



Mr Neale Hogarth
Bettergrow Pty Ltd
28 Industry Road
VINEYARD NSW 2765

15 July 2020

Dear Mr Hogarth

**Wetherill Park Resource Recovery Facility (SSD-7401-Mod-1)
Planning Secretary's Environmental Assessment Requirements**

Please find attached a copy of the Planning Secretary's Environmental Assessment Requirements (SEARs) for the modification application (SSD-7401-Mod-1). These requirements have been prepared in consultation with relevant public authorities based on the information you have provided to date.

Your modification application must address the SEARs (**Attachment 1**) and the requirements of the public authorities (**Attachment 2**). Please note that the Planning Secretary may modify these requirements at any time.

If you do not submit the modification application within two years, you must consult further with the Planning Secretary in relation to the preparation of the modification application.

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 modification application. 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 modification application. This will enable the Department to confirm the applicable fee (see Division 1AA, Part 15 of the Environmental Planning and Assessment Regulation 2000).

If the modification application 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 Bianca Thornton on 02 8217 2040 or via email at bianca.thornton@planning.nsw.gov.au.

Yours sincerely

A handwritten signature in black ink, appearing to read 'C. Ritchie'.

Chris Ritchie
Director
Industry Assessments
as delegate for the Planning Secretary

**Attachment 1: Planning Secretary's Environmental Assessment Requirements
Wetherill Park Resource Recovery Facility (SSD-7401-Mod-1)**

- 1. Description of the modification**, including:
 - a detailed description of the proposed modification, including the relationship with and changes to existing operations and any staging
 - identification of conditions to be modified and proposed wording of any new or modified conditions
 - identification of any proposed variations to other licences and approvals.
- 2. Details of the existing operations on site**, including:
 - a description of existing and approved operations/facilities, including licences or statutory approvals that apply to these
 - a summary of the existing conditions of consent that would be relevant to the proposal
 - a summary of the existing environmental management and monitoring regime
 - detailed plans of the existing and proposed site layout and structures
 - a table detailing compliance with existing conditions of consent.
- 3. Assessment of the modification**, including:
 - a detailed assessment of the key issues specified below, the public authority requirements and any other significant issues identified by a risk assessment, which includes:
 - an assessment of all potential impacts of the proposal on the existing environment and measures to avoid, minimise, mitigate and/or manage these potential impacts, including proposals for adaptive management and/or contingency plans to manage any significant risks to the environment
 - an assessment of the potential impacts of all stages of the development, including any cumulative impacts of the proposal with the existing operations on site.
- 4. Strategic and statutory context**, including:
 - the need and justification for the proposal having regard to its location and impacts, the suitability of the site and the public interest;
 - consideration of all relevant legislation, strategies, environmental planning instruments, including identification for any inconsistencies
 - detailed justification the proposal is substantially the same development as the development to which consent was originally granted, as per s4.55(2) of the EP&A Act.
- 5. Traffic and access**, including:
 - a quantitative traffic impact assessment which considers traffic types and volumes likely to be generated, impacts on road safety and impacts on the capacity of the road network
 - detailed plans of the proposed layout of the internal road and pedestrian network and parking on site in accordance with the relevant Australian Standards and Council's DCP
 - 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
 - swept path diagrams depicting vehicles entering, exiting and manoeuvring throughout the site for both heavy and light vehicles.
- 6. Air quality**, including:
 - a quantitative Air Quality Impact Assessment (AQIA) of the potential air quality, dust and odour impacts of all stages of the development (construction and operation) in accordance with the relevant Environment Protection Authority guidelines, including an assessment of cumulative impacts
 - the details of buildings and air handling systems and strong justification (including quantitative evidence) for any material handling, processing or stockpiling external to a building
 - details of proposed mitigation, management and monitoring measures.
- 7. Soil and water**, including:
 - an assessment of potential surface and ground water impacts including details of surface water and stormwater management system(s) and measures to treat, reuse or dispose of water
 - detailed site water balance
 - consideration of potential flooding impacts
 - details of any measures to minimise demand for potable water
 - details of proposed mitigation, management and monitoring measures.

