Planning, Industry & Environment

Planning Services
Industry Assessments
Contact: Katelyn Symington
Phone: (02) 8275 1216
Email: Katelyn.symington@planning.nsw.gov.au

Our Ref: SSD 10356

Ms Bush
Southern Waste Recycling Solutions Ltd
15 Carribee Road
Moss Vale New South Wales 2577

Dear Ms Bush

Southern Waste Management Facility (SSD 10356)
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 Southern Waste Management Facility at Lot 12 DP 527683 in the Wingecarribee Shire local government area (LGA).

The SEARs have been prepared in consultation with relevant public agencies (see **Attachment 2**) based on the information you have provided to date. Please note that the Planning Secretary may modify these requirements at any time. If you do not submit a Development Application (DA) and EIS for the development within two years, you must consult further with the Planning Secretary in relation to the preparation of the EIS. The Department of Planning and Environment (the Department) will review the EIS for the development carefully before putting it on public exhibition and will require you to submit an amended EIS if it does not adequately address the SEARs.

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 USB Drives) 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 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 Katelyn Symington on the details listed above.

Yours sincerely

C. Ritchie 29/7/19.

Chris Ritchie
Director
Industry Assessments
As delegate of the Planning Secretary

Planning Secretary's Environmental Assessment Requirements

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

Application Number	SSD 10356
Project Name	Southern Waste Management Facility
Development	Construction and operation of a resource recovery facility with a maximum throughput of up to 200,000 tonnes per annum (tpa) of waste. The facility would manage the following wastes: hydro-excavation and drilling muds, Virgin Excavated Natural Material (VENM) and sediment-laden stormwater. Preliminary works include clearing of vegetation and improvements to access to the site. The built development includes the construction of: • in/out weighbridges and passing bays • raw materials bays • enclosed building for waste treatment and storage infrastructure • enclosed and bunded stockpiling area and • stormwater management structures.
Location	Lot 12 DP527683, 15 Carribee Road, Moss Vale
Applicant	Southern Waste Recycling Solutions Ltd
Date of Issue	25 July 2019
General Requirements	The Environmental Impact Statement (EIS) for the development must meet the form and content requirements in clauses 6 and 7 of Schedule 2 of the *Environmental Planning and Assessment Regulation 2000* (the Regulation). In addition, the EIS must include a: • detailed description of the development, including: – accurate history of the site, including development consents – need for the proposed development – justification for the proposed development – likely staging of the development – likely interactions between the development and existing, approved and proposed operations in the vicinity of the site – plans of any proposed building works and – contributions required to offset the proposal. • 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) • risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment • 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 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*, including details of all components of the CIV • a close estimate of the jobs that will be created by the development during the construction and operational phases of the development and • certification that the information provided is accurate at the date of preparation.
Key issues	The EIS must address the following specific matters: • **Statutory and strategic context –** including: – details of all development consents and approved plans previously and/or currently applicable to the site and – a detailed justification that the site can accommodate the proposed resource recovery facility, having regard to the scope of the proposed operation, its environmental impacts and relevant mitigation measures. – 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. • **Suitability of the Site** – including: – details of all development consents and approved plans for the existing facility, including for all structures, plant and equipment – 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 landowners 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 strong justification for any material handling, processing or stockpiling external to buildings – the details of buildings and air handling systems and strong justification for any material handling, processing or stockpiling external to a building – a greenhouse gas assessment and – details of proposed mitigation, management and monitoring measures. • **Soils and Water** – including: – an assessment of potential impacts to soil and water resources, topography, hydrology, groundwater, drainage lines, watercourses and riparian lands on or nearby the site, including mapping and description of existing background conditions and cumulative impacts – a detailed site water balance including identification of water requirements for the life of the project, measures that would be implemented to ensure an adequate and secure water supply is available for the proposal and a detailed description of the measures to minimise the water use at the site – characterisation of water quality at the point of discharge to surface and/or groundwater against the relevant water quality criteria (including details of the contaminants of concern that may leach from the waste into the wastewater and proposed mitigation measures to manage any impacts to receiving waters and monitoring activities and methodologies) – details of stormwater/wastewater/leachate management system including the capacity of onsite detention system(s), onsite sewage management and measures to treat, reuse or dispose of water – consideration of salinity and acid sulphate soils and impacts – characterisation of the nature and extent of any contamination of the site and a description of proposed measures – a description of erosion and sediment controls and – detailed flooding assessment. • **Noise and Vibration** – including: – a quantitative assessment of potential construction, operational and transport noise and vibration impacts in accordance with relevant Environment Protection Authority guidelines and undertaken by a suitably qualified and experienced person(s) and – cumulative impacts of other developments – details and justification of the proposed noise mitigation 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 haul routes. Traffic flows are to be shown diagrammatically to a level of detail sufficient for easy interpretation – 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

