maximum volume of waste to be stored on the Premises at any one time;
- details of the maximum annual throughput of waste for be processed at the Premises;
- a description of waste processing procedures for each waste type;
- the PEA indicates that the proposal will trigger the scheduled activities of resource recovery and waste processing. The EPA is unable to issue a licence for both these activities simultaneously. Resource recovery applies to activities which dispose of less than 50% of waste after processing, while waste processing applies to activities that dispose of more than 50% of waste after processing;
- a description of how the proponent will meet the EPA's record keeping and reporting requirements, including weighing material in and out of the Premises (refer to the EPA's Waste Levy Guidelines for more information – available at http://www.epa.nsw.gov.au/your-environment/waste/waste-levy;
- a detailed site plan(s) identifying areas for:

- haulage;
- waste receival, processing, storage and loading (for each waste type)
- quarantine;
- infrastructure for environmental controls including dust, noise, water and wheelwash;
- weighbridge;
- site boundaries;
- stormwater drainage areas; and
- unused stabilised areas;

- details of the type and quantities of materials to be produced and their intended fate;
- details of any materials produced under a Resource Recovery Order, and the controls in place for meeting the conditions of that order;
- a description of procedures for dealing with non-conforming waste (i.e. waste not permitted to be received at the Premises).

3. Waste types – the EPA requires detailed information on the waste types proposed to be received at the Premises. For each waste type the applicant must detail the physical and chemical content of the waste, the types of pollution which may result from the storage and processing of that waste and mitigation measures for managing any such impacts.

The list of waste types to be received at the Premises must be made clear.

Please note that the EPA will not consider including the following waste types on the licence:

- Excavated Natural Material or other wastes listed under a resource recovery exemption –
  - resource recovery exemptions apply to the application of waste to land. It is not appropriate to list these on an environment protection licence. The EPA may consider allowing receipt of Virgin Excavated Natural Material and soils at the Premises.

4. Water Management – the EPA expects that assessment of the impacts to water be included in the application. This must include as a minimum characterisation of any proposed discharges from the premises (both volume and quality), assessment of the potential impacts from these discharges and proposed mitigation measures to manage any impacts. The Environmental Assessment must address potential impacts on South Creek, its riparian and flood zones, including a flood impact assessment.

Discharges includes, but are not limited to stormwater (contaminated and uncontaminated), and waste water (such as from dewatering). Please refer to Attachment A for detail of what is to be included in assessment of water impacts.

Please refer to Attachment A for detail of what is to be included in water impact assessments.
Details of stormwater management during both construction and operation must be included in the Environmental Assessment.

5. Wheelwash - Best practice waste management facilities contain a wheelwash to reduce risk of contaminants being tracked out onto public roads. The EPA notes that the Report does not contain reference to a wheelwash for the site. The Proponent should set out in the Environmental Assessment whether a wheelwash will be installed and if not, justification as to why a wheelwash will not be installed.

6. Air Quality - The Environmental Assessment should include an air quality assessment that identifies all potential air emissions from the proposal with particular regard to dust generated by the large scale of dust producing works taking place on the site. The air assessment must consider the proximity of the proposal to

the residential areas surrounding the site. The proponent must asses the impact of these discharges and demonstrate effective control of all identified air emissions from the proposal. Please refer to Attachment A for detail of what is to be included in the air quality impact assessment.

As this proposal is for a large scale facility (150,000 tpa), you will need to take special precautions to prevent dust being emitted offsite through the open doors of the building. The proponent should consider the installation of a dust extraction system to minimise dust in the building which can potentially emit offsite through open doors used by traffic. Any openings in the building must be included when modelling dust emissions from the site.

Please note, that in relation to air impacts, a place where someone works may be considered a sensitive receiver. Therefore, industrial neighbours adjacent to the proposal must be included as sensitive receivers when conducting an air quality or odour impact assessment. In carrying out the air assessment, the proponent should refer to the relevant guidelines as listed in Attachment A and any relevant industry codes of practice and best practice management guidelines.

