Department of Planning and Environment

Our ref: Restart of Redbank Power Station (SSD-56284960)

Mr Mike Haywood
General Manager Sustainable Energy
Verdant Earth Technologies Limited
Level 33 52 Martin Place
Sydney New South Wales 2000

30 August 2023

Subject: Planning Secretary's Environmental Assessment Requirements

Dear Mr Haywood

Please find attached a copy of the Planning Secretary's environmental assessment requirements (SEARs) for the Restart of Redbank Power Station (SSD-56284960). The SEARs have been prepared in consultation with relevant public authorities, based on the information you have provided. A copy of the advice from the public authorities is attached for your information.

Where relevant, the Planning Secretary may modify the SEARs to ensure the environmental assessment of the project covers all relevant matters and is consistent with contemporary assessment practice.

Your SEARs will expire two years from the date of issue (or the date they were last modified) unless the Planning Secretary has granted an extension. If you would like to seek an extension, you should contact the department at least three months prior to the expiry date. If your application is not submitted within two years (or by the agreed extension date), you will need to make a new application for SEARs to progress your project.

Preparing your EIS

Your environmental impact statement (EIS) must be prepared having regard to the department's *State Significant Development Guidelines* – including the *Preparing an Environmental Impact Statement Guideline*. All relevant guides for State significant projects that are referenced in the SEARs are available at www.planning.nsw.gov.au/Policy-and-Legislation/Planning-reforms/Rapid-Assessment-Framework.

During the preparation of your EIS, you are required to consult with various parties, including the department and relevant agencies, in accordance with *the Undertaking Engagement Guidelines for State Significant Projects*. For more information, please visit the "Prepare EIS" page on the NSW planning portal. Agency contact details can be found at https://www.planningportal.nsw.gov.au/major-projects/assessment/guide-agency-directory.

You will need a Registered Environmental Assessment Practitioner (REAP) to declare that your EIS meets certain standards in relation to its completeness, accuracy, quality and clarity before it is submitted to the department, as per Division 5 of Part 8 of the *Environmental Planning and Assessment Regulation 2021*. A pro forma declaration can be found in Appendix B of the Preparing an Environmental Impact Statement Guideline.

Lodging your development application (DA)

Once you submit your EIS, we will check it for completeness to confirm it addresses the requirements in Part 8 of the *Environmental Planning and Assessment Regulation 2021*. We will also notify you of the DA fee for your project.

Please note that **your DA is not taken to be lodged until the DA fee has been paid**.

To minimise delays, **please contact the department at least two weeks before you submit your EIS** to confirm fee determination information and payment arrangements. This will give us sufficient time to ensure your application fee can be determined quickly.

Information needed to determine the DA fee

Your application will need to be accompanied by a Quantity Surveyor's Report supporting the estimated cost of development for your project. You must ensure that the information in the report is consistent with the information provided in your DA form.

If your project involves marinas, extractive industries or any subdivision of land, you must also ensure that your report includes a breakdown of estimated costs for any other component of your project.

Public exhibition requirements

When you contact us regarding the applicable DA fee, we will also advise whether hard and/or electronic copies of the EIS will be required for public exhibition.

Matters of National Environmental Significance

Any development likely to have a significant impact on matters of National Environmental Significance will require approval under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). This approval is in addition to approvals required under NSW legislation.

It is your responsibility to contact the Commonwealth Department of Climate Change, Energy, the Environment and Water to determine if you need approval under the EPBC Act (https://www.dcceew.gov.au/ or 6274 1111).

If you have any questions, please contact Joe Fittell on 02 4908 6896 or via email at Joe.Fittell@planning.nsw.gov.au.

Yours sincerely,

Gen Lucas
A/Director – Resource Assessments
as delegate for the Planning Secretary

Planning Secretary's Environmental Assessment Requirements

Section 4.12(8) of the *Environmental Planning and Assessment Act 1979*

Part 8 of the *Environmental Planning and Assessment Regulation 2021*

Application Number	SSD-56284960
Project	Restart of Redbank Power Station
Location	Lot 450 DP 1119428 within Singleton LGA
Proponent	Verdant Earth Technologies Limited
Date of Issue	30 August 2023
General Requirements	The Environmental Impact Statement (EIS) must meet the minimum form and content requirements as prescribed by Part 8 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) and must have regard to the *State Significant Development Guidelines*. In particular, the EIS must include: • a stand-alone executive summary; • a full description of the development, including: - details of construction, operation and decommissioning, including any staging of the development; - high quality site plans at an adequate scale showing all infrastructure and facilities (including any infrastructure that would be required for the development, but the subject of a separate approvals process); - a high quality detailed constraints map identifying the key environmental and other land use constraints that have informed the final design of the development; • a strategic justification of the development focusing on site selection and the suitability of the proposed site with respect to potential land use conflicts with existing and future surrounding land uses (including other proposed or approved energy facilities, rural/residential development and subdivision potential); • an assessment of the likely impacts of the development on the environment, focusing on the specific issues identified below, including: - a description of the existing environment likely to be affected by the development; - an assessment of the likely impacts of all stages of the development, (which is commensurate with the level of impact), including any cumulative impacts of the site and existing, approved or proposed developments in the region and impacts on the site and any road upgrades, taking into consideration any relevant legislation, environmental planning instruments, guidelines, policies, plans and industry codes of practice including the *Cumulative Impact Assessment Guideline* (DPIE, 2021);

	- a description of the measures that would be implemented to avoid, mitigate and/or offset the impacts of the development (including draft management plans for specific issues as identified below); and - a description of the measures that would be implemented to monitor and report on the environmental performance of the development; • a general description of any infrastructure that would be required for the project that is the subject of a separate approval process; • a consolidated summary of all the proposed environmental management and monitoring measures, identifying all the commitments in the EIS; and a detailed evaluation of the merits of the project as a whole having regard to: - the requirements in Section 4.15 of the *Environmental Planning and Assessment Act 1979*, including the objects of the Act and how the principles of ecologically sustainable development have been incorporated in the design, construction and ongoing operations of the development; - the suitability of the site with respect to potential land use conflicts with existing and future surrounding land uses; and - feasible alternatives to the development (and its key components), including the consequences of not carrying out the development. • Where relevant, the assessment of key issues below, and any other significant issues identified in the risk assessment, must include: - adequate baseline data; - consideration of the potential cumulative impacts due to other developments in the vicinity (completed, underway or proposed); and - measures to avoid, minimise and if necessary, offset predicted impacts, including detailed contingency plans for managing any significant risks to the environment; and - a health impact assessment of local and regional impacts associated with the development, including those health risks associated with relevant key issues. • a detailed consideration of the capability of the project to contribute to the security and reliability of the electricity system in the National Electricity Market, having regard to local system conditions. The EIS must also be accompanied by: • a report from a AIQS Certified Quantity Surveyor or RICS Chartered Quantity Surveyor providing a detailed calculation of the capital investment value (CIV) (as defined in the Regulation) of the proposal, including details of all assumptions and components from which the CIV calculation is derived. The report shall be prepared on company letterhead and indicate applicable GST component of the CIV and include certification that the information provided is accurate for the development at the time of application; and • an estimate of jobs that will be created during the construction and operational phases of the proposed development. The development application must be accompanied by the consent of the owner/s of the land (as required in Section 23(1) of the Regulation).
Key issues	The EIS must address the following specific matters: **1. Statutory and Strategic Context** Address the statutory provisions applying to the development contained in all relevant environmental planning instruments, including: • *State Environmental Planning Policy (Planning Systems) 2021*;

- *State Environmental Planning Policy (Resources and Energy) 2021*;
- *State Environmental Planning Policy (Resilience and Hazards) 2021*;
- *State Environmental Planning Policy (Biodiversity and Conservation) 2021*;
- *State Environmental Planning Policy (Transport and Infrastructure) 2021*;
- *Singleton Local Environmental Plan 2013*;
- *Upper Hunter Strategic Regional Land Use Plan*; and
- *Hunter Regional Plan 2041*.

2. Land and Water

- an assessment of the impacts of the project on soils, including consideration of the extent and nature of any existing contaminated materials on site, and the potential risks to human health and the receiving environmental and measures that would be implemented to avoid and mitigate impacts;
- a supply chain assessment demonstrating that the required volumes of feedstock with no higher value use are available;
- demonstration that demand for feedstock can be met over the operational lifespan of the plant;
- an assessment of the impacts of the project on groundwater aquifers and groundwater dependent ecosystems having regard to the NSW Aquifer Interference Policy and relevant Water Sharing Plans;
- an assessment of the impacts of the project on surface water quality having regard to the *NSW Water Quality and River Flow Objectives* (DECCW, 2006), *Australian and New Zealand Guidelines for Fresh and Marine Water Quality* (ANZG, 2018);
- a detailed site water balance for the project a description of the water demands and identification of a water supply for the life of the project, and any water licensing requirements;
- details of wastewater disposal arrangements;
- an assessment of flooding and the hydrological impacts of the project; and
- a description of the erosion and sediment control measures that would be implemented to mitigate any impacts during construction.

3. Air Quality

- an assessment of the likely air quality impacts of the project in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 2022);
- ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations Act 1997* and the *Protection of the Environment Operations (Clean Air) Regulation 2010*;
- an assessment of the likely greenhouse gas impacts of the project; and
- preparation of a greenhouse gas mitigation plan and climate change adaptation plan.

4. Noise and Vibration

- assessment of the likely construction noise impacts of the project under the *Construction Noise Guideline* if available, or the *Interim Construction Noise Guideline* (DECCW, 2009) if the Construction Noise Guideline is not available.
- an assessment of the likely operational noise impacts of the project under the *NSW Noise Policy for Industry* (EPA, 2017);
- an assessment of the likely road noise impacts of the project under the *NSW Road Noise Policy* (EPA, 2011); and

- an assessment of the likely vibration amenity and structural impacts of the project under *Assessing Vibration: A Technical Guideline* (DEC, 2006) and *German Standard DIN 4150-3 Structural Vibration – effects of vibration on structures*;

5. Transport

- an assessment of the transport impacts of the project on the capacity, condition, safety and efficiency of the local and State road network, including consideration of cumulative impacts from traffic associated with construction of other major projects in the area;
- an assessment of the likely transport impacts to the site access route and site access point having regard to Oversized or Over mass vehicles (if required);
- a description of the measures that would be implemented to mitigate any impacts during construction and operation of the development, in the form of a draft traffic management plan; and
- a description of any proposed road upgrades, including an assessment of associated impacts, developed in consultation with the relevant road authorities (if required);

6. Waste

- identify, quantify and classify the likely waste stream to be generated during construction and operation, and describe the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.