8. **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 including details of the proposed on-going monitoring regime to be implemented.
9. **Waste management**, including:
 - a description of the waste streams that would be accepted at the site including maximum daily, weekly and annual throughputs and the maximum size for stockpiles and any liquid waste storage
 - a detailed 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 waste 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
 - details of the waste tracking system for incoming and outgoing waste
 - details of the waste management strategy for construction and ongoing operational waste generated
 - the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the NSW Waste Avoidance and Resource Recovery Strategy 2014-2021.
10. **Hazard and risk**, including a preliminary risk screening completed in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33 (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is “potentially hazardous” a Preliminary Hazard Analysis (PHA) must be prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis (DoP, 2011) and Multi-Level Risk Assessment (DoP, 2011).
11. **Fire and incident management**, including:
 - technical information on the environmental protection equipment to be installed on the premises such as air, water and noise controls, spill clean-up equipment and fire management
 - the measures that would be implemented to ensure that the development is consistent with the *Fire safety in waste facilities* (FRNSW).
12. **Biodiversity**, including an assessment of biodiversity impacts in accordance with the Biodiversity Assessment Method and documented in a Biodiversity Development Assessment Report (BDAR) or justification that a BDAR is not required as the proposal will not increase the impact on biodiversity values as per Clause 7.17(2)(c) of the *Biodiversity Conservation Act 2016*.
13. **Visual**, including an assessment of the potential impacts of the development on the amenity of the surrounding area.
14. **Consultation** with relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners, particularly FRNSW, Sydney Water and Water NSW.
15. A table indicating where each element of the SEARs is addressed in the modification application.

Attachment 2: Requirements from Public Authorities



In reply please quote: SSD-7401 (MOD 1)

Contact: Kerren Ven on (02) 9725 0878

8 July 2020

Industry Assessments,
Department of Planning, Industry and Environment
4 Parramatta Square,
12 Darcy Street,
PARRAMATTA NSW 2150

Attention: Bianca Thornton

SEARS REQUEST FOR ADVICE (SSD-7401-MOD-1) – Proposed increased processing capacity, additional wastes streams and new shredding

I refer to recent correspondence from the Department of Planning, Industry and Environment regarding the above matter associated with the existing resource recovery facility at 24 Davis Road, Wetherill Park approved under SSD-7401 and EPL 21092.

The proponent is proposing to modify the consent for the following:

- 24/7 operation
- Demolition of site buildings to reconfigure plant equipment and shed structures,
- Increase the processing capacity of the resource recovery facility from 160,000 tpa to 350,000 tpa,
- Install a large partly enclosed shed over the existing drill mud processing area for additional waste streams for processing, and
- Construction of a building infrastructure to services the development.

Council has reviewed the Scoping Report prepared by RPS Group dated 12 June 2020 and endorses the information provided in section 7 of the Scoping Report to be addressed in the EIS. Furthermore, Council request that the following additional matters be addressed as part of the SEARs and EIS assessment.

Amended Stormwater Drainage Plans

The EIS shall include amended Stormwater Drainage Plans. The Stormwater Plans shall be prepared by a qualified engineer in accordance with Council's Stormwater Management Policy Sept 2017.

Traffic and Parking

Council's Traffic Engineers have reviewed the Scoping Report and advise the following information shall be included as part of the EIS:



- The Traffic and Transport Impact Assessment Report states that during peak weekly operations, the recycling facility is anticipated to generate between 30-40 vehicle movements (comprising both passenger and heavy vehicles) per hour to and from the site between 1pm – 3pm. During the peak commuter periods (between 7am – 9am and 4pm – 6pm), the recycling facility would generate a traffic demand of between 15-30 vehicle movements (comprising both passenger and heavy vehicles) per hour to and from the site.
- Table 2 of the traffic and transport impact assessment report – Summary of anticipated average and peak daily vehicle movements in and out of the site indicates the maximum number of heavy vehicles generated by the development is expected to be 38 during the 1-hour period. 38 heavy vehicles travelling to and from the site during the peak hour are considered relatively high. Additional information shall be provided to Council to address this concern.
- A Traffic Management Plan demonstrating how the increase in vehicle movements will be managed within the site shall be submitted to Council for assessment.
- A Loading Management Plan shall be submitted to Council for assessment as the site has limited number of service bays to accommodate the heavy vehicles. This can be incorporated into the conditions of consent subject to the agreement with the applicant.
- The applicant's turning path diagram (Job No. 0604-16 Sheet No. A03) shows heavy vehicles manoeuvring within the site are impacted by trucks parking within the site and the concrete slab structure for mud processing area. Additional information shall be provided to address this concern.
- The applicant's swept path diagram shall demonstrate how two-way traffic movements will be accommodated at/near the entry/exit driveway. This information shall be provided to Council for assessment. The width of the driveway shall be designed to accommodate the simultaneous movements of a 19m B-Double vehicle and another vehicle and this shall be justified by turning path analysis.