	– 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 – swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site – plans of any proposed road upgrades, infrastructure works or new roads required for the development and – an assessment of potential impacts on local road pavement lifespan. • **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 draft Fire Safety Guideline – Fire Safety in Waste Facilities (November 2018) and – detailed information relating to the proposed structures addressing relevant levels of compliance with Volume One of the National Construction Code (NCC). • **Hazard** – including a preliminary risk screening completed in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development* and Applying SEPP 33 (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is "potentially hazardous" a Preliminary Hazard Analysis (PHA) must be prepared in accordance with *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis* (DoP, 2011) and *Multi-Level Risk Assessment* (DoP, 2011). • **Heritage and Aboriginal Cultural Heritage** – including consultation with Aboriginal people must be undertaken. • **Visual** – including an assessment of the potential visual impacts of the project on the amenity of the surrounding area.
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: • NSW Environment Protection Authority • Environment, Energy and Science Group (formerly OEH) • Department of Industry • Transport for NSW • NSW Fire and Rescue • Rural Fire Service • Wingecarribee Shire Council • Natural Resources Access Regulator (NRAR) • WaterNSW • Local community and other stakeholders. The EIS must describe the consultation process and the issues raised and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.

Further consultation after 2 years	If you do not lodge a Development Application and EIS for the development within 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, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this proposal.

ATTACHMENT 1

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 internal and external alterations and additions.

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
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)
Air Quality and Odour	
Air Quality	Protection of the Environment Operations (Clean Air) Regulation 2010
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA 2016)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
Odour	Assessment and Management of Odour from Stationary Sources in NSW (DEC 2006)
Greenhouse Gas	The National Greenhouse and Energy Reporting (Measurement) Technical Guidelines (NGER Technical Guidelines)
	Guidelines for Energy Savings Action Plans (DEUS 2005)
Traffic and Transport	
	Guide to Traffic Generating Development (RTA)
	Guide to Traffic Management Part 12: Traffic Impacts of Developments (Austroads 2016)
	NSW Long Term Transport Master Plan (TfNSW 2012)
	Road Design Guide (RTA)
Soil and Water	
Soil	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC)
	Draft Guidelines for the Assessment & Management of Groundwater Contamination (DECC)
	State Environmental Planning Policy No. 55 – Remediation of Land
	Managing Land Contamination – Planning Guidelines SEPP 55 – Remediation of Land (DOP)
	Acid Sulphate Soils Manual (Stone *et al.* 1998)