7. Biodiversity

- an assessment of the biodiversity values and the likely biodiversity impacts of the project in accordance with the *NSW Biodiversity Conservation Act 2016*, the *Biodiversity Assessment Method* (BAM) and documented in a Biodiversity Development Assessment Report (BDAR); and
- the BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the BAM.

8. Heritage

- an assessment of the likely Aboriginal impacts of the project in accordance with the *Code of Practice for Archaeological Investigation of Aboriginal Objects in New South Wales* (DECCW, 2010), including adequate consultation with Aboriginal stakeholders having regard to the *Aboriginal Cultural Heritage Consultation Requirements for Proponents* (OEH, 2010); and
- an assessment of likely non-Aboriginal heritage impacts of the project.

9. Hazards and Risks

- a Preliminary Hazard Analysis (PHA), prepared consistent with *Hazardous Industry Planning Advisory Paper No. 6 – Guidelines of Hazard Analysis* (DPE, 2011) and Multi-level Risk Assessment, covering all aspects of the project that may pose risks to the public. The PHA must:
  - be a Quantitative Risk Assessment (QRA) and must include consideration of the change in risk as the quantity and concentrations of hydrogen used for operating the power station and in plant (piping, vessels, equipment, etc.) increases; and
  - consider current and new technologies and standards for the design and operation of the power station and pipelines with hydrogen.
- must demonstrate that the risks from the project, including cumulative risk from all project components and any ancillary blending facilities, comply with the criteria set out in *Hazardous Industry Planning Advisory*

	Paper No. 4 – Risk Criteria for Land Use Safety Planning (DPE, 2011); and • an assessment of bushfire risk in accordance with *Planning for Bush Fire Protection 2019* (NSW RFS, 2019); and • a plume rise impact assessment prepared in accordance with CASA's guidelines for conducting plume rise assessments, and an assessment of the potential impact to aviation in the vicinity of the project. **10. Visual** • likely visual and landscape character impacts of the project on the amenity of the surrounding area and private residences in the vicinity of the project. **11. Social** • an assessment of the social impacts of the project prepared in accordance with the Department's *Social Impact Assessment Guideline For State Significant Developments* (2021) and the likely impacts on the local community and community infrastructure (including consideration of cumulative impacts from other major projects in the area); and **12. Economics** • an analysis of any potential economic benefits and impacts of the development including to NSW and the local and regional community.
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Part 8 of the Regulation. Provide these as part of the EIS rather than as separate documents. In addition, the EIS must include high quality files of maps and figures of the subject site and proposal.
Engagement	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. The EIS must detail the engagement undertaken and demonstrate how it was consistent with the *Undertaking Engagement Guidelines for State Significant Projects*. The EIS must detail how issues raised and feedback provided have been considered and responded to in the project.
Expiry Date	If you do not lodge a Development Application and EIS for the development within 2 years of the issue date of these SEARs, your SEARs will expire. If an extension to these SEARs will be required, please consult with the Planning Secretary 3 months prior to the expiry date.
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
ENVIRONMENTAL PLANNING INSTRUMENTS, POLICIES, GUIDELINES & PLANS

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/

Waste	
	Waste Classification Guidelines (EPA)
	Eligible Waste Fuel Guidelines 2016
	NSW Energy from Waste Policy Statement 2021
	NSW Waste Avoidance and Resource Recovery Strategy 2014-21
	Guidelines for the burning of bio-material: record-keeping requirements for electricity generating facilities 2013
Air	
	Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2022)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA 2022))
	Technical Framework – Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006)
	National Greenhouse Accounts Factors (Commonwealth)
Greenhouse Gas	
	Net Zero Plan Stage 1: 2020–2030
	Net Zero Plan Implementation Update 2022
	NSW Climate Change Adaptation Strategy
	NSW Waste and Sustainable Materials Strategy
	EPA Climate Change Policy (2023), including its Climate Change Policy and Action Plan
Hazards and Risks	
	Hazardous and Offensive Project Application Guidelines – Applying SEPP 33
	Hazardous Industry Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning
	Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis
	Hazardous Industry Planning Advisory Paper No. 11 – Route Selection
	Australian Standard 4452 Storage and Handling of Toxic Substances
	Australian Dangerous Goods Code
	AS2885 Pipelines – Gas and Liquid Petroleum, Operation and Maintenance
	Planning for Bushfire Protection (NSW RFS)
	Advisory Circular AC 139-05 v3.0 Plume Rise Assessments (CASA)
Water	
	NSW Water Strategy: https://www.dpie.nsw.gov.au/water/plans-and-programs/nsw-water-strategy

	NSW State Groundwater Policy Framework Document and component policies (DPI)
	Relevant Water Sharing Plans
	NSW Aquifer Interference Policy 2012 (DPI)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	Guidelines for Development in the Drinking Water catchments (Hunter Water, 2017)
	NSW State Rivers and Estuary Policy (DPI Water)
	NSW Government Water Quality and River Flow Objectives at: https://www.environment.nsw.gov.au/ieo/
	Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DECC, 2008)
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Technical Guidelines: Bunding & Spill Management (EPA)
	NSW Guidelines for Controlled Activities (various) (DPI)
Land and Contamination	
	NSW Forest Management Framework
	Burning of Native Forest Biomaterial
	Guidelines for the burning of bio-material: record-keeping requirements for electricity generating facilities
	Contaminated Sites Sampling Design Guidelines 1995 (EPA)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (with amendment April 2013)
	Acid Sulfate Soils Manual (OEH)
	Australian and New Zealand Guidelines for Fresh and Marine Water Quality (EPA)
	Managing Urban Stormwater: Soils & Construction (Landcom)
	Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC)
	National Environment Protection (Assessment of Site Contamination) Measure 1999 (with amendment April 2013)
	Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)
	The land and soil capability assessment scheme: Second approximation (OEH)
	The land and soil capability assessment scheme: Second approximation (OEH)
	Australian Soil and Land Survey Handbook (CSIRO)
	Soil and Landscape Issues in Environmental Impact Assessment (DPI)
Biodiversity	
	Biodiversity Assessment Method (OEH 2020)
	Policy and Guidelines for Fish Habitat Conservation and Management – Update (DPI, 2013)
	NSW State Groundwater Dependent Ecosystem Policy (DPI Water)
	Risk Assessment Guidelines for Groundwater Dependent Ecosystems (DPI Water)
	Why Do Fish Need to Cross the Road? Fish Passage Requirements for Waterway Crossings (DPI)
Heritage	
	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)

	Guide to investigating, assessing and reporting on Aboriginal cultural heritage in NSW (OEH, 2011)
	Aboriginal Cultural Heritage Consultation Requirements for Proponents 2010 (DECCW, 2010)
	Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW (OEH)
	NSW Heritage Manual (Heritage Office and Department of Urban Affairs and Planning, 1994)
	Assessing Heritage Significance (NSW Heritage Office, 2001)
	Statements of Heritage Impact (Heritage Office and Department of Urban Affairs and Planning, 2002)
Noise and Vibration	
	NSW Noise Policy for Industry (EPA)
	NSW Road Noise Policy and associated Application Notes (EPA)
	Construction Noise Guideline (EPA) (if finalised - subject to any transitional arrangements), otherwise Interim Construction Noise Guideline (DECCW, 2009)
	Environmental Noise Management - Assessing Vibration: a Technical Guideline (DEC, 2006)
	German Standard DIN 4150-3: Structural Vibration – effects of vibration on structures
	Technical Basis for Guidelines to Minimise Annoyance Due to Blasting Overpressure and Ground Vibration (ANZECC, 1990)
Transport	
	Road and Related Facilities within the Department of Planning EIS Guidelines Guide to Traffic Generating Projects (RMS)
	TfNSW Supplements to Austroads Guides, available at: https://roads-waterways.transport.nsw.gov.au/business-industry/partners-suppliers/documenttypes/supplements-austroads-guides/index.html
	Road Design Guide (RMS) & relevant Austroads Standards
	Austroads Guide to Traffic Management Part 12: Traffic Impacts of Project
Visual	
	AS4282-1997 Control of the obtrusive effects of outdoor lighting
	Dark Sky Planning Guideline: Protecting the observing conditions at Siding Spring
Social	
	Social Impact Assessment Guideline for State Significant Developments (2021)

Our ref: DOC23/702901-2

Joe Fittell
Team Leader
Department of Planning and Environment

Via Major Projects Portal

29 August 2023

Dear Mr Fittell

Revised Secretary's Environmental Assessment Requirements (SSD-56284960)
Restart of Redbank Power Station and Use of Biomass (excluding native forestry residues from logging) as a Fuel

I refer to your request for the Environment Protection Authority's ("EPA") requirements for the environmental assessment (EA) regarding the above proposal received by EPA on 9 August 2023.

The EPA has considered the details of the proposal and has identified the information it requires to assess the application. These are provided in **Section A**. In summary, the EPA's key information requirements for the proposal include an assessment of:

1. The use of waste wood residues and other potential trial materials proposed in accordance with the EPA's *Energy from Waste Policy* (EPA 2021) and *Eligible Waste Fuels Guideli*nes (EPA 2022),

2. The air quality control technologies and achievable emission concentration levels, and assessment of the potential emission levels in accordance with the *Protection of the Environment Operations (Clean Air) Regulation 2022*,

3. Greenhouse gas impacts and climate change risks,

4. A human health risk assessment undertaken in accordance with *Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards* (enHealth),

5. Noise and vibration assessment,

6. Potential impact to surface and ground waters,

7. Soils and contamination; and

8. Waste and chemicals.

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

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

Phone 131 555
Phone 02 9995 5555
(from outside NSW)

TTY 133 677, then ask for 131 155

Locked Bag 5022
PARRAMATTA
NSW 2124

6&8 Parramatta Square 10 Darcy Street
PARRAMATTA NSW 2150

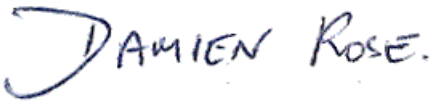
info@epa.nsw.gov.au
www.epa.nsw.gov.au
ABN 43 692 285 758

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 further questions about this issue, please contact Paul Wearne on (02) 4224 4100 or at environmentprotection.planning@epa.nsw.gov.au.

Yours sincerely



DAMIEN ROSE
Unit Head – Statutory Planning

Attachment
1. Section A – Environmental Assessment Requirements
2. Section B – Guidance Material

SECTION A:

Environmental Assessment Requirements for Restart of Redbank Power Station (SSD-56284960)

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.

3. 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) including greenhouse gas emissions and climate change related risks.