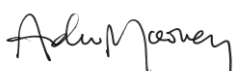
Natural Resources comments

The following documentation shall be included as part of the EIS:

- An Arborist Report prepared by a qualified consultant including tree protection measures outlining proposed retained vegetation on site,
- An Ecologist Report prepared by a qualified consultant indicating no or any significant impact indicated in the Preliminary Biodiversity Assessment, and
- A detailed Landscape Plan prepared by a qualified Landscape Architect shall be submitted.

If you have any questions regarding the above, please contact Ms K Ven on Council's Strategic Land Use Planning Section on (02) 9725 0878.

Yours faithfully,



Andrew Mooney

ACTING MANAGER, STRATEGIC LAND USE PLANNING

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

Attention: Bianca Thornton

Notice Number 1597036
Date 03-Jul-2020

RE: Modification of the Greenspot Resource Recovery Facility 24 Davis Road Wetherill Park, NSW

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 19 June 2020.

The modification application includes an increase in the processing capacity of the recycling and resource recovery facility from 160,000 tpa up to 350,000tpa, the installation of a large partly enclosed shed over the existing drill mud processing area and bulk landscape area, and additional waste streams for processing as follows:

- 100,000 tonnes per year of hydro-excavation drilling muds and fluids for storage, separation and consolidation (**being a 40,000tpa increase above currently approved levels**);
- 150,000 tonnes per year of General Solid Waste, including VENM, ENM, soils, gravels, aggregates, street sweepings, clean timber, asphalt waste, cured concrete, rail ballast, and C&D waste (**this is a new waste stream for processing**);
- 70,000 tonnes of Garden Organics (GO) and Mixed Food and Garden Organics (FOGO) (**no change to approved levels**);
- 30,000 tonnes of Food Organics (**no change to approved levels**).
- the construction of additional shedding which would provide all-weather processing and the enclosure of plant and equipment.

The EPA has considered the details of the proposal and has identified the information it requires to assess the proposal in Attachment A. The EPA also has several specific information requirements for this proposed modification that should be covered in the environmental assessment as follows:

1. **Dust prevention** - The facility design must minimise dust generation and assess the impact of an increase in material throughput and processing on receptors around the facility.
2. **Noise** - the proponent must assess noise impacts and demonstrate effective controls to manage noise impacts, including from traffic, at all receptors. Please refer to Attachment A for detail of what is to be included in the noise impact assessment.

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 in its title and description in the EA.

4. **Air Quality** - the EIS should include an air quality assessment that identifies all potential air emission from the Premises with regards to dust generated from the proposed increase in throughput and processing of building and demolition waste, VENM, ENM, soils, concrete etc. The proponent must assess the impact of these discharges and demonstrate effective control of all identified air emissions from the Premises. Please refer to Attachment A for detail of what is to be included in the air quality impact assessment.

Please note, that in relation to air impacts, a place where someone works may be considered a sensitive receiver. Therefore, industrial neighbours to the Premises must be included as sensitive receivers when conducting air quality or odour impact assessments

In carrying out the 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.

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

A handwritten signature in blue ink, appearing to read "T. Wilson".

.....

Trevor Wilson

Unit Head

Sydney Waste Compliance

(by Delegation)

ATTACHMENT A: EIS REQUIREMENTS FOR

Modification of the Greenspot Resource Recovery Facility 24 Davis Road Wetherill Park, NSW

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.

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 siteany waste processing related to the facility, including reuse, recycling, reprocessing (including composting) or treatment both on- and off-site
 - c) the method for disposing of all wastes or recovered materials at the facility
 - d) the emissions arising from the handling, storage, processing and reprocessing of waste at the facility
 - e) 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 generationsproper valuation and pricing of environmental resources
 - b) identification of who will bear the environmental costs of the proposal.