Surface Water	National Water Quality Management Strategy: Water quality management - an outline of the policies (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Policies and principles - a reference document (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Implementation guidelines (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ)
	National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	NSW State Rivers and Estuaries Policy (1993)
	State Water Management Outcomes Plan
	NSW Government Water Quality and River Flow Environmental Objectives (DECC)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Managing Urban Stormwater: Soils & Construction (Landcom 2004)
	Managing Urban Stormwater: Treatment Techniques (DECC 1997)
	Managing Urban Stormwater: Source Control (DECC)
	Technical Guidelines: Bunding & Spill Management (DECC)
	NSW Floodplain Development Manual 2005
	NSW Guidelines for Controlled Activities on Waterfront Land (NOW 2012)
Groundwater	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC 1995)
	NSW State Groundwater Policy Framework Document (DLWC 1997)
	NSW State Groundwater Quality Protection Policy (DLWC 1998)
	NSW State Groundwater Dependent Ecosystems Policy (DLWC 2002)
	NSW State Groundwater Quantity Management Policy (DLWC 2002)
	Guidelines for the Assessment and Management of Groundwater Contamination (DEC 2007)
	NSW Aquifer Interference Policy (NOW 2012)
	MDBC Guidelines on Groundwater Flow Modelling 2000
	Australian Groundwater Modelling Guidelines (NWC 2012)
Wastewater	Environmental Guidelines: Use of Effluent by Irrigation (DECC 2004)
	Environmental Guidelines: Storage and Handling of Liquids (DECC 2007)
	National Water Quality Management Strategy - Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 1) 2006 (EPHC, NRMMC & AHMC)
	National Water Quality Management Strategy – Australian Guidelines for Water Recycling: Managing Health and Environmental Risks (Phase 2): Augmentation of Drinking Water Supplies 2008 (EPHC, NRMMC & AHMC)

	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC)
	National Water Quality Management Strategy: Guidelines for Sewerage Systems - Use of Reclaimed Water (ARMCANZ/ANZECC)
	Recycled Water Guidance Document: Recycled Water Management Systems (DPI 2015)
Noise and Vibration	
Noise	Noise Policy for Industry (EPA 2017)
	NSW Road Noise Policy (EPA 2011)
	Environmental Criteria for Road Traffic Noise (EPA 1999)
	Interim Construction Noise Guideline (DECC 2009)
Vibration	Assessing Vibration: A Technical Guideline (DEC 2006)
	Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC 1990)
Fire and Incident Management	
	Planning for Bushfire Protection (NSW Rural Fire Service 2006)
	Draft Planning for Bushfire Protection (NSW Rural Fire Service 2018)
	Draft Fire Safety in Waste Facilities Guideline (NSW Fire and Rescue NSW 2018)
Hazards and Risk	
	State Environmental Planning Policy No. 33 – Hazardous and Offensive Development
	Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DUAP)
	AS/NZS 4360:2004 Risk Management
	HB 203:2006 Environmental Risk Management – Principles and Process
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
	Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning (DUAP)
	Contaminated Sites – Guidelines on Significant Risk of Harm from Contaminated Land and the Duty to Report (EPA 2003)
Biodiversity	
	Biodiversity Assessment Method (2017)
Heritage	
	Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH 2011)
	Code of Practice for the Archaeological Investigation of Aboriginal Objects in New South Wales (DECCW 2010)
	Draft Guidelines for Aboriginal Cultural Impact Assessment and Community Consultation (Department of Planning 2005)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW 2010)

Social	
	Social impact assessment guideline for State significant mining, petroleum production and extractive industry development (2017)
Visual	
	Control of Obtrusive Effects of Outdoor Lighting (Standards Australia, AS 4282)
	State Environmental Planning Policy No 64 - Advertising and Signage

ATTACHMENT 2

Government Authority Responses to Request for Key Issues

Katelyn Symington

From: Nathan Everett <Nathan.Everett@fire.nsw.gov.au>
Sent: Thursday, 11 July 2019 11:24 AM
To: Katelyn Symington
Cc: Fire Safety
Subject: FRNSW response - Request for input SEARs - Southern Waste Management Facility (SSD 10356)

Dear Katelyn,

Request for agency input into SEARs
Southern Waste Management Facility (SSD 10356)
15 Carribee Road, Moss Vale (Wingecarribee LGA)

Thank you for your submission for the above development to Fire & Rescue NSW (FRNSW) for review and agency input.

It is understood that Southern Waste Recycling Services (the Applicant) is proposing to develop and operate a waste disposal, treatment and resource recovery facility at Moss Vale, NSW with capability to process up to 200,000 tonnes per annum of natural material including; excavated materials, drilling muds, and stormwater.