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 on http://www.environment.nsw.gov.au/ieo/index.htm, using technical criteria derived from *the Australian and New Zealand Guidelines for Fresh and Marine Water Quality*, ANZECC 2000)
  b. the management of discharges with potential for water impacts
  c. drainage works and associated infrastructure; land-forming and excavations; working capacity of structures; and water resource requirements of the proposal.

- Outline site layout, demonstrating efforts to avoid proximity to water resources (especially for activities with significant potential impacts e.g. effluent ponds) and showing potential areas of modification of contours, drainage etc.

- Outline how total water cycle considerations are to be addressed showing total water balances for the development (with the objective of minimising demands and impacts on water resources). Include water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

Waste and chemicals

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

- Provide details of liquid waste and non-liquid waste management at the facility, including:
  a. the transportation, assessment and handling of waste arriving at or generated at the site
  b. any stockpiling of wastes or recovered materials at the site
  c. any waste processing related to the facility, including reuse, recycling, reprocessing (including composting) or treatment both on- and off-site
  d. the method for disposing of all wastes or recovered materials at the facility
  e. the emissions arising from the handling, storage, processing and reprocessing of waste at the facility
  f. the proposed controls for managing the environmental impacts of these activities.

- Provide details of spoil disposal with particular attention to:
  a. the quantity of spoil material likely to be generated
  b. proposed strategies for the handling, stockpiling, reuse/recycling and disposal of spoil
  c. the need to maximise reuse of spoil material in the construction industry
  d. identification of the history of spoil material and whether there is any likelihood of contaminated material, and if so, measures for the management of any contaminated material
  e. designation of transportation routes for transport of spoil.

- Provide details of procedures for the assessment, handling, storage, transport and disposal of all hazardous and dangerous materials used, stored, processed or disposed of at the site, in addition to the requirements for liquid and non-liquid wastes.
- Provide details of the type and quantity of any chemical substances to be used or stored and describe arrangements for their safe use and storage.
- Reference should be made to the guidelines: EPA's *Waste Classification Guidelines 2014 (as amended from time to time)*

ESD

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

4. Rehabilitation

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

5. 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

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

- 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.

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. soil types and properties (including erodibility; engineering and structural properties; dispersibility; permeability; presence of acid sulfate soils and potential acid sulfate soils)
  e. ecological information (water system habitat, vegetation)
  f. 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: on https://www.environment.nsw.gov.au/ieo/ 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.

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).

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.

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 exceedances.

2. Air

Describe baseline conditions

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

Assess impacts

- Provide an Air Quality Impact Assessment (AQIA) prepared in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in New South Wales* (EPA 2022). The AQIA must.

- Identify all potential discharges of fugitive and point source emissions of pollutants and odour for all stages of the proposal. All processes that could result in air emission must be identified and described. Sufficient detail to accurately communicate the characteristics and quantity of all emissions must be provided.

- Describe the receiving environment in detail. The proposal must be contextualised within the receiving environment (local, regional, and inter-regional as appropriate). The description must include but need not be limited to:
  a. Meteorology and climate
  b. Topography
  c. Surrounding land-use
  d. Identified sensitive receptors; and
  e. Ambient air quality

- Identify comparable facilities within the airshed and consider the cumulative of air emissions from these facilities.

- Detail emission control techniques/practices, including emission sampling and monitoring, that will be employed by the proposal, and benchmark these techniques/practices against best practice emission control and management.

- Assess all risks to the environment, human health and amenity associated with emissions of air pollutants, including odour from all stages of the proposal.

- Justify the level of assessment undertaken on the basis of risk factors including but not limit to:
  i. Proposal location
  ii. Characteristics of the receiving environment and
  iii. Type and quantity of pollutants emitted

- Include a consideration of ‘worst case’ emission scenarios and impacts at proposed emission limits.

- Account for cumulative impacts with existing emissions sources as well as any currently approved developments linked to the receiving environment.

- 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.

- Include air dispersion modelling conducted in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA 2022)*. Consideration must be given to recent amendments to air pollutant standards contained in the *National Environment Protection (Ambient Air Quality) Measure)*

- Demonstrate the Proposal's ability to comply with the relevant regulatory framework, specifically the Act and the *Protection of the Environment Operations (Clean Air) Regulation 2022*.

- For potentially odorous emissions provide the emission rates in terms of odour units (determined by techniques compatible with EPA procedures). Use sampling and analysis techniques for individual or complex odours and for point or diffuse sources, as appropriate.

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

- Reference should be made to relevant guidelines which are provided in Section B. These include, but are not limited to, *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (EPA, 2022)*; Approved Methods for the Sampling and Analysis of Air Pollutants in NSW* (EPA, 2022)*; Assessment and Management of Odour from Stationary Sources in NSW* (DEC, 2006)*; Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006); Load Calculation Protocol for use by holders of NSW Environment Protection Licences when calculating Assessable Pollutant Loads* (DECC, 2009).

Describe management and mitigation measures

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

3. Forestry related matters, including biomass generated from trees

The assessment must include details on the following matters:

- Total expected annual volumes of feedstock across the life of the project from:
  - public and private native forest tenures, and
  - biomass obtained from sources specified under Chapter 9 Part 3 of the *Protection of the Environment Operations (General) Regulation* 2022.
- For any source identified from the total expected volume of feedstock above, an independent contemporary supply chain assessment demonstrating that the required volumes with no higher

value use are available locally, including breakdown of availability by land tenure. *Note: the Department of Primary Industries (DPI) report cited in the Scoping Report for the proposal is not sufficient.*

- Demonstration that demand for these sources can be met over the plants operational lifespan without an intensification of forestry operations or compromising ecologically sustainable forest management (ESFM).

- Method to assess and meet the higher value use requirement of the waste material obtained from suppliers.

- Method to continually evaluate the higher value uses of incoming waste material obtained from suppliers over the plant's operational lifespan.

- Description of the feedstock supply chain, processing steps and how the applicant will demonstrate that its quality assurance / quality control processes will be effective in ensuring that it will not receive unlawfully harvested material.

- Record keeping methodology for all native forest biomaterial received by the facility.

4. 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*.

5. Noise and vibration

Describe baseline conditions

- Determine the existing background (LA90) and ambient (LAeq) noise levels, as relevant, in accordance with the *NSW Noise Policy for Industry*.

- Determine the existing road traffic noise levels in accordance with the *NSW Road Noise Policy*, where road traffic noise impacts may occur.

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

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

Assess impacts

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

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

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

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

- The noise impact assessment report should include:
  a. a plan showing the assumed location of each noise source for each prediction scenario
  b. a list of the number and type of noise sources used in each prediction scenario to simulate all potential significant operating conditions on the site
  c. any assumptions made in the predictions in terms of source heights, directivity effects, shielding from topography, buildings or barriers, etc
  d. methods used to predict noise impacts including identification of any noise models used.
  e. the weather conditions considered for the noise predictions
  f. the predicted noise impacts from each noise source as well as the combined noise level for each prediction scenario
  g. for developments where a significant level of noise impact is likely to occur, noise contours for the key prediction scenarios should be derived
  h. an assessment of the need to include modification factors as detailed in Fact Sheet C of the *NSW Noise Policy for Industry*.

- Discuss the findings from the predictive modelling and, where relevant noise criteria have not been met, recommend additional feasible and reasonable mitigation measures.

- The noise impact assessment report should include details of any mitigation proposed including the attenuation that will be achieved and the revised noise impact predictions following mitigation.
  a. Where relevant noise/vibration levels cannot be met after application of all feasible and reasonable mitigation measures the residual level of noise impact needs to be quantified

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

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.

6. 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 (EPA 2022) *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: https://www.environment.nsw.gov.au/ieo/

- 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 2018 *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 2018 Guidelines). NB: While specific guidelines for groundwater are not available, the ANCECC 2018 Guidelines endorse the application of the trigger values and decision trees as a tool to assess risk to environmental values in groundwater.

- 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).

- Prepare a water pollution discharge impact assessment in accordance with the *EPA Guidance Note Water pollution discharge assessments* at: https://www.epa.nsw.gov.au/your-environment/water/managing-water-pollution-in-nsw/environment-protection-licensing/water-pollution-discharge-assessments

- 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 in relation to Storing and Handling of Liquids at https://www.epa.nsw.gov.au/~/media/EPA/Corporate%20Site/resources/licensing/2007210liquidsManual.ashx 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 the relevant guidelines provided in Section B. these include, but are not limited to, *Managing Urban Stormwater: Soils and Construction* (Landcom, 2004), *Guidelines for Fresh and Marine Water Quality* ANZECC 2018), *Environmental Guidelines: Use of effluent by Irrigation* (DEC, 2004).

Describe management and mitigation measures

- Outline stormwater management to control pollutants at the source and contain them within the site. Also describe measures for maintaining and monitoring any stormwater controls.

- Outline erosion and sediment control measures directed at minimising disturbance of land, minimising water flow through the site and filtering, trapping or detaining sediment. Also include measures to maintain and monitor controls as well as rehabilitation strategies.

- Describe waste water treatment measures that are appropriate to the type and volume of waste water and are based on a hierarchy of avoiding generation of waste water; capturing all contaminated water (including stormwater) on the site; reusing/recycling waste water; and treating any unavoidable discharge from the site to meet specified water quality requirements.

- Outline pollution control measures relating to storage of materials, possibility of accidental spills (e.g. preparation of contingency plans), appropriate disposal methods, and generation of leachate.

- Describe hydrological impact mitigation measures including:
  a. site selection (avoiding sites prone to flooding and waterlogging, actively eroding or affected by deposition)
  b. minimising runoff
  c. minimising reductions or modifications to flow regimes
  d. avoiding modifications to groundwater.

- Describe groundwater impact mitigation measures including:
  a. site selection
  b. retention of native vegetation and revegetation
  c. artificial recharge
  d. providing surface storages with impervious linings
  e. monitoring program.

- Describe geomorphological impact mitigation measures including:
  a. site selection
  b. erosion and sediment controls
  c. minimising instream works
  d. treating existing accelerated erosion and deposition
  e. monitoring program.

- Any proposed monitoring should be undertaken in accordance with the *Approved Methods for the Sampling and Analysis of Water Pollutants in NSW* (EPA 2022).

7. Soils and contamination

Describe baseline conditions

- Provide any details on soil types, properties and any potential 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 the relevant guidelines provided in Section B. These include, but are not limited to, *Contaminated Land Guidelines – Consultants Reporting on Contaminated Land* (EPA, 2020)*; Guidelines on the Duty to Report Contamination under the Contaminated Land Management Act 1997* (EPA, 2015).