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

Authorised amount and financial assurance - It should also be noted that there are several requirements for holders of environment protection licenses, including a limit on the maximum amount of waste permitted onsite at any one time, monthly recording and reporting and provision of a financial assurance. The EPA will discuss these matters further with the Applicant at the licensing stage.

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.

Please note that this response does not cover biodiversity or Aboriginal cultural heritage issues, which are the responsibility of the Office of Environment and Heritage.

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

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

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

Yours sincerely

.....

Trevor Wilson

Unit Head

Metropolitan South - Sydney

(by Delegation)

ATTACHMENT A:

ENVIRONMENTAL ASSESSMENT REQUIREMENTS FOR

Cobra Waste Solutions Resource Recovery Facility, Yennora

How to use these requirements

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

A. Executive summary

B. The proposal

C. The location

D. Identification and prioritisation of issues

E. The environmental issues

F. List of approvals and licences

G. Compilation of mitigation measures

H. Justification for the proposal

A Executive summary

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

B The proposal

1. Objectives of the proposal

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

2. Description of the proposal

General

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

d) environment protection measures, including noise mitigation measures, dust control measures and erosion and sediment control measures.

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

Air

- Identify all sources or potential sources of air emissions from the development.
  Note: emissions can be classed as either:
  - *point (e.g. emissions from stack or vent) or*
  - *fugitive (from wind erosion, leakages or spillages, associated with loading or unloading, conveyors, storage facilities, plant and yard operation, vehicle movements (dust from road, exhausts, loss from load), land clearing and construction works).*
- Provide details of the project that are essential for predicting and assessing air impacts including:
  a) the quantities and physio-chemical parameters (e.g. concentration, moisture content, bulk density, particle sizes etc) of materials to be used, transported, produced or stored
  b) an outline of procedures for handling, transport, production and storage
  c) the management of solid, liquid and gaseous waste streams with potential to generate emissions to air.

Noise and vibration

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

Water

- Provide details of the project that are essential for predicting and assessing impacts to waters including:
  a) the quantity and physio-chemical properties of all potential water pollutants and the risks they pose to the environment and human health, including the risks they pose to Water Quality Objectives in the ambient waters (as defined on http://www.environment.nsw.gov.au/ieo/index.htm, using technical criteria derived from *the Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, ANZECC 2000)
  b) the management of discharges with potential for water impacts
  c) drainage works and associated infrastructure; land-forming and excavations; working capacity of structures; and water resource requirements of the proposal.

- Outline site layout, demonstrating efforts to avoid proximity to water resources (especially for activities with significant potential impacts e.g. effluent ponds) and showing potential areas of modification of contours, drainage etc.
- Outline how total water cycle considerations are to be addressed showing total water balances for the development (with the objective of minimising demands and impacts on water resources). Include water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

Waste and chemicals

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

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

- Reference should be made to the guidelines: EPA's *Waste Classification Guidelines 2014 (as amended from time to time)*

ESD

- Demonstrate that the planning process and any subsequent development incorporates objectives and mechanisms for achieving ESD, including:
  a) an assessment of a range of options available for use of the resource, including the benefits of each option to future generations

  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 *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (DEC, 2016)*; Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* (DEC, 2007)*;* .

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. Noise and vibration

Describe baseline conditions

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

Assess impacts

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

- Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. Determine expected noise level and noise character likely to be generated from noise sources during:
  a) site establishment
  b) construction
  c) operational phases
  d) transport including traffic noise generated by the proposal
  e) other services.