FRNSW submit the following general comments and recommendations for consideration in developing the SEARs:

- It is understood that the proposed waste stream is non-combustible in nature and poses limited risk in regard to potential for an incident requiring an emergency response.
- It is understood that the proposed development may require the transportation and storage of a range of hazardous substances and that a preliminary hazard assessment (PHA) will be undertaken in accordance with the Hazardous Industry Planning Advisory Paper No. 6 (HIPAP 6). It is recommended that a copy of the PHA be included for review in the Environmental Impact Statement (EIS).

If you have any queries regarding the above please contact the Fire Safety Infrastructure Liaison Unit, referencing FRNSW file number BFS19/2211. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Regards,
Nathan

FIRE + RESCUE

QUALIFIED FIREFIGHTER NATHAN EVERETT
FIRE SAFETY OFFICER
FIRE SAFETY INFRASTRUCTURE LIAISON

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

Planning, Industry & Environment

Katelyn Symington
Senior Environmental Assessment Officer
Department of Planning & Environment
E-mail: katelyn.symington@planning.nsw.gov.au

16 July 2019

Our ref: Southern Waste Management Facility - Request for SEARs

Your ref: SSD 10356

File: DOC19/606690

Dear Ms Symington

Subject: Southern Waste Management Facility – Request for SEARs

Thank you for your e-mail of 2 July 2019 requesting input into the abovementioned project SEARs requirements. We note that the applicant has requested the following waivers for the SSD application:

- Biodiversity Development Assessment Report (BDAR) waiver in accordance with s7.9 of the *Biodiversity Conservation Act 2016*
- Aboriginal Cultural Heritage Assessment Report (ACHAR) waiver in accordance with the *'Guidance for Aboriginal cultural heritage impact assessment for state significant development and state significant infrastructure'* (March 2019)("the guidance")

We have assessed the BDAR waiver request and concur that a BDAR is not warranted in this instance. A separate letter formally waiving the BDAR requirement has been issued. However, we recommend that the application assesses any indirect impacts of the proposal upon native vegetation and the unnamed waterway adjacent to the development area.

The guidance for waiving an ACHAR in lieu of a due diligence assessment states that this may be considered where the proposed development footprint is not being expanded, and where recent assessment has identified that Aboriginal cultural heritage values have been removed or destroyed. The proposal does not fully meet these requirements, as the existing footprint is proposed to be slightly expanded and the assessment does not identify previous harm.

However, a due diligence assessment has already been prepared by the applicant (Biosis 2019). The due diligence argues that there is low archaeological potential and recommends no further archaeological investigation. Consultation is not a formal requirement of exercising due diligence, however the lack of consultation risks impact to Aboriginal cultural values that have not been identified by the affected Aboriginal community. There are no existing recorded sites within the proposed development area, however the assessment could be improved by requesting that the applicant conduct Aboriginal community consultation in accordance with relevant guidelines.

Should the ACHAR requirement be waived, we recommend that Aboriginal community consultation in accordance with the "*Aboriginal cultural heritage consultation requirements for proponents*" (OEH 2010) be undertaken. This would mitigate the risk of input from affected Aboriginal communities identifying impacts to Aboriginal cultural heritage values not being considered.

Please do not hesitate to contact Calvin Houlison, Senior Conservation Planning Officer or 4224 4179 or via e-mail calvin.houlison@environment.nsw.gov.au should you have any further queries.

Yours sincerely,

CHRIS PAGE
Senior Team Leader, Planning (Illawarra)
South East Branch
Biodiversity & Conservation

Transport for NSW

Ms Katelyn Symington
Senior Environmental Assessment Officer
Industry Assessments
Department of Planning, Industry & Environment
GPO Box 39
Sydney NSW 2001

ATTN: Bianca Thornton

Dear Ms Symington

Request for Input - SEARs – Southern Waste Management Facility (SSD 10356)

Thank you for your recent correspondence dated 02 July 2019 requesting Transport for NSW (TfNSW) to provide input to the Secretary's Environmental Assessment Requirements (SEARs) for the subject proposed State Significant Development.