Describe management and mitigation measures

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

8. 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)*

- As the proposal is an energy from waste facility it must:
  a. demonstrate that the proposed operation will comply with the *NSW EPA's Energy from Waste Policy Statement* (EPA 2021) and associated *Eligible Waste Fuels Guidelines* (EPA 2022);
  b. demonstrate that the proposed operation will comply with the Protection of the *Environment Operations (General) Amendment (Thermal Energy from Waste) Regulation 2022*, which forms part of the *Protection of the Environment Operations (General) Regulation 2022*;
  c. describe the classes and quantities of waste that would be thermally treated at the facility and demonstrate that the proposed waste consistently meets the definition of an EPA-approved eligible waste fuel under the *Eligible Waste Fuels Guidelines* (EPA 2022),
  d. include details of the 'end of life waste stream' materials referred to in the proposal scoping report. The details should include (but not limited to) the types of materials, waste classifications, characteristics, source(s), and predicted annual volumes over the life of the proposal.
  e. 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 and that there are no practical, higher order reuse opportunities for the waste.
  f. fully characterise the waste and/or undertake proof of performance (where required),
  g. 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.
  h. detail the location and size of stockpiles of unprocessed and processed waste at the site;
  i. 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;
  j. detail procedures for the management of other solid, liquid and gaseous waste streams.
  k. 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;
  l. 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* and *NSW Waste and Sustainable Materials Strategy 2041*.

m. meet the relevant emission standards as set out in the Protection of the Environment Operations (Clean Air) Regulation 2022.
n. Document how you will comply with Clause 36 of the *Protection of the Environment (Waste) Regulation* 2018. This Clause includes requirements regarding the installation and calibration of a weighbridge, vehicle flow plans, weighbridge software and associated recording and reporting requirements.
o. Document how you will comply with the EPA's waste levy benchmark requirements including the software to be used.
p. Nominate the upper limit of the amount of waste that may be stockpiled at your facility at any one time. This nominated amount will be considered when determining the maximum authorised amount of waste that may be at your facility at any time.

Note: The listing of a waste or waste-derived material as an eligible waste fuel does not constitute an approval to use that material at a particular facility. Proponents must first apply to the EPA for a resource recovery order and exemption in accordance with Part 4 of Eligible Waste Fuels 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.

9. Climate change

- The proponent must prepare a:
  a. Greenhouse Gas Mitigation Plan in accordance with the requirements in Part 1, and
  b. Climate Change Adaptation Plan in accordance with the requirements in Part 2.

General

- The proponent must prepare a brief description of the greenhouse gas (GHG) impacts and climate change risks associated with the project.

Part 1: Greenhouse Gas Mitigation Plan

- A Greenhouse Gas Mitigation Plan must incorporate the following components:

GHG emissions estimates for the project

GHG emissions must be estimated for the project as designed, accounting for the emission mitigation and management measures to be applied. The following information must be provided:

- Credible annual (financial year) and total GHG emissions estimates for the life of the project:
  a. addressing scope 1, scope 2 and scope 3 emissions
  b. specified separately for construction (including demolition, land clearing and excavation), operational, decommissioning, closure and post closure stages, as applicable
  c. estimated based on throughput at maximum capacity and at planned operational throughput.

- This must include annual (financial year) estimates of:

a. scope 1 emissions by GHG and cumulatively for all GHGs, specified by source and categorised by the Intergovernmental Panel on Climate Change (IPCC) sectors as applied within Australia's national emission projections (refer to Table 1 below).
b. scope 1 emissions intensity per unit of production or activity for the primary scheduled activity under Schedule 1 of the Protection of the Environment Operations Act 1997 (POEO Act)
c. total scope 2 emissions
d. scope 2 emissions intensity per unit production or activity for the primary scheduled activity under Schedule 1 of the POEO Act
e. scope 3 emissions by relevant category and in total for categories most likely to be relevant and representative of most scope 3 emissions (refer to Table 2 below).

- For the above scope 1 and scope 2 emission estimates, provide enough supporting information to enable replication of emission calculations with information disaggregated for each operation (e.g., quantity of individual fuels consumed, emissions of fugitive gas, electricity consumption and production estimates, global warming potentials applied, and the abatement effectiveness applied for GHG emission mitigation measures).

- Uncertainties in the effectiveness of GHG mitigation measures and contingency actions to be implemented to ensure the level of performance claimed must be clearly stated.

- If the project involves a modification that alters emissions from existing activities at the facility, an appropriate emissions measurement boundary must be specified that captures the overall impact of the project on GHG emissions.
- For proposed modifications, the projected annual emissions for the modification must be compared to a 'business-as-usual' scenario (i.e. without the modification). If the modification is projected to alter emissions elsewhere from the existing facility, this must be clearly stated and accounted for in the GHG assessment boundary for the project.
- A comparison of the projected scope 1 emissions of the project to 2050 against the base-case and current policy emission projections for NSW.

GHG emissions must be calculated in accordance with National Greenhouse and Energy Reporting (NGER) Technical Guidelines 2017-18, NGERs Measurement Determination, National Greenhouse Accounts (NGA) factors (or any proven better practice method), and by using the GHG Global Warming Potentials specified for use in the most recent NGER reporting requirements. Higher order NGER methods should be used where possible.

Where relevant, reference should be made to the Safeguard Mechanism: Prescribed production variables and default emissions intensities when estimating emission intensities for the project.

Notes:

The NSW current policy and base-case projections are available on the NSW Net Zero Emissions Dashboard and data sets downloadable from the NSW Sharing and Enabling Environmental Data (SEED) Portal.

The NGER Measurement Determination sets out how to assess uncertainty in emission estimates.

Further information and assistance are available at:

- National Greenhouse and Energy Reporting (NGER) scheme
- NGERs Technical Guidelines 2017-18
- NGERs Measurement Determination
- National Greenhouse Accounts (NGA) factors
- National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015

- National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Reforms) Rules 2023
- International Performance Measurement and Verification Protocol (IPMVP)
- Intergovernmental Panel on Climate Change (IPCC)
- World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol Standards
- ISO 14064-1:2018

The Commonwealth provides emissions projections (on an annual basis) for scope 2 emission factors up to 2035.

GHG emissions targets for the project

- An overarching long-term scope 1 GHG emissions reduction target for the project that represents a meaningful contribution to the scope 1 emissions reduction objectives of the State.
- Regular interim scope 1 targets that establish a trajectory to achieving the overarching scope 1 target, with interim targets to be specified at 5-year or shorter-term intervals.
- Scope 1 targets must be specified in absolute terms, e.g. tonnes CO_2-e for a given year, with emission intensity targets specified where appropriate.
- Specifying and reporting on Scope 2 and Scope 3 emission reduction targets are encouraged but not required.
- An explanation of, and justification for, the proposed long-term and interim targets for the project and how these will make a meaningful contribution to the scope 1 emissions reduction objectives of the State.
- A meaningful contribution refers to the expectation that project emissions would reduce at a comparable rate to the NSW net zero emissions trajectory. If the project does not align with the NSW net zero emissions trajectory, provide a comprehensive explanation as to why the alternative trajectory is appropriate.

Notes:

The global GHG Protocol and the Science Based Target Initiatives provide advice on how to set targets. Targets should compare to a base year and be time dependent.

The scope 1 emissions reduction objectives of the State are:
- to achieve net zero emissions by 2050, and
- to achieve a reduction of at least 70% of 2005 emissions levels by 2035, and
- to achieve a reduction of at least 50% of 2005 emissions levels by 2030[1].

Obligations for Safeguard facilities

If the project is likely to be a Safeguard facility (or is a proposed modification to a Safeguard facility):
- For the life of the project, provide information about the project's expected Safeguard Mechanism obligations under the Australian Government's *National Greenhouse and Energy Reporting Act 2007*, including, where relevant:
  a. any expected individual facility baseline determinations

[1] Clause 8(2)a of the Energy and Utilities Administration Regulation 2021

b. how the project's proposed emission targets align with any expected decline rate for the individual facility baseline
c. any sectoral baseline
d. how the project's proposed emissions will impact on the sectoral baseline
e. how the project's estimated scope 1 emissions intensity per unit production (as calculated under "GHG emissions estimates for the project" above) compares to any relevant emissions intensity specified in the National Greenhouse and Energy Reporting (Safeguard Mechanism) rules.

Notes:

The Safeguard Mechanism provides minimum requirements for the highest emitting facilities, but that does not preclude the need for the EPA and the consent authority to properly understand the potential GHG impacts of proposed new or significantly modified developments and ensure all proponents are adequately avoiding, minimising and managing their emissions over all stages of the development.

Further information about the Safeguard Mechanism is available on the Clean Energy Regulator's website and within related rules:

- National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015
- National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Reforms) Rules 2023

Obligations for electricity firming infrastructure

If the project is electricity firming infrastructure, and the proponent intends to enter into a Long-Term Energy Service Agreement with the Consumer Trustee:

- For the life of the project, provide information about the project's expected obligations under Part 12 of the Electricity Infrastructure Investment Regulation 2021, including, where relevant:
  a. how the project's proposed emission targets align with obligations under the Regulation, including the requirement for net zero emissions from 2036.
  b. how will the project's offset obligations under the Regulation be reduced, as the NSW grid emissions intensity reduces over time.

Notes:

Firming infrastructure operators that hold a Long-Term Energy Service Agreement must meet emissions intensity requirements under the under Part 12 of the Electricity Infrastructure Investment Regulation 2021, these include:

- Before 2036, a firming infrastructure facility's annual emissions intensity must be lower than the emissions intensity of all NSW generators supplying to the grid each year.
- From 1 January 2036, a firming infrastructure facility must achieve net zero for their scope 1 emissions annually.

Further information about the EPA's role in overseeing firming infrastructure's GHG emissions obligations, is available on our website.

Measures to avoid and reduce GHG emissions

- A description of measures that would be implemented to avoid and reduce the project's scope 1, scope 2 and scope 3 emissions, with reference to the mitigation hierarchy to first avoid, then reduce emissions.

- For scope 1 and scope 2 mitigation measures, include an assessment of:
  a. whether these measures represent the full range of best practice design, technology and management measures that could be implemented
  b. the likely effectiveness of these measures, including performance measures, where relevant

c. a comparison of the project's emissions and emissions intensity per unit production benchmarked against other comparable projects, best practice, and industry sector standards/milestones where they exist
d. where best practice is not proposed to be adopted, provide a robust, verifiable justification.

- For projects with scope 1 and 2 emissions exceeding 100,000 t CO_2-e per year at any time over the operational life of the project, mitigation assessments must be verified by an independent expert review. Assurance is to be provided that the review has been conducted by an independent and suitably credentialled reviewer.

- Consideration should be given to reducing scope 1, scope 2 and scope 3 emissions throughout the life of the project through regular GHG Mitigation Plan reviews.