  Note: The noise impact assessment report should include noise source data for each source in 1/1 or 1/3 octave band frequencies including methods for references used to determine noise source levels. Noise source levels and characteristics can be sourced from direct measurement of similar activities or from literature (if full references are provided).
- Determine the noise levels likely to be received at the reasonably most affected location(s) (these may vary for different activities at each phase of the development).
- The noise impact assessment report should include:
  a) a plan showing the assumed location of each noise source for each prediction scenario
  b) a list of the number and type of noise sources used in each prediction scenario to simulate all potential significant operating conditions on the site
  c) any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers, etc
  d) methods used to predict noise impacts including identification of any noise models used.
  e) the weather conditions considered for the noise predictions
  f) the predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario
  g) for developments where a significant level of noise impact is likely to occur, noise contours for the key prediction scenarios should be derived
  h) an assessment of the need to include modification factors as detailed in Fact Sheet C of the *NSW Noise Policy for Industry*.
- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional feasible and reasonable mitigation measures.
- The noise impact assessment report should include details of any mitigation proposed including the attenuation that will be achieved and the revised noise impact predictions following mitigation.
  a) Where relevant noise/vibration levels cannot be met after application of all feasible and reasonable mitigation measures the residual level of noise impact needs to be quantified
- For the assessment of existing and future traffic noise, details of data for the road should be included such as assumed traffic volume; percentage heavy vehicles by time of day; and details of the calculation process. These details should be consistent with any traffic study carried out in the EIS.
- Where blasting is intended an assessment in accordance with the *Technical Basis for Guidelines to Minimise Annoyance due to Blasting Overpressure and Ground Vibration* (ANZECC, 1990) should be undertaken. The following details of the blast design should be included in the noise assessment:

a) bench height, burden spacing, spacing burden ratio

b) blast hole diameter, inclination and spacing

c) type of explosive, maximum instantaneous charge, initiation, blast block size, blast frequency.

Describe management and mitigation measures

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

4. Water

Describe baseline conditions

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

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

- Provide site drainage details and surface runoff yield.
- State the ambient Water Quality and River Flow Objectives for the receiving waters. These refer to the community's agreed environmental values and human uses endorsed by the Government as goals for the ambient waters. These environmental values are published on the website: http://www.environment.nsw.gov.au/ieo/index.htm. The EIS should state the environmental values listed for the catchment and waterway type relevant to your proposal. NB: A consolidated and approved list of environmental values are not available for groundwater resources. Where groundwater may be affected the EIS should identify appropriate groundwater environmental values and justify the choice.
- State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the ANZECC 2000 *Guidelines for Fresh and Marine Water Quality* (http://www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html) (Note that, as at 2004, the NSW Water Quality Objectives booklets and website contain technical criteria derived from the 1992 version of the ANZECC Guidelines. The Water Quality Objectives remain as Government Policy, reflecting the community's environmental values and long-term goals, but the technical criteria are replaced by the more recent ANZECC 2000 Guidelines). NB: While specific guidelines for groundwater are not available, the ANCECC 2000 Guidelines endorse the application of the trigger values and decision trees as a tool to assess risk to environmental values in groundwater.

State any locally specific objectives, criteria or targets, which have been endorsed by the government e.g. the Healthy Rivers Commission Inquiries or the NSW Salinity Strategy (DLWC, 2000) (http://www.environment.nsw.gov.au/salinity/government/nswstrategy.htm).

- Where site specific studies are proposed to revise the trigger values supporting the ambient Water Quality and River Flow Objectives, and the results are to be used for regulatory purposes (e.g. to assess whether a licensed discharge impacts on water quality objectives), then prior agreement from the EPA on the approach and study design must be obtained.
- Describe the state of the receiving waters and relate this to the relevant Water Quality and River Flow Objectives (i.e. are Water Quality and River Flow Objectives being achieved?). Proponents are generally only expected to source available data and information. However, proponents of large or high risk developments may be required to collect some ambient water quality / river flow / groundwater data to enable a suitable level of impact assessment. Issues to include in the description of the receiving waters could include:

  a) lake or estuary flushing characteristics

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

  c) sensitive ecosystems or species conservation values

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

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

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

Assess impacts

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

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

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

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

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

- Where a licensed discharge is proposed, provide the rationale as to why it cannot be avoided through application of a reasonable level of performance, using available technology, management practice and industry guidelines.
- Where a licensed discharge is proposed, provide the rationale as to why it represents the best environmental outcome and what measures can be taken to reduce its environmental impact.
- Reference should be made to *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 *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites* (OEH, 2011)*; Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997* (EPA, 2015).