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

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

- details of all traffic types (including vehicle type and the likely arrival and departure times) and volumes likely to be generated during construction and operation, including a description of haul route origins and destinations;
- an assessment of the predicted impacts of this traffic on road safety and the capacity of the State road network (in particular the intersections along the Illawarra Highway), including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic model as prescribed by Roads and Maritime Services;
- detailed plans of the proposed layout of the internal road and pedestrian network and parking on site in accordance with the relevant Australian Standards;
- plans of any proposed road upgrades, infrastructure works or new roads required for the development;
- plans demonstrating how all vehicles associated with construction and operation awaiting loading, unloading or servicing can be accommodated on the site to avoid queuing in the street network, and
- swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site for both heavy and light vehicles.

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

- Future Transport 2056 and supporting documents.
- Draft NSW Freight and Ports Plans.
- Guide to Traffic Generating Developments (RMS).
- Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development.

Transport for NSW (TfNSW)
477 Pitt Street, Haymarket NSW 2008
T 02 8202 2200 | **W** transport.nsw.gov.au | ABN 18 804 239 602

PO Box 398, Parramatta NSW 2124
Level 14, 169 Macquarie Street
Parramatta NSW 2150
www.waternsw.com.au
ABN 21 147 934 787

11 July 2019

Contact: *Miles Ellis*
Telephone: *(02) 9865 2502*
Our ref: *D2019/68887*

Katelyn Symington
Planner
Department of Planning, Industry and Environment
GPO Box 39
SYDNEY NSW 2001

Subject: Input into Secretary's Environmental Assessment Requirements – Southern Waste Management Facility (SSD 10356)

I refer to the Department's referral with a request for WaterNSW's input into the Secretary's Environmental Assessment Requirements (SEARs) for the proposed resource recovery facility at Moss Vale (Southern Waste Management Facility – SSD 10356). WaterNSW appreciates the opportunity to provide input into the planning process for this development.

As the development is located within the Sydney Drinking Water Catchment, clauses 9(1) & (2) and 10(1) of the *State Environmental Planning Policy (Sydney Drinking Water Catchment) 2011* apply. The Environmental Impact Statement (EIS) must specifically address each of these clauses, in particular a clear description and justification as to how the development would achieve a neutral or beneficial effect on water quality.

The development should incorporate WaterNSW's Current Recommended Practices (CRPs) – SEPP clause 9(1). Information and copies of CRPs can be found at http://www.waternsw.com.au/water-quality/catchment/development. CRPs that are directly applicable to this proposal include:

- Managing Urban Stormwater (the "Blue Book") Volume 1, and
- Using MUSIC in Sydney Drinking Water Catchment (WaterNSW 2019).

If the development does not propose to incorporate these CRPs, then clause 9(2) applies.

The full description of the development should also include:

- a description of all processes involved; detailed site plans at suitable scales showing the location of all structures (including raw material stockpiles and finished product stockpiles), and details of the risks associated with all activities on receiving waters, and
- a detailed description of the product(s) stated as 'low-grade upgraded hydrocarbon mixture products' and measures for storage of this product within the facility.

The environmental assessment of the development should also include those aspects which have the potential to impact on the quality and quantity of surface and ground waters at the site. This includes:

- **Stormwater Management** –Detail should be provided on:
  - proposed stormwater management for the site including collection, detention, treatment, reuse and/or discharge

- the nature of any stormwater treatment, including an identification of the location of proposed stormwater management or treatment measures that can capture runoff from the site for treatment before reuse or discharge
- estimated pre and post development stormwater flows, pollutant loads and concentrations with and without stormwater treatment both for a range of average and wet weather conditions. This can be demonstrated through stormwater quality modelling (such as MUSIC) to demonstrate that the development at each stage, and in its entirety, can achieve NorBE (.sqz file to be provided to WaterNSW), and
- a stormwater drainage plan for the site that identifies the proposed stormwater treatment and management measures and details the nature and location of any stormwater discharge points.