Notes:

NSW expects proponents to apply the mitigation hierarchy to first avoid, then reduce and finally to offset residual emissions.

Avoiding emissions through best practice design may involve comparing absolute emissions and emissions intensity performance metrics, with comparable facilities and ensuring emissions and emissions intensity are minimised at the design stage and/or a particular level of emissions intensity performance is attained through adoption of renewable/low emissions technologies.

For the purpose of these requirements, best practice is the most effective and best combination of technologies used and the way in which an installation is designed, built, maintained, operated and decommissioned to avoid and minimise the environmental impacts arising from emissions[2].

NSW public infrastructure projects will also need to consider the Protection of the Environment Policy (PEP) for sustainable construction when this policy is released. This PEP will promote low-carbon design and construction, and increased use of remanufactured waste in NSW public infrastructure projects. After July 2024, public authorities will be required to consider its provisions for all new public infrastructure proposals, including State Significant Infrastructure.

Strategies to offset GHG emissions

- A description of all strategies proposed to offset the project's scope 1 and scope 2 emissions, including the projected offsets required on an annual CO_2-e basis, and the expected location, provenance, integrity and type or legislated method of any offsets.

- Carbon service providers and carbon market advisors, including agents, must be accredited and regulated as per Recommendation 12 of the Chubb Review of the Australian Carbon Credit Unit (ACCU) Scheme[3] (Chubb *et al*, December 2022).

- Avoided deforestation projects must not be used in accordance with Recommendation 9 of the Chubb Review.

- If offsets are proposed to be used by projects with scope 1 and 2 emissions exceeding 100,000 t CO_2-e per year at any time over the operational life of the project, the independent expert review must consider whether suitable offsets are likely to be available at the time of the proposed

[2] EU Industrial Emissions Directive (Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)). Retrieved from ec.europa.eu/environment/industry/stationary/ied/legislation.htm

[3] The Australian Carbon Credit Unit (ACCU) Scheme: A Review, Professor Ian Chubb, The Hon Dr Annabelle Bennett, Ariadne Gorring, Dr Steve Hatfield-Dodds, December 2022. Retrieved from dcceew.gov.au/climate-change/emissions-reduction/independent-review-accus on 25 July 2023.

surrender. Assurance is to be provided that the review has been conducted by an independent and suitably credentialled reviewer.

Notes:

NSW expects proponents to apply the mitigation hierarchy to first avoid, then reduce and finally to offset residual emissions.

Carbon offsets should be limited to residual emissions that cannot be avoided and be based on clear, enforceable, and accountable methods. Domestic offsets under the Safeguard Mechanism, as well as voluntary offsets purchased to reduce residual emissions, may contribute to a proponent's overall commitments. Where carbon offsets are to be implemented, they should meet offset integrity principles with due regard to the integrity standards set out in *the Commonwealth Carbon Credits (Carbon Farming Initiative) Act 2011*.

NSW prefers proponents to use carbon offsets that conserve, preserve, protect, enhance, and manage the NSW environment. Where appropriate offset projects cannot be identified in NSW, offset projects in other Australian locations may be used.

Monitoring and reporting GHG emissions performance

- A description of the measures that would be implemented to monitor and periodically report on the GHG emissions performance relative to project's emissions targets.

- This includes monitoring and reporting on the implementation and effectiveness of GHG emission mitigation measures, in addition to monitoring and reporting on the project's scope 1, 2 and 3 emissions and progress being made towards targets.

- A description of related GHG reporting obligations, such as under the NGER scheme, and whether any additional information on GHG emissions is proposed to be made publicly available, and if so, indicate the format, frequency and form of such reporting.

Review of Plan

- A timetable for review of the project's *GHG Mitigation Plan* that reflects the project's lifespan and the identified interim and overarching targets.

Part 2: Climate Change Adaptation Plan

Notes:

Further guidance on considering climate adaptation can be found in the following resources:
- ISO 31000
- ISO/TS 14092
- AS 5334
- Climate Risk Ready NSW Guide

You might find some aspects of the Climate Risk Ready NSW Guide useful to guide your considerations under Part 2. While it was developed for NSW government agencies, the principles, steps and resources may assist you to prepare your *Climate Change Adaptation Plan*.

A *Climate Change Adaptation Plan* must incorporate the following components:

Climate change risk assessment

- A climate change risk assessment that addresses predicted climatic changes and the potential impacts of climate hazards on the environmental performance of the project.

Notes:

A climate hazard is defined as a physical event (hydro-meteorological or oceanographic) that can harm human health, livelihoods, or natural resources. These could be direct climate hazards such as flooding of a sewage treatment plant, causing water pollution to nearby waterways, or indirect hazards such as a drought, where water is not available for dust suppression.

A climate risk is the potential for adverse consequences for human or ecological systems from climate hazards (adapted from IPCC).

- The risk assessment must take into account AdaptNSW regional climate change projections, for the near future and for the life of the project.

Note: Regional climate change projections are available on the AdaptNSW website.

Measures to reduce climate risk

- A description of measures that would be implemented to reduce likely climate change risks and potential impacts on the environmental performance of your project.

- An assessment of:
  a. the likely effectiveness of these measures
  b. whether these measures will remain effective over time as climate change risks increase
  c. whether contingency plans will be necessary to manage any residual risks.

- If contingency measures are deemed necessary under (c) above, provide a description of how the project is designed so that these contingency measures can be readily implemented if and when necessary.

Monitoring and reporting on the effectiveness of measures to reduce climate risk

- A description of metrics that will be used to periodically evaluate the effectiveness of the adaptation management measures.

- A description of the measures that would be implemented to monitor and periodically report on against these metrics.

Review of Plan

- A timetable for review of the project's *Climate Change Adaptation Plan* that reflects the project's lifespan and incorporates at each review the latest knowledge about predicted climate risks in the short and long term.

Table 1: Sectors and subsectors to be applied in the categorisation of sources

Sector	Sub-sector
Electricity (public electricity generation)	Coal
	Gas
	Hydro
	Wind
	Solar
	Other
	Pumped Hydro (storage)
	Battery (storage)
Stationary energy (excluding electricity Generation)	Agriculture, Forestry and Fishing
	Buildings
	Domestic Gas Production and Distribution
	LNG
	Manufacture of Solid Fuels
	Manufacturing
	Military
	Mining
	Oil and Other Gas Extraction
	Petroleum Refining
Transport	Articulated trucks
	Buses
	Cars
	Domestic aviation
	Domestic navigation
	Light commercial vehicles
	Motorcycles
	Other transportation
	Railways
	Rigid trucks
Fugitives	Domestic natural gas (gas other than LNG)
	LNG
	Oil
	Open cut mines
	Underground coal mines
Industrial processes	Chemical industry
	Metal industry
	Mineral industry
	Non-energy products from fuel and solvent use
	Other product manufacture and use
	Other production
	Product uses as substitutes for ozone depleting substances
Waste	Solid waste - Composting
	Solid waste - Incineration
	Solid waste - Waste to landfill
	Wastewater - Domestic and commercial
	Wastewater - Industrial
Land use, land use change and forestry	Agricultural and other land
	Forest conversion to agriculture and other land
	Forests

Sector	Sub-sector
Agriculture	Crops
	Dairy
	Fertilisers
	Grain Fed Beef
	Grazing Beef
	Lime and Urea
	Other animals
	Pigs
	Sheep

Table 2: Likely relevance of Scope 3 Categories by Sector

Sector	Relevant Scope 3 Category
Agricultural Commodities	Category 1: Purchased goods and services Category 10: Processing of sold products Category 11: Use of sold products
Capital Goods	Category 11: Use of sold products Category 1: Purchased goods and services
Cement	Category 1: Purchased goods and services Category 3: Fuel-and-energy-related activities Category 4: Upstream transportation and distribution Category 9: Downstream transportation and distribution
Chemicals	Category 1: Purchased goods and services Category 11: Use of sold products Category 12: End of life treatment of sold products Category 4: Upstream transportation and distribution Category 3: Fuel-and-energy-related activities Category 2: Capital goods Category 9: Downstream transportation and distribution
Coal	Category 11: Use of sold products Category 9: Downstream transportation and distribution
Construction	**Building developers:** Category 11: Use of sold products Category 4: Upstream transportation and distribution Category 12: End of life treatment of sold products Category 2: Capital Goods Category 3: Fuel-and-energy-related activities **Construction contractors:** Category 1: Purchased goods and services Category 2: Capital goods
Electric Utilities	Category 11: Use of sold products Category 3: Fuel-and-energy-related activities Category 15: Investments Category 1: Purchased goods and services Category 4: Upstream Transportation and Distribution
Financial Services	Category 15: Investments
Food and Beverages	Category 1: Purchased goods and services Category 9: Downstream Transportation and Distribution Category 4: Upstream Transportation and Distribution Category 5: Waste generated in operations
Metals and Mining	**Mining:** Category 10: Processing of sold products Category 9: Downstream transportation and distribution **Processing Metals:** Category 1: Purchased goods and services Category 4: Upstream Transportation and Distribution Category 9: Downstream transportation and distribution Category 5: Waste generated in operations
Oil and Gas	Category 11: Use of sold products Category 1: Purchased goods and services

Sector	Relevant Scope 3 Category
Paper and Forestry	**Forestry:** Category 1: Purchased goods and services Category 10: Processing of sold products Category 12: End of life treatment of sold products Category 9: Downstream Transportation and Distribution **Processors:** Category 1: Purchased goods and services Category 9: Downstream Transportation and Distribution Category 4: Upstream Transportation and Distribution
Real Estate	**Building developers:** Category 2: Capital Goods Category 3: Fuel and energy-related activities Category 11: Use of sold products Category 4: Upstream transportation and distribution Category 12: End of life treatment of sold products **Building owners:** Category 2: Capital Goods Category 13: Downstream leased assets Category 1: Purchased goods and services Category 3: Fuel and energy-related activities
Steel	Category 1: Purchased goods and services Category 11: Use of sold products Category 10: Processing of sold products Category 12: End of life treatment of sold products Category 4: Upstream Transportation and Distribution Category 9: Downstream transportation and distribution Category 5: Waste generated in operations
Transport OEMS	Category 11: Use of sold products Category 1: Purchased goods and services
Transport Services	Category 4: Fuel and energy-related activities Category 3: Upstream transportation and distribution Category 1: Purchased goods and services

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.

- 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.