Describe management and mitigation measures

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

6. Waste and chemicals

Describe baseline conditions

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

Assess impacts

- Assess the adequacy of proposed measures to minimise natural resource consumption and minimise impacts from the handling, transporting, storage, processing and reprocessing of waste and/or chemicals.
- Reference should be made to: the EPA's *Waste Classification Guidelines 2014 (as in force from time to time)*
- If the proposal is an energy from waste facility it must:
    - demonstrate that the proposed operation will comply with the NSW EPA's Energy from Waste Policy Statement;
    - describe of the classes and quantities of waste that would be thermally treated at the facility;
    - demonstrate that waste used as a feedstock in the waste to energy plant would be the residual from a resource recovery process that maximises the recovery of material;
    - detail procedures that would be implemented to control the inputs to the waste to energy plant, including contingency measures that would be implemented if inappropriate materials are identified;
    - detail the location and size of stockpiles of unprocessed and processed recycled waste at the site;
    - demonstrate any waste material (e.g. biochar, ash) produced from the waste to energy facility for land application is fit-for-purpose and poses minimal risk of harm to the environment in order to meet the requirements for consideration of a resource recovery order and /or exemption by the EPA;
    - detail procedures for the management of other solid, liquid and gaseous waste streams;
    - describe how waste would be treated, stored, used, disposed and handled on site, and transported to and from the site, and the potential impacts associated with these issues, including current and future offsite waste disposal methods; and
    - identify the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the *NSW Waste Avoidance and Resource Recovery Strategy 2014-21*.

Describe management and mitigation measures

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

7. Cumulative impacts

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

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

F. List of approvals and licences

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

G. Compilation of mitigation measures

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

H. Justification for the Proposal

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

ATTACHMENT 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
POEO (Clean Air) Regulation 2010	http://www.legislation.nsw.gov.au/#/view/regulation/2010/428
Noise and Vibration	
NSW Noise Policy for Industry	http://www.epa.nsw.gov.au/your-environment/noise/industrial-noise/noise-policy-for-industry-(2017)
Interim Construction Noise Guideline (DECC, 2009)	http://www.epa.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.epa.nsw.gov.au/noise/vibrationguide.htm
NSW Road Noise Policy (DECCW, 2011)	http://www.epa.nsw.gov.au/your-environment/noise/transport-noise
NSW Rail Infrastructure Noise Guideline (EPA, 2013)	http://www.epa.nsw.gov.au/your-environment/noise/transport-noise
Human Health Risk Assessment	

Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards (enHealth, 2012)	http://www.eh.org.au/documents/item/916
Waste, Chemicals and Hazardous Materials and Radiation	
Waste	
Environmental Guidelines: Solid Waste Landfills (EPA, 2016)	http://www.epa.nsw.gov.au/waste/landfill-sites.htm
Draft Environmental Guidelines - Industrial Waste Landfilling (April 1998)	http://www.epa.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf
EPA's Waste Classification Guidelines 2014	http://www.epa.nsw.gov.au/wasteregulation/classify-guidelines.htm
Resource recovery orders and exemptions	http://www.epa.nsw.gov.au/wasteregulation/orders-exemptions.htm
European Unions Waste Incineration Directive 2000	http://ec.europa.eu/environment/archives/air/stationary/wid/legislation.htm
EPA's Energy from Waste Policy Statement	http://www.epa.nsw.gov.au/wastestrategy/energy-from-waste.htm
NSW Waste Avoidance and Resource Recovery Strategy 2014-2021	http://www.epa.nsw.gov.au/wastestrategy/warr.htm
Chemicals subject to Chemical Control Orders	
Chemical Control Orders (regulated through the EHC Act)	http://www.epa.nsw.gov.au/pesticides/CCOs.htm
National Protocol - Approval/Licensing of Trials of Technologies for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
National Protocol for Approval/Licensing of Commercial Scale Facilities for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
Water and Soils	
Acid sulphate soils	
Coastal acid sulfate soils guidance material	http://www.environment.nsw.gov.au/acidsulfatesoil/ and http://www.epa.nsw.gov.au/mao/acidsulfatesoils.htm
Acid Sulfate Soils Planning Maps	http://www.environment.nsw.gov.au/acidsulfatesoil/riskmaps.htm
Contaminated Sites Assessment and Remediation	
Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land	http://www.epa.nsw.gov.au/clm/planning.htm