- **Wastewater management including domestic wastewater** – a detailed description of wastewater management measures including wastewater generated from staff amenities from the development should be provided. The location and details of wastewater management infrastructure should be outlined on site plans.
- **Concept Construction and Operational Environmental Management Plans**
  - The conceptual Construction Environmental Management Plan should include a Soil and Water Management Plan as per the "Blue Book".
  - The conceptual Operational Environmental Management Plan should describe how operational water management will be conducted on the site over the life of the proposal.

WaterNSW requests that the SEARs require the applicant to consult with WaterNSW during the preparation of the EIS. WaterNSW looks forward to reviewing the forthcoming EIS.

If you wish to discuss this letter or the project more generally please do not hesitate to contact Miles Ellis on 9865 2502 or email at environmental.assessments@waternsw.com.au

Yours sincerely

FIONA SMITH
Executive Manager – Water and Catchment Protection

Department of Planning & Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Katelyn Symington

Notice Number	1582152
File Number	EF19/21678
Date	10-Jul-2019

Request for Secretary's Environmental Assessment Requirements (SEARs)
Proposed Resource Recovery Facility - Lot 12 DP 527683 Moss Vale - SEAR 10356

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 2 July 2019.

The EPA has considered the details of the proposal as provided by Prime Environmental Consulting on behalf of Southern Waste Recycling Solutions and has identified the information it requires to issue its general terms of approval in Attachment A. In summary, the EPA's key information requirements for the proposal include an adequate assessment of:

1. Baseline conditions that exist at the site of the proposed development
2. Potential environmental impacts arising from the proposed development and its ongoing activities
3. Possible management and mitigation processes that will be implemented to protect the environment from these impacts

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 EA 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.

If you have any questions about this matter, please contact Greg Frost (02) 4224 4113.

Yours sincerely

.....

MEGAN WHELAN
Unit Head Waste Compliance
Environment Protection Authority

(by Delegation)

ATTACHMENT A: EIS REQUIREMENTS FOR
Proposed Resource Recovery Facility
Lot 12 DP 527683 - 15 Carribee Road, Moss Vale

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* (https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines)
- 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* (https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines)

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
  a) 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 and odour

- 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

3. Noise and vibration

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

4. Water

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

5. Soil Contamination Issues

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

D Identification and prioritisation of issues / scoping of impact assessment

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

E The environmental issues

1. General

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

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

Describe baseline conditions

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

Assess impacts

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

Describe management and mitigation measures

- Describe any mitigation measures and management options proposed to prevent, control, abate or mitigate identified environmental impacts associated with the proposal and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- Proponents are expected to implement a 'reasonable level of performance' to minimise environmental impacts. The proponent must indicate how the proposal meets reasonable levels of performance. For example, reference technology based criteria if available, or identify good practice for this type of activity or development. A 'reasonable level of performance' involves adopting and implementing technology and management practices to achieve certain pollutant emissions levels in economically viable operations. Technology-based criteria evolve gradually over time as technologies and practices change.
- Use environmental impacts as key criteria in selecting between alternative sites, designs and technologies, and to avoid options having the highest environmental impacts.

- Outline any proposed approach (such as an Environmental Management Plan) that will demonstrate how commitments made in the EIS will be implemented. Areas that should be described include:

  a) operational procedures to manage environmental impacts

  b) monitoring procedures

  c) training programs

  d) community consultation

  e) complaint mechanisms including site contacts

  f) strategies to use monitoring information to improve performance

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

2. Air and odour

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:

  a) Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2016)

  b) Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC, 2007)

  c) Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)

  d) Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)

Describe management and mitigation measures

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

3. Noise and vibration

Describe baseline conditions

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

Assess impacts

- Determine the project noise trigger levels for the site. For each identified potentially affected receiver, this should include:
  a) determination of the project intrusive noise level for each identified potentially affected receiver
  b) selection and justification of the appropriate amenity category for each identified potentially affected receiver
  c) determination of the project amenity noise level for each receiver
  d) determination of the appropriate maximum noise level event assessment (sleep disturbance) trigger level.
- Maximum noise levels during night-time period (10pm-7am) should be assessed to analyse possible affects on sleep. Determine expected noise level and noise character likely to be generated from noise sources during:
  a) site establishment

b) construction

c) operational phases

d) transport including traffic noise generated by the proposal

e) other services.

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

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

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

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

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

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

  e) the weather conditions considered for the noise predictions

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

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

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

- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional feasible and reasonable mitigation measures.
- The noise impact assessment report should include details of any mitigation proposed including the attenuation that will be achieved and the revised noise impact predictions following mitigation.
- Where relevant noise/vibration levels cannot be met after application of all feasible and reasonable mitigation measures the residual level of noise impact needs to be quantified
- For the assessment of existing and future traffic noise, details of data for the road should be included such as assumed traffic volume; percentage heavy vehicles by time of day; and details of the calculation process. These details should be consistent with any traffic study carried out in the EIS.

Describe management and mitigation measures

- Determine the most appropriate noise mitigation measures and expected noise reduction including both noise controls and management of impacts for both construction and operational noise. This will include selecting quiet equipment and construction methods, noise barriers or acoustic screens, location of stockpiles, temporary offices, compounds and vehicle routes, scheduling of activities, etc.
- For traffic noise impacts, provide a description of the ameliorative measures considered (if required), reasons for inclusion or exclusion, and procedures for calculation of noise levels including ameliorative

measures. Also include, where necessary, a discussion of any potential problems associated with the proposed ameliorative measures, such as overshadowing effects from barriers. Appropriate ameliorative measures may include:

a) use of alternative transportation modes, alternative routes, or other methods of avoiding the new road usage

b) control of traffic (eg: limiting times of access or speed limitations)

c) resurfacing of the road using a quiet surface

d) use of (additional) noise barriers or bunds

e) treatment of the façade to reduce internal noise levels buildings where the night-time criteria is a major concern

f) more stringent limits for noise emission from vehicles (i.e. using specially designed 'quite' trucks and/or trucks to use air bag suspension

g) driver education

h) appropriate truck routes

i) limit usage of exhaust brakes

j) use of premium muffles on trucks

k) reducing speed limits for trucks

l) ongoing community liaison and monitoring of complaints

m) phasing in the increased road use.

4. Water

Describe baseline conditions

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

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

- Provide site drainage details and surface runoff yield.

- State the ambient Water Quality and River Flow Objectives for the receiving waters. These refer to the community's agreed environmental values and human uses endorsed by the Government as goals for the ambient waters. These environmental values are published on the website: http://www.environment.nsw.gov.au/ieo/index.htm. The EIS should state the environmental values listed for the catchment and waterway type relevant to your proposal.

  Note: 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.waterquality.gov.au/anz-guidelines/resources/previous-guidelines/anzecc-armcanz-2000)

(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).

Note: 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).
- 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:

  a) *Manager Urban Stormwater: Soils and Construction* (Landcom, 2004)

  b) *Guidelines for Fresh and Marine Water Quality* (ANZECC, 2000)

  c) *Environmental Guidelines: Use of Effluent by Irrigation* (DEC, 2004)

  d) *Environmental Guidelines: Composting and Related Organics Processing Facilities* (DECC, 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:
  a) *Contaminated Sites - Guidelines Reporting on Contaminated Sites* (OEH, 2011)
  b) *Guidelines on the Duty to Report Contamination under the Contamination Land Management Act 1997* (EPA, 2015)
  c) *Environmental Guidelines: Composting and Related Organics Processing Facilities* (DECC, 2004)

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* (https://www.epa.nsw.gov.au/your-environment/waste/classifying-waste/waste-classification-guidelines)

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

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OUT19/8854

Katelyn Symington
Senior Environmental Assessment Officer
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

kately.symington@planning.nsw.gov.au

Dear Ms Symington

Southern Waste Management Facility (SSD 10356)
Comment on the Secretary's Environmental Assessment Requirements (SEARs)

I refer to your email of 3 July 2019 to the Department of Planning, Industry and Environment (DPIE) – Lands, Water and Department of Primary Industries (DPI) about the above matter.

The following advice for you to consider is from relevant branches of Lands & Water and DPI.

The SEARs should include:

DPIE – Water and Natural Resources Access Regulator

- 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).

DPI – Agriculture

NSW DPI Agriculture provides recommended SEARs **(Attachment 1)** and relevant guidelines and resources **(Attachment 2)** to assist the proponent in addressing the recommended SEARs.

Any further referrals to DPIE – Lands, Water and DPI can be sent by email to landuse.enquiries@dpi.nsw.gov.au.

Yours sincerely

Simon Francis
Senior Project Officer, Assessments
DPIE Water – Strategic Relations
18 July 2019

ATTACHMENT 1

Southern Waste Management Facility (SSD 10356)
SEARs

SEARs Recommendations

Issue and desired outcome	Detail / Requirement
Site Suitable for development	• Detail that the proposal is consistent with strategic plans and zone requirements • Complete a Landuse Conflict Risk Assessment (LUCRA) to identify potential landuse conflict, in particular relating to separation distances and management practices to minimise odour, dust and noise from sensitive receptors. A LUCRA is described in the DPI Land Use Conflict Risk Assessment Guide. • Include a map to scale showing the above operational and infrastructure details including separation distances from sensitive receptors.
Consideration for impacts to agricultural resources and land	• Describe the current and potential *Important Agriculture Land* on the proposed development site and surrounding locality including the land capability and agricultural productivity. • Demonstrate that all significant impacts on current and potential agricultural developments and resources can be reasonably avoided or adequately mitigated. • Consider possible cumulative effects to agricultural enterprises and landholders. • Detail the expected life span of the proposed development
Bushfire risk identified and managed	• Risk assessment level and mitigation plan developed to address bush fire risk.
Suitable and secure water supply	• Estimated water demand and water availability should be clearly outlined in the proposal. The source of water and any sanitisation methods to be detailed in the application. • Outline any impacts to water use from agriculture and mitigation measures if required.
Biosecurity Standards met	• Include a biosecurity (pests, weeds and disease) risk assessment outlining the likely plant, animal and community risks as per guidelines in Attachment 2. • Prepare a Biosecurity Plan to demonstrate meeting their general duty under the Biosecurity Act 2015, particularly in relation to VEMN importation and other identified risks as well as contingency plans for any failures. Include monitoring and mitigation measures in weed, disease and pest management plans.
Suitable traffic movements	• Consideration of the route for movements needs to be taken into account so that impacts on sensitive receptors are minimised (eg noise, dust, volume of traffic). This should include consideration of Travelling Stock Reserves1 (TSR) and the movement of livestock or farm vehicles along / across the affected roads
Visual amenity achieved	• Amenity impacts are assessed and any necessary response to mitigate visual impacts is described and illustrated.
Land stewardship met	• Develop Rehabilitation and Decommissioning/Closure Management Plans that outlines the rehabilitation objectives and strategies. This includes, but is not limited to, describing the design criteria of the final landuse and landform, indicators to be used to guide the return of the land back to agricultural production, along with the expected timeline for the rehabilitation program. • Outline monitoring and mitigation measures to be adopted for rehabilitation remedial actions.

Issue and desired outcome	Detail / Requirement
Adequate consultation with community	• Consult with relevant agencies such as on the design, construction and operation of the proposed infrastructure. • Consult with the owners / managers of affected and adjoining neighbours and agricultural operations in a timely and appropriate manner about; the proposal, the likely impacts and suitable mitigation measures or compensation. • Establish a complaints register that includes reporting and investigating procedures and timelines, and liaison with Council in relation to complaint issues.

END ATTACHMENT 1

ATTACHMENT 2

Recommended Guidelines and Resources

Title	Location
Land Use Conflict Risk Assessment Guide	www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/lucra
Infrastructure Proposals on Rural Land	http://www.dpi.nsw.gov.au/content/agriculture/resources/lup/development-assessment/infrastructure-proposals

END ATTACHMENT 2