3. Rehabilitation

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

4. Consideration of alternatives and justification for the proposal

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

C The location

1. General

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

2. Air

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

3. Noise and vibration

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

4. Water

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

5. Soil Contamination Issues

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

D Identification and prioritisation of issues / scoping of impact assessment

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

E The environmental issues

1. General

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

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

Describe baseline conditions

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

Assess impacts

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

Describe management and mitigation measures

- Describe any mitigation measures and management options proposed to prevent, control, abate or mitigate identified environmental impacts associated with the proposal and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.
- Proponents are expected to implement a 'reasonable level of performance' to minimise environmental impacts. The proponent must indicate how the proposal meets reasonable levels of performance. For example, reference technology based criteria if available, or identify good practice for this type of activity or development. A 'reasonable level of performance' involves adopting and implementing technology and

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

- Use environmental impacts as key criteria in selecting between alternative sites, designs and technologies, and to avoid options having the highest environmental impacts.
- Outline any proposed approach (such as an Environmental Management Plan) that will demonstrate how commitments made in the EIS will be implemented. Areas that should be described include:
 - a) operational procedures to manage environmental impacts
 - b) monitoring procedures
 - c) training programs
 - d) community consultation
 - e) complaint mechanisms including site contacts
 - f) strategies to use monitoring information to improve performance
 - g) strategies to achieve acceptable environmental impacts and to respond in event of exceedences.

4. Air

Describe baseline conditions

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

Assess impacts

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

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

- Reference should be made to the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (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. Human Health Risk Assessment

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

6. Noise and vibration

Describe baseline conditions

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

- i) a record of periods of affected data (due to adverse weather and extraneous noise), methods used to exclude invalid data and a statement indicating the need for any re-monitoring.

Assess impacts

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

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

- Determine the noise levels likely to be received at the reasonably most affected location(s) (these may vary for different activities at each phase of the development).
- The noise impact assessment report should include:
 - a) a plan showing the assumed location of each noise source for each prediction scenario
 - b) a list of the number and type of noise sources used in each prediction scenario to simulate all potential significant operating conditions on the site
 - c) any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers, etc
 - d) methods used to predict noise impacts including identification of any noise models used.
 - e) the weather conditions considered for the noise predictions
 - f) the predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario
 - g) for developments where a significant level of noise impact is likely to occur, noise contours for the key prediction scenarios should be derived

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

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.

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	
<i>Contaminated Land Management Act 1997</i>	http://www.legislation.nsw.gov.au/#/view/act/1997/140
<i>Environmentally Hazardous Chemicals Act 1985</i>	http://www.legislation.nsw.gov.au/#/view/act/1985/14
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/#/view/act/1979/203
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/#/view/act/1997/156
<i>Water Management Act 2000</i>	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/envguidlms/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/20110650consultantsguidelines.pdf
Guidelines for the NSW Site Auditor Scheme - 2nd edition (DEC, 2006)	http://www.epa.nsw.gov.au/resources/clm/auditorguidelines06121.pdf
Sampling Design Guidelines (EPA, 1995)	http://www.epa.nsw.gov.au/resources/clm/95059sampingdline.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



OUT20/7471

Bianca Thornton
Planning and Assessment Group
NSW Department of Planning, Industry and Environment

bianca.thornton@planning.nsw.gov.au

Dear Ms Thornton

**Wetherill Park Resource Recovery Facility MOD 1 - Increased Processing Capacity,
Additional Wastes Streams and New Shedding
Comment on the Secretary's Environmental Assessment Requirements (SEARs)**

I refer to your email of 19 June 2020 to the Department of Planning, Industry and Environment (DPIE) Water and the Natural Resources Access Regulator (NRAR) about the above matter.

The following recommendations are provided by DPIE Water and NRAR. Please note Crown Lands, the Department of Primary Industries (DPI) – Fisheries and DPI - Agriculture all now provide a separate response directly to you.

The SEARS should include:

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

Any further referrals to DPIE – NRAR & Water can be sent by email to:

landuse.enquiries@dpi.nsw.gov.au.

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

(b) ahp.central@dpi.nsw.gov.au; and (c) landuse.ag@dpi.nsw.gov.au respectively.

Yours sincerely

Alistair Drew
Project Officer, Assessments
Water – Strategic Relations
2 July 2020

1 July 2020

Our Ref: 170803

Bianca Thornton

Environmental Assessment Officer
Industry Assessments, DPIE
4 Parramatta Square, Parramatta NSW 2150
bianca.thornton@planning.nsw.gov.au

RE: Sydney Water input to SEARs for SSD-7401-Mod-1 at 24 Davis Road, Wetherill Park

Thank you for seeking Sydney Water's input on the Secretary's Environmental Assessment Requirements for the abovementioned modification to SSD-7401. We have reviewed the proposal and provide the following comments for your consideration.