Guidelines for Consultants Reporting on Contaminated Sites (EPA, 2000)	http://www.epa.nsw.gov.au/resources/clm/20110650consultantsglines.pdf
Guidelines for the NSW Site Auditor Scheme - 2nd edition (DEC, 2006)	http://www.epa.nsw.gov.au/resources/clm/auditorglines06121.pdf
Sampling Design Guidelines (EPA, 1995)	http://www.epa.nsw.gov.au/resources/clm/95059sampgdlne.pdf
National Environment Protection (Assessment of Site Contamination) Measure 1999 (or update)	http://www.scew.gov.au/nepms/assessment-site-contamination
Soils – general	
Managing land and soil	http://www.environment.nsw.gov.au/soils/landandsoil.htm
Managing urban stormwater for the protection of soils	http://www.environment.nsw.gov.au/stormwater/publications.htm
Landslide risk management guidelines	http://australiangeomechanics.org/admin/wp-content/uploads/2010/11/LRM2000-Concepts.pdf
Site Investigations for Urban Salinity (DLWC, 2002)	http://www.environment.nsw.gov.au/resources/salinity/booklet3siteinvestigationsforurbansalinity.pdf
Local Government Salinity Initiative Booklets	http://www.environment.nsw.gov.au/salinity/solutions/urban.htm
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.environment.gov.au/water/publications/quality/nwqms-guidelines-4-vol1.html
Applying Goals for Ambient Water Quality Guidance for Operations Officers - Mixing Zones	Contact the EPA on 131555
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

22 September 2020

Susan Fox
Senior Environmental Assessment Officer
Industry Assessments
Department of Planning, Industry & Environment
4 Parramatta Square, 12 Darcy Street, Parramatta NSW 2150
E: susan.fox@planning.nsw.gov.au

Sydney Water input to SEARs for Yennora Resource Recovery Facility at 30 Loftus Road, Yennora (SSD-932066)

Thank you for seeking Sydney Water's input to the Secretary's Environmental Assessment Requirements for the abovementioned development which proposes the construction of a resource recovery facility (RRF) that would process an estimated 150,000 tonnes of waste per annum.

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

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

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

Water-related Infrastructure Requirements

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

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

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

Integrated Water Cycle Management

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

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

Yours sincerely,

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

Our Reference: SYD20/01092
DPIE Reference: SSD-9320662

7 October 2020

Mr Jim Betts
Secretary
Department of Planning, Industry and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Attention: Susan Fox

Dear Mr Betts,

REQUEST FOR SEARS INPUT – COBRA WASTE SOLUTIONS RESOURCE RECOVERY FACILITY 30 LOFTUS ROAD, YENNORA

Reference is made to the Department of Planning, Industry, and Environment (DPIE) correspondence 28 date 18 September 2020, regarding the abovementioned application which was referred to Transport for NSW (TfNSW) for comment.

TfNSW has reviewed the submitted information and request the following issues to be addressed as part of the traffic and transport impact assessment of the proposed development:

- Accurate details of the current daily and peak hour vehicle, existing and future public transport networks and pedestrian and cycle movement provided on the road network located adjacent to the proposed development.

- Details of estimated total daily and peak hour trips generated by the proposal, including vehicle, public transport, pedestrian and bicycle trips.

- The adequacy of existing public transport or any future public transport infrastructure within the vicinity of the site, pedestrian and bicycle networks and associated infrastructure to meet the likely future demand of the proposed development.