SECTION 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
Protection of the Environment Operations (General) Amendment (Thermal Energy from Waste) Regulation 2022 - which forms part of the *Protection of the Environment Operations (General) Regulation 2022*	https://legislation.nsw.gov.au/view/html/inforce/current/sl-2022-0449
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 (2022)	https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/approved-methods-for-the-modelling-and-assessment-of-air-pollutants
Approved methods for sampling and analysis of air pollutants in NSW (2022)	https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/sampling-analysing-air-emissions
POEO (Clean Air) Regulation 2022	https://legislation.nsw.gov.au/view/pdf/asmade/sl-2022-811
Assessment and Management of Odour from Stationary Sources in NSW (DEC 2006)	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/air/20060440framework.pdf
Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC 2006)	https://www.epa.nsw.gov.au/your-environment/air/industrial-emissions/managing-odour/technical-framework-odour
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)	https://www.health.gov.au/resources/publications/enhealth-guidance-guidelines-for-assessing-human-health-risks-from-environmental-hazards?language=en
Waste, Chemicals and Hazardous Materials and Radiation	
Waste	http://www.epa.nsw.gov.au/wastestrategy/warr.htm
Environmental Guidelines: Solid Waste Landfills (EPA, 2016)	https://www.epa.nsw.gov.au/~/media/EPA/Corporate%20Site/resources/waste/solid-waste-landfill-guidelines-160259.ashx
EPA's Waste Classification Guidelines 2014	https://www.epa.nsw.gov.au/~/media/EPA/Corporate%20Site/resources/wasteregulation/140796-classify-waste.ashx
Resource recovery orders and exemptions	https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/resource-recovery-framework/current-orders-and-exemption
EPA's Energy from Waste Policy Statement, and EPA's Eligible Waste Fuels Guidelines	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
NSW Waste and Sustainable Materials Strategy 2041	https://www.dpie.nsw.gov.au/__data/assets/pdf_file/0006/385683/NSW-Waste-and-Sustainable-Materials-Strategy-2041.pdf
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	https://www.environment.nsw.gov.au/research-and-publications/publications-search/acid-sulfate-soils-remediation-guidelines-for-coastal-floodplains-in-nsw and http://www.epa.nsw.gov.au/mao/acidsulfatesoils.htm

Acid Sulfate Soils Planning Maps	https://datasets.seed.nsw.gov.au/dataset/acid-sulfate-soils-risk0196c
Contaminated Sites Assessment and Remediation	
State Environmental Planning Policy (Resilience and Hazards) 2021	https://www.epa.nsw.gov.au/your-environment/contaminated-land
Managing land contamination: Planning Guidelines – SEPP 55 Remediation of Land (1998)	http://www.epa.nsw.gov.au/clm/planning.htm
Consultants Reporting on Contaminated Land (EPA, 2020)	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/contaminated-land/20p2233-consultants-reporting-on-contaminated-land-guidelines.pdf
EPA contaminated land consultant certification policy (2022)	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/contaminated-land/21p3245-contaminated-land-consultant-certification-policy.pdf
Guidelines for the NSW Site Auditor Scheme – 3rd edition (EPA, 2017)	https://www.epa.nsw.gov.au/your-environment/contaminated-land/site-auditor-scheme
Sampling Design Guidelines (EPA, 2022)	https://yoursay.epa.nsw.gov.au/sampling-design-guidelines
National Environment Protection (Assessment of Site Contamination) Measure 1999 (or update)	https://www.nepc.gov.au/nepms/assessment-site-contamination
Soils – general	
Managing land and soil	https://www.environment.nsw.gov.au/topics/land-and-soil/managing-land-and-soil
Managing Urban Stormwater: Soils and construction	https://www.environment.nsw.gov.au/research-and-publications/publications-search/managing-urban-stormwater-soils-and-construction-volume-1-4th-editon
Site Investigations for Urban Salinity (DLWC, 2002)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/site-investigations-for-urban-salinity
Local Government Salinity Initiative Booklets	https://www.environment.nsw.gov.au/research-and-publications/publications-search/local-government-salinity-initiative-introduction-to-urban-salinity
Water	

Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2018) 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 (2022)	https://www.epa.nsw.gov.au/licensing-and-regulation/licensing/environment-protection-licences/licensing-under-poeo-act-1997/licensing-to-regulate-water-pollution/approved-methods-for-sampling-and-analysing-water-pollutants
Environmental Guidelines: Use of Effluent by Irrigation (2004).	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/epa/effguide.pdf
EPA Guidance Note Water pollution discharge assessments	https://www.epa.nsw.gov.au/your-environment/water/managing-water-pollution-in-nsw/environment-protection-licensing/water-pollution-discharge-assessments

Forestry Related Matters	
NSW Forest Management Framework	https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0005/1318505/overview-of-the-nsw-fmf.v1.1-march-2021.pdf
Burning of Native Forest Biomaterial	https://www.epa.nsw.gov.au/licensing-and-regulation/licensing/environment-protection-licences/burning-of-biomaterial
Guidelines for the burning of bio-material: record-keeping requirements for electricity generating facilities	https://www.epa.nsw.gov.au/-/media/8B148C747CF84B4F8A7189EBE7AB4CCE.ashx?la=en
Climate change - Greenhouse gases and climate risks	
National Greenhouse and Energy Reporting (NGER) Technical Guidelines 2017-18	https://www.cleanenergyregulator.gov.au/NGER/About-the-National-Greenhouse-and-Energy-Reporting-scheme https://www.cleanenergyregulator.gov.au/DocumentAssets/Pages/NGER-Technical-Guidelines-2017-18.aspx
NGERs Measurement Determination	https://www.cleanenergyregulator.gov.au/NGER/Legislation/Measurement-Determination
National Greenhouse Accounts (NGA) factors	https://www.dcceew.gov.au/climate-change/publications/national-greenhouse-accounts-factors-2022
National Greenhouse and Energy Reporting (Safeguard Mechanism) Rule 2015	https://www.legislation.gov.au/Details/F2023C00600
National Greenhouse and Energy Reporting (Safeguard Mechanism) Amendment (Reforms) Rules 2023	https://www.legislation.gov.au/Details/F2023L00528

International Performance Measurement and Verification Protocol (IPMVP)	https://evo-world.org/en/products-services-mainmenu-en/protocols/ipmvp
Intergovernmental Panel on Climate Change (IPCC)	https://www.ipcc.ch/
World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol Standards	https://ghgprotocol.org/standards
ISO 14064-1:2018 Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals	https://www.iso.org/standard/66453.html
Commonwealth Carbon Credits (Carbon Farming Initiative) Act 2011.	https://www.legislation.gov.au/Details/C2011A00101
ISO 31000 Risk management	https://www.iso.org/iso-31000-risk-management.html
ISO/TS 14092:2020 Adaptation to climate change — Requirements and guidance on adaptation planning for local governments and communities	https://www.iso.org/standard/68509.html
AS5334-2013 Climate change adaptation for settlements and infrastructure - A risk- based approach	https://www.standards.org.au/standards-catalogue/standard-details?designation=as-5334-2013
Climate Risk Ready NSW Guide	https://www.climatechange.environment.nsw.gov.au/climate-risk-ready-nsw-guide
Adapt NSW - Regional climate change projections (Climate change in my region)	https://www.climatechange.environment.nsw.gov.au/my-region

Your ref: SSD-56284960
Our ref: DOC23/227074-4

Joe Fittell
Team Leader
Planning and Assessment
Department of Planning and Environment

By email: Joe.Fittell@planning.nsw.gov.au

Dear Joe,

Input into Secretary's Environmental Assessment Requirements – Restart of Redbank Power Station (SSD-56284960) (Singleton Shire)

I refer to your Major Projects portal request on 2 May 2023 seeking input into the Secretary's Environmental Assessment Requirements (SEARs) for conversion of the Redbank Power Station to a Fire Biomass Fuels Power Station, located at 112 Long Point Road West, Warkworth (Lot 450, DP 1119428). The proposed development is within the Singleton City local government area.

The Biodiversity Conservation Division (BCD) of the Department of Planning and Environment (the Department) understands that Verdant Earth Technologies Limited (the Applicant) has acquired the power station and is seeking approval to restart and operate the plant. To enable the power station to use waste wood residues as fuel, some modifications to the plant and operations will be required. BCD understands that the proposal is a State Significant Development (SSD-56284960) project under the *Environmental Planning and Assessment Act 1979*.

BCD has reviewed the document *Scoping Report and SEAR Application – Restart of Redbank Power Station and Use of Waste Wood Residue as a Fuel* prepared by Jackson Environment and Planning Pty Ltd dated 17 November 2022 and has prepared Standard SEARs which are presented in **Attachment A**. There are no project-specific SEARs provided for this project (**Attachment B**). Details of guidance documents are provided in **Attachment C**.

If you have any further questions about this issue, please contact Steven Crick, Senior Team Leader Planning, on 4927 3248 or at huntercentralcoast@environment.nsw.gov.au

Yours sincerely

Joe Thompson
Director Hunter Central Coast Branch
Biodiversity and Conservation Division

4/5/23

Attachment A – Standard Environmental Assessment Requirements

Biodiversity

1. Biodiversity impacts related to the proposed development (SSD-56284960) are to be assessed in accordance with the Biodiversity Assessment Method 2020 and documented in a Biodiversity Development Assessment Report (BDAR). The BDAR must include information in the form detailed in the *Biodiversity Conservation Act 2016* (s6.12), *Biodiversity Conservation Regulation 2017* (s6.8) and Biodiversity Assessment Method 2020.
2. The BDAR must document the application of the avoid, minimise and offset framework including assessing all direct, indirect and prescribed impacts in accordance with the Biodiversity Assessment Method 2020.
3. The BDAR must include details of the measures proposed to address the offset obligation as follows;
    - The total number and classes of biodiversity credits required to be retired for the development/project;
    - The number and classes of like-for-like biodiversity credits proposed to be retired;
    - The number and classes of biodiversity credits proposed to be retired in accordance with the variation rules;
    - Any proposal to fund a biodiversity conservation action;
    - Any proposal to conduct ecological rehabilitation (if a mining project);
    - Any proposal to make a payment to the Biodiversity Conservation Fund.

If seeking approval to use the variation rules, the BDAR must contain details of the reasonable steps that have been taken to obtain requisite like-for-like biodiversity credits.

4. The BDAR must be prepared by a person accredited in accordance with the Accreditation Scheme for the Application of the Biodiversity Assessment Method Order 2017 under s6.10 of the *Biodiversity Conservation Act 2016*.

Water and soils

5. The EIS must map the following features relevant to water and soils including:
   a. Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
   b. Rivers, streams, wetlands, estuaries (as described in s4.2 of the Biodiversity Assessment Method).
   c. Wetlands as described in s4.2 of the Biodiversity Assessment Method.
   d. Groundwater.
   e. Groundwater dependent ecosystems.
   f. Proposed intake and discharge locations.

6. The EIS must describe background conditions for any water resource likely to be affected by the development, including:
   a. Existing surface and groundwater.
   b. Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
   c. Water Quality Objectives (as endorsed by the NSW Government http://www.environment.nsw.gov.au/ieo/index.htm) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
   d. Indicators and trigger values/criteria for the environmental values identified at (c) in accordance with the ANZECC (2000) Guidelines for Fresh and Marine Water Quality and/or local objectives, criteria or targets endorsed by the NSW Government.

7. The EIS must assess the impacts of the development on water quality, including:
   a. The nature and degree of impact on receiving waters for both surface and groundwater, demonstrating how the development protects the Water Quality Objectives where they are currently being achieved, and contributes towards achievement of the Water Quality Objectives over time where they are currently not being achieved. This should include an assessment of the mitigating effects of proposed stormwater and wastewater management during and after construction.
   b. Identification of proposed monitoring of water quality.

8. The EIS must assess the impact of the development on hydrology, including:
   a. Water balance including quantity, quality and source.
   b. Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.

c. Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
d. Impacts to natural processes and functions within rivers, wetlands, estuaries and floodplains that affect river system and landscape health such as nutrient flow, aquatic connectivity and access to habitat for spawning and refuge (e.g. river benches).
e. Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
f. Mitigating effects of proposed stormwater and wastewater management during and after construction on hydrological attributes such as volumes, flow rates, management methods and re-use options.
g. Identification of proposed monitoring of hydrological attributes.

Flooding and coastal erosion

9. The EIS must map the following features relevant to flooding as described in the Floodplain Development Manual 2005 (NSW Government 2005) including:
   a. Flood prone land.
   b. Flood planning area, the area below the flood planning level.
   c. Hydraulic categorisation (floodways and flood storage areas).

10. The EIS must describe flood assessment and modelling undertaken in determining the design flood levels for events, including a minimum of the 1 in 10 year, 1 in 100 year flood levels and the probable maximum flood, or an equivalent extreme event.

11. The EIS must model the effect of the proposed development (including fill) on the flood behaviour under the following scenarios:
   a. Current flood behaviour for a range of design events as identified in 11 above. This includes the 1 in 200 and 1 in 500 year flood events as proxies for assessing sensitivity to an increase in rainfall intensity of flood producing rainfall events due to climate change.

12. Modelling in the EIS must consider and document:
   a. The impact on existing flood behaviour for a full range of flood events including up to the probable maximum flood.
   b. Impacts of the development on flood behaviour resulting in detrimental changes in potential flood affection of other developments or land. This may include redirection of flow, flow velocities, flood levels, hazards and hydraulic categories.
   c. Relevant provisions of the NSW Floodplain Development Manual 2005.

13. The EIS must assess the impacts on the proposed development on flood behaviour, including:
   a. Whether there will be detrimental increases in the potential flood affectation of other properties, assets and infrastructure.
   b. Consistency with Council floodplain risk management plans.
   c. Compatibility with the flood hazard of the land.

d. Compatibility with the hydraulic functions of flow conveyance in floodways and storage in flood storage areas of the land.
e. Whether there will be adverse effect to beneficial inundation of the floodplain environment, on, adjacent to or downstream of the site.
f. Whether there will be direct or indirect increase in erosion, siltation, destruction of riparian vegetation or a reduction in the stability of river banks or watercourses.
g. Any impacts the development may have upon existing community emergency management arrangements for flooding. These matters are to be discussed with the SES and Council.
h. Whether the proposal incorporates specific measures to manage risk to life from flood. These matters are to be discussed with the SES and Council.
i. Emergency management, evacuation and access, and contingency measures for the development considering the full range or flood risk (based upon the probable maximum flood or an equivalent extreme flood event). These matters are to be discussed with and have the support of Council and the SES.
j. Any impacts the development may have on the social and economic costs to the community as consequence of flooding.

14. The EIS must describe the potential effects of coastal processes and hazards (within the meaning of the Coastal Management Act 2016), including sea level rise and climate change:
    a. On the proposed development
    b. Arising from the proposed development.

15. The EIS must consider have regard to any certified Coastal Management Program (or Coastal Zone Management Plan) and be consistent with the management objectives described in the Coastal Management Act 2016 and development controls for coastal management areas mapped under the State Environmental Planning Policy (Coastal Management) 2018.

Attachment B – Project specific environmental assessment requirements

Biodiversity - nil
Water and soils - nil
Flooding and coastal erosion - nil

Attachment C – Guidance material

Title	Web address
Relevant legislation	
Biodiversity Conservation Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/63/full
Coastal Management Act 2016	https://www.legislation.nsw.gov.au/#/view/act/2016/20/full
Commonwealth Environment Protection and Biodiversity Conservation Act 1999	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
Environmental Planning and Assessment Act 1979	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
Fisheries Management Act 1994	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
Marine Parks Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
National Parks and Wildlife Act 1974	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
Protection of the Environment Operations Act 1997	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
Water Management Act 2000	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
Wilderness Act 1987	http://www.legislation.nsw.gov.au/viewtop/inforce/act+196+1987+FIRST+0+N
Biodiversity	
Biodiversity Assessment Method (OEH, 2020)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Biodiversity/biodiversity-assessment-method-2020-200438.pdf
Guidance and Criteria to assist a decision maker to determine a serious and irreversible impact (OEH, 2017)	http://www.environment.nsw.gov.au/resources/bcact/guidance-decision-makers-determine-serious-irreversible-impact-170204.pdf
Surveying threatened plants and their habitats - NSW survey guide for the Biodiversity Assessment Method (DPIE, 2020)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/surveying-threatened-plants-and-their-habitats-survey-guide-for-the-biodiversity-assessment-method
NSW Survey Guide for Threatened Frogs – A guide for the survey of threatened frogs and their habitats for the Biodiversity Assessment Method (DPIE 2020)	https://www.environment.nsw.gov.au/research-and-publications/publications-search/nsw-survey-guide-for-threatened-frogs
'Species credit' threatened bats and their habitats – NSW survey guide for the Biodiversity Assessment Method	https://www.environment.nsw.gov.au/research-and-publications/publications-search/species-credit-threatened-bats-nsw-survey-guide-for-biodiversity-assessment-method
Fisheries NSW policies and guidelines	http://www.dpi.nsw.gov.au/fisheries/habitat/publications/policies,-guidelines-and-manuals/fish-habitat-conservation
List of national parks	http://www.environment.nsw.gov.au/NationalParks/parksearchatoz.aspx
Revocation, recategorisation and road adjustment policy (OEH, 2012)	http://www.environment.nsw.gov.au/policies/RevocationOfLandPolicy.htm

Title	Web address
Guidelines for developments adjoining land and water managed by the Department of Environment, Climate Change and Water (DECCW, 2010)	http://www.environment.nsw.gov.au/protectedareas/developmntadjoiningdecc.htm
Acid sulphate soils	
Acid Sulfate Soils Planning Maps via Data.NSW	http://data.nsw.gov.au/data/
Acid Sulfate Soils Manual (Stone et al. 1998)	http://www.environment.nsw.gov.au/resources/epa/Acid-Sulfate-Manual-1998.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.environment.nsw.gov.au/resources/soils/acid-sulfate-soils-laboratory-methods-guidelines.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Flooding and coastal erosion	
Reforms to coastal erosion management	http://www.environment.nsw.gov.au/coasts/coastalerosionmgmt.htm
Floodplain development manual	http://www.environment.nsw.gov.au/floodplains/manual.htm
Guidelines for Preparing Coastal Zone Management Plans	Guidelines for Preparing Coastal Zone Management Plans http://www.environment.nsw.gov.au/resources/coasts/130224CZMPGuide.pdf
NSW Climate Impact Profile	http://climatechange.environment.nsw.gov.au/
Climate Change Impacts and Risk Management	Climate Change Impacts and Risk Management: A Guide for Business and Government, AGIC Guidelines for Climate Change Adaptation
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	www.environment.gov.au/water/publications/quality/australian-and-new-zealand-guidelines-fresh-marine-water-quality-volume-1
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf

Department of Planning and Environment

Our ref: OUT23/4349

Joel Fittell
Planning and Assessment Group
NSW Department of Planning and Environment
Email: joe.fittell@planning.nsw.gov.au

21 March 2023

Subject: **Restart of Redbank Power Station (SSD-56284960)**

Comment on the Secretary's Environmental Assessment Requirements (SEARs)

Dear Joe Fittell

DPE Water has developed standard SEARs for SSD and SSI projects. Please see Attachment A for detailed requirements.

If any of the requirements do not apply to this project, the proponent should describe why in a short statement.

Should you have any further queries in relation to this submission please do not hesitate to contact DPE Water Assessments at water.assessments@dpie.nsw.gov.au. or to the following coordinating officer within DPE Water:

Maddy Gunethilake, Project Officer
E: maddy.gunethilake@dpie.nsw.gov.au
Yours sincerely

Maddy Gunethilake
Project Officer, Assessments, Knowledge Division
Department of Planning and Environment: Water

Attachment A

Water Take and Licensing

No.	Assessment Requirement	Relevant Policy/Guideline/Legislation
1	A detailed and consolidated site water balance.	
2	Description of all works/activities that may intercept, extract, use, divert or receive surface water and/or groundwater. This includes the description of any development, activities or structures that will intercept, interfere with or remove groundwater, both temporary and permanent.	NSW Aquifer Interference Policy, section 3 & 5 of the *Water Management Act 2000*, Water Sharing Plans Clause 24 of the *Water Management (General) Regulation 2018* Groundwater Guidelines- https://www.industry.nsw.gov.au/water/licensing-trade/major-projects
3	Details of all water take for the life of the project and post closure where applicable. This is to include water taken directly and indirectly, and the relevant water source where water entitlements are required to account for the water take. If the water is to be taken from an alternative source confirmation should be provided by the supplier that the appropriate volumes can be obtained.	Section 3 & 5 of the *Water Management Act 2000*, Water Sharing Plans Section 2 of the NSW Aquifer Interference Policy provides explanation of water take for aquifer interference activities
4	Details of Water Access Licences (WALs) held to account for any take of water where required, or demonstration that WALs can be obtained prior to take of water occurring. This should include an assessment of the current market depth where water entitlement is required to be purchased. Any exemptions or exclusions to requiring approvals or licenses under the *Water Management Act 2000* should be detailed by the proponent.	Water Sharing Plans Sections 3, 5, 60A & 60I of the *Water Management Act 2000* WAL must nominate a work to satisfy s60D of the *Water Management Act 2000* and this is completed by a dealing application under s71W of the *Water Management Act 2000* Exemptions or exclusions information: o Clause 21-23, 34-50, sch.1 and 4 *Water Management Regulation 2018* o Sections 4.41 and 5.23 of the *EP&A Act 1979* o Water licensing and works approvals exemptions - https://water.dpie.nsw.gov.au/licensing-and-trade/licensing/water-licensing-and-works-approvals-exemptions

Water Impacts

No.	Assessment Requirement	Relevant Policy/Guideline/Legislation
5	A description of groundwater conditions that provides an understanding of groundwater level across the site under a range of wet and dry conditions.	NSW Aquifer Interference Policy Groundwater Guidelines
6	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, groundwater dependent ecosystems, and ground water levels; including measures proposed to reduce and mitigate these impacts.	*Water Management Act 2000* Part 1, Division 1, Section 5(2d; 4c) & Part 3 Div 2 Sect 97 *Water Management Act 2000* Part 1, Division 1, Section 5(4a;5a; 6a; 7a; 8a)) NSW Aquifer Interference Policy Groundwater Guidelines
7	Proposed surface and groundwater monitoring activities and methodologies.	Groundwater Guidelines NSW Water Quality and River Flow Objectives Australian and New Zealand fresh and marine water quality guidelines (ANZG 2018)

Assessment against Policy and Guidelines

No.	Assessment Requirement	Relevant Policy/Guideline/Legislation
8	Identification and impact assessment of all works/activities located on waterfront land including an assessment against Guidelines for Controlled Activities on Waterfront Land (NRAR 2018).	Guidelines for Controlled Activities on Waterfront Land (NOW 2012)
9	Assessment of project against relevant policies and guidelines	Water Sharing Plans, Floodplain Management Plans, NSW Aquifer Interference Policy, Guidelines for Controlled Activities on Waterfront Land (NOW 2012), Groundwater Guidelines

Department of Primary Industries - Agriculture
Department of Regional NSW

OUT23/5046

Mr Joe Fittell
Team Leader
Department of Planning and Environment-Planning
C/o Major Projects Portal

Secretary's Environmental Assessment Requirements - Restart of Redbank Power Station (SSD-56284960)

Dear Mr Fittell

Thank you for your correspondence of 21 March 2023 and the opportunity to provide comment on the environmental assessment requirements for the above project proposal.

The NSW Department of Primary Industries (DPI) Agriculture collaborates and partners with our stakeholders to protect and enhance the productive and sustainable use and resilience of agricultural resources and the environment.

NSW DPI Agriculture has reviewed the scoping report for the above proposal. The issues of concern relate to the potential impacts of the power station on agricultural land uses in the area.

NSW DPI Agriculture requests that the following matters be included in the Secretary's Environmental Assessment Requirements (SEARs).

- A Landuse Conflict Risk Assessment should be completed as part of the environmental impact statement (EIS). This should specifically address the issues that impact on the agricultural land in the locality.
- Describe the current and historical agricultural land uses on surrounding land in the locality including the land capability and agricultural productivity of the surrounding land. The EIS should address any direct, indirect and cumulative impacts on surrounding agricultural land and enterprises resulting from the proposed restart of the power station.
- We note the commitment to a biosecurity management plan in relation to transport and handling of the woody material. This should also be extended to the site where a risk assessment for any plant, animal and community risk should be undertaken. The risk assessment should include details of how the proposal will deal with identified biosecurity risks as well as contingency plans for any failures. It also should include monitoring and mitigation measures for weed and pest management on site.

Industry guidelines and resource information (Attachment A) should also be provided to the proponent for their consideration when preparing the Environmental Impact Statement.

105 Prince Street | Locked Bag 21
Orange NSW 2800

E: landuse.ag@dpi.nsw.gov.au
dpi.nsw.gov.au

Should you require clarification on any of the information contained in this response, please do not hesitate to contact me on 0427 949 987 or by email at landuse.ag@dpi.nsw.gov.au.

Sincerely

Mary Kovac
Agricultural Land Use Planning Officer
Ag Strategic Initiatives
Hunter Region

3 April 2023

Attachment A: Industry guidelines and resource information

Title	Website link
Land Use Conflict Risk Assessment Guide	https://www.dpi.nsw.gov.au/agriculture/lup/development-assessment2/lucra
Biosecurity Risk Management in Land Use Planning and Development	https://www.dpi.nsw.gov.au/__data/assets/pdf_file/0018/1271241/managing-biosecurity-risks-in-land-use-planning-and-development-guide.pdf

From:	Samantha Gibbins
To:	Joe Fittell
Cc:	Jack Turner; Bec Yit
Subject:	Heritage NSW - ACH - Advice on SEARs - Restart of Redbank Power Station (SSD-56284960) (Singleton Shire)
Date:	Monday, 3 April 2023 5:13:00 PM
Attachments:	image001.png image002.png image003.png image004.png image005.png

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Dear Joe,

Heritage NSW recommends that the following SEAR be included with respect to Aboriginal cultural heritage (ACH).

Aboriginal Cultural Heritage

- Provide an Aboriginal Cultural Heritage Assessment Report (ACHAR), prepared in accordance with relevant guidelines and requirements, identifying, describing and assessing any impacts to Aboriginal cultural heritage sites or values associated with the site.

I will upload this email to the MPP. If you require any further information, please contact me directly.

Kind regards,

Sam

Sam Gibbins, BA (Hons), PhD
A/Manager Assessments
Environment and Heritage - Heritage NSW
Department of Planning and Environment
T (02) 9895 6586 **M** 0491 980 661 **E** Samantha.Gibbins@environment.nsw.gov.au

heritage.nsw.gov.au and dpie.nsw.gov.au

Locked Bag 5020
Parramatta NSW 2124

Working days Monday to Friday, 8:00am – 4:00pm

I acknowledge the traditional custodians of the land and pay respects to Elders past and present. I also acknowledge all the Aboriginal and Torres Strait Islander staff working with NSW Government at this time.

Transport for NSW

27 March 2023

File No: NTH23/00157/01
Your Ref: SSD-56284960

The Director
Planning and Assessment
Department of Planning & Environment

Attention: Joe Fittell - Joe.Fittell@planning.nsw.gov.au

RE: Secretary's Environmental Assessment Requirements for the Restart of Redbank Power Station, Lot 450 DP 1119428; 112 Long Point Road West Warkworth

I refer to your email of 21 March 2023 requesting input from Transport for NSW to the Secretary's Environmental Assessment Requirements (SEARs) for the abovementioned development proposal.

TfNSW key interests are the safety and efficiency of the transport network, the needs of our customers and the integration of land use and transport in accordance with the *Future Transport Strategy*.

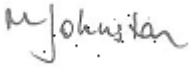
Golden Highway (HW27) is a classified State road and Long Point Road West is a local road. Council is the roads authority for all public roads in the area in accordance with Section 7 of *the Roads Act 1993.*

TfNSW requests that a Traffic Impact Assessment (TIA) be prepared by suitably qualified person/s in accordance with the Austroads Guide to Traffic Management Part 12, the complementary TfNSW Supplement and RTA Guide to Traffic Generating Developments. The TIA should include, but not necessarily be limited to, an assessment of the considerations outlined in **Attachment A**.

TfNSW highlights that in determining the application under the *Environmental Planning and Assessment Act 1979*, it is the Consent Authority's responsibility to consider the environmental impacts of any roadworks which are ancillary to the development. This includes any works which form part of the proposal and/or any works which are deemed necessary to include as requirements in the conditions of project approval.

If you have any further enquiries regarding the above comments please do not hesitate to contact Shengxi Lin, Development Services Case Officer on 1300 207 783 or via email at: development.north@transport.nsw.gov.au

Yours faithfully,



Marg Johnston
Team Leader, Development Services
Community and Place | Region North
Regional & Outer Metropolitan
Transport for NSW

Enc. ATTACHMENT A - Requested TIA consideration for SEAR

ATTACHMENT A - Traffic Impact Assessment – Requested considerations for SEAR

For context, this attachment must be read with TfNSW letter of 27 March 2023 reference number NTH23/00157/01.

Traffic Impact Assessment (TIA) be prepared by suitably qualified person/s in accordance with the Austroads Guide to Traffic Management Part 12, the complementary TfNSW Supplement and RTA Guide to Traffic Generating Developments.

The TIA is to identify the impacts of the development and the proposed on-site and off-site measures proposed to mitigate the impacts of the development on any road or rail related infrastructure. The TIA must explain and justify all inputs informing the proposed mitigation measures and TIA conclusions.

The TIA should be tailored to the scope of the proposed development and include, but not necessarily be limited to, consideration of the following;

- A map of the surrounding road network identifying the site access, nearby accesses, intersections and transport related facilities.
- The total impact of existing and proposed development on the road network with consideration for a 10 year horizon. This should include;
  - Identify Annual Average Daily Traffic (AADT) volumes with percentage heavy vehicles along the transport route/s and diagrammatically demonstrate AM and PM peak hour movements at key intersections.
  - Background traffic data from published sources and/or recent survey data. The source of data and any assumptions are to be clearly explained and justified, including the growth rate applied to the future horizon.
  - The volume and distribution of existing and proposed trips to be generated by the construction, operational and decommission phases of the development. This should identify the maximum daily and hourly demands generated by the development, particularly where they coincide with the network peak hour.
  - The type and frequency of design vehicles accessing the development site.
- Details of the road geometry and alignment along the identified transport route/s, including existing formations, crossings, intersection treatments and any identified hazards. This should include;
  - Available sight distances at the site access and nearby intersections and any constraint to achieving the required sight distance for the posted speed limit.
  - An assessment of turn treatment warrants in accordance with the Austroads Guide to Traffic Management Part 6 and Austroads Guide to Road Design Part 4A for intersections along the identified transport route/s, identifying the existence of the minimum basic turn treatments and addressing the need for any warranted higher order treatments.
  - Swept path analysis demonstrating the largest design vehicle entering and leaving the development, and moving in each direction through intersections along the proposed transport route/s.
- Capacity analysis using SIDRA or other relevant application, to identify an acceptable Level of Service (LOS) at intersections with the classified (State) road/s, and where relevant, analysis of any other intersections along the proposed transport route/s.

6 Stewart Avenue (Locked Bag 2030) Newcastle West NSW 2302 1300 207 783 ABN 18 804 239 602
76 Victoria Street (PO Box 576) Grafton NSW 2460 transport.nsw.gov.au

- A review of crash data along the identified transport route/s for the most recent 5 year reporting period and an assessment of road safety along the proposed transport route/s considering the safe systems principles adopted under Future Transport 2056.
- Strategic (2D) design drawings of all proposed road works and the site access demonstrating scope, estimated cost and constructability of works