The proposed development presents **potential impacts** to Sydney Water's assets including but not limited to:

- Potable water and wastewater reticulation pipes on Davis Road, and
- Twin critical potable water trunk mains and other major assets within the grounds of Prospect Reservoir to the rear of the site.

Sydney Water 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 development should **determine service demands** following servicing investigations and demonstrate that satisfactory arrangements for drinking water, wastewater, and recycled water (if required) 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 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.

Integrated Water Cycle Management

4. 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 do not hesitate to contact the Growth Planning Team at urbangrowth@sydneywater.com.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read "K. Leitch", with a long horizontal stroke extending to the right.

Kristine Leitch

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

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

Attention: Bianca Thornton

Dear Madam/ Sir,

New Request for Advice - MOD 1 - Increased Processing Capacity, Additional Wastes Streams and New Shedding (SSD-7401-Mod-1) (Fairfield)

Thank you for your correspondence via the Major Projects Planning Portal (ref: PAE-3690) dated 19 June 2020 requesting Transport for NSW (TfNSW) provide input to the Secretary's Environmental Assessment Requirements (SEARs) for the above.

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

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

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

1. Details of all traffic types and volumes likely to be generated by the proposed redevelopment during construction and operation, including a description of haul route origins and destinations, including:
 - a. Daily inbound and outbound vehicle traffic profile by time of day and day of week (if travel patterns differ across the week);
 - b. Site and traffic management plan on how to manage number of 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 surrounding road network;
 - c. Detailed plan of proposed layout of internal road network to demonstrate that the site will be able to accommodate the most productive vehicle types (noting that the surrounding road network accommodates 25/26 metre B-doubles at HML) and parking on site in accordance with the relevant Australian Standard and Council's Development Control Plan;
 - d. Swept path diagrams to demonstrate vehicles entering, exiting and manoeuvring throughout the site;
 - e. An assessment of the forecast impacts on traffic volume generated on road safety and capacity of road network including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic model as prescribed by TfNSW (former Roads and Maritime). The traffic modelling should consider the scenarios of year 2026, 2031, 2036 and the year until the facility cease operation. These should include, but not be limited to:
 - i. Davis Road at Elizabeth Street; and

- ii. Victoria Street at Elizabeth Street.
 - f. Details plan of any proposed road upgrades, infrastructure works or new road required for the development;
 - g. An assessment of potential impact on load road pavement lifespan including:
 - i. Davis Road;
 - ii. Elizabeth Street; and
 - iii. Widemere Road/Hassall Street.
 - h. To ensure that the above requirements are fully addressed, the traffic impact assessment must properly ascertain the cumulative study area traffic impacts associated with the redevelopment (and any other known proposed developments in the area); and
 - i. An assessment of the accessibility and provision of public transport and active transport. TfNSW requires the Environmental Impact Assessment report to address these implications.
2. The detailed traffic impact assessment should address the relevant planning provisions, goals and strategic planning objectives in the following:
- a. Future Transport 2056 and supporting documents;
 - b. NSW Freight and Ports Plans 2018-2023;
 - c. Guide to Traffic Generating Developments 2002(RTA);
 - d. TDT 2013/04a Guide to Traffic Generating Developments; and
 - e. Austroads Guide to Traffic Management Part 12: Traffic Impacts of Development.

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

Yours sincerely



6/7/2020

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

CD20/05206

Bianca Thornton

From: Brendan.M Hurley <Brendan.M.Hurley@fire.nsw.gov.au>
Sent: Tuesday, 23 June 2020 2:41 PM
To: Bianca Thornton
Cc: Fire Safety
Subject: Request for Input - SEARs - Modification to Wetherill Park Resource Recovery Facility (SSD-7401-Mod-1). BFS20/1862

Request for Input - SEARs - Modification to Wetherill Park Resource Recovery Facility (SSD-7401-Mod-1)

Dear Bianca,

Fire & Rescue NSW (FRNSW) acknowledge the receipt of your email on the 19th June 2020, requesting input into the preparation of the Secretary's Environmental Assessment Requirements (SEARs) Modification 1 for the preparation of an Environmental Impact Statement (EIS) for the Wetherill Park Resource Recovery Facility (SSD-7401-Mod-1).

FRNSW have reviewed the documentation (scoping report) 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.

An assessment of the project in accordance with SEPP 33 will be undertaken during the EIS to confirm the proposed development is not offensive or hazardous. FRNSW 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.

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.

For further information please contact the Fire Safety Infrastructure Liaison Unit, referencing FRNSW file number BFS20/1862. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Regards
Brendan



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