- Measures to integrate the development with the existing/future public transport network.

- The impact of trips generated by the development on nearby intersections, with consideration of the cumulative impacts from other approved developments in the vicinity, and the need/associated funding for, and details of, upgrades or road improvement works, if required (Traffic modelling is to be undertaken using SIDRA network modelling for current and future years).

- The identification of infrastructure required to ameliorate any impacts on traffic efficiency and road safety impacts associated with the proposed development.

- Identification of the volume and type of traffic movements into and out of the site.

- Details on the provision of all queuing and staging of vehicles on site.

- Details of travel demand management measures to minimise the impact on general traffic and bus operations, including details of a location-specific sustainable travel plan (Green Travel Plan and specific Workplace travel plan) and the provision of facilities to increase the non-car mode share for travel to and from the site.

- Details on the source of materials coming into the site (including any operational constraints).

- Details on the provision of driver facilities on site.

- The proposed walking and cycling access arrangements and connections to public transport services.

- Details of the proposed site vehicle access and parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (i.e. turn paths, sight distance requirements, aisle widths, etc).

- Detailing vehicle circulation, proposed number of car parking spaces and compliance with the appropriate parking codes.

- Details of the light and heavy vehicle movements (including vehicle type and likely arrival and departure times), including service vehicle movements.

- The proposed access arrangements, including car and bus pick-up/drop-off facilities, and measures to mitigate any associated traffic impacts and impacts on public transport, pedestrian and bicycle networks, including pedestrian crossings and refuges and speed control devices and zones.

- Proposed bicycle parking provision, including end of trip facilities, in secure, convenient, accessible areas close to main entries incorporating lighting and passive surveillance.

- Proposed number of on-site car parking spaces for staff and visitors and corresponding compliance with existing parking codes and justification for the level of car parking provided on-site.

- An assessment of the cumulative on-street parking impacts of cars and bus pick-up/drop-off, staff parking and any other parking demands associated with the development.

- An assessment of road and pedestrian safety adjacent to the proposed development and the details of required road safety measures and personal safety in line with CPTED.

- Emergency vehicle access, service vehicle access, delivery and loading arrangements and estimated service vehicle movements (including vehicle type and the likely arrival and departure times).

- The preparation of a preliminary Construction Traffic and Pedestrian Management Plan to demonstrate the proposed management of the impact in relation to construction traffic addressing the following:

    - Assessment of cumulative impacts associated with other construction activities (if any).
    - An assessment of road safety at key intersection and locations subject to heavy vehicle construction traffic movements and high pedestrian activity.
    - Details of construction program detailing the anticipated construction duration and highlighting significant and milestone stages and events during the construction process.
    - Details of anticipated peak hour and daily construction vehicle movements to and from the site.
    - Details of on-site car parking and access arrangements of construction vehicles, construction workers to and from the site, emergency vehicles and service vehicle.
    - Details of temporary cycling and pedestrian access during construction.

Future development

- In July 2020, the Western Sydney Freight Line (stage 1) (WSFL) was gazetted in the Western Sydney Employment Area State Environmental Planning Policy (WSEA SEPP). TfNSW are currently examining options for WSFL Stage 2, between the M7 at Kemps Creek to the main southern freight line at Yennora and should be considered in the EIS.

The Applicant is to demonstrate that the proposal is generally consistent with relevant plans and reports including (but not limited to):

- Future Transport 2056 and supporting plans; and
- NSW Freight and Ports Plan 2018 – 2023
- Guide to Traffic Generating Developments (Roads and Maritime Services, 2002)
- EIS Guidelines - Road and Related Facilities (DoPI)
- Cycling Aspects of Austroads Guides
- NSW Planning Guidelines for Walking and Cycling
- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development
- Standards Australia AS2890.3 (Bicycle Parking Facilities).

If you have any further inquiries in relation to this development application please contact Narelle Gonzales, Development Assessment Officer, on 0409 541 879 or by email at: development.sydney@rms.nsw.gov.au.

Yours sincerely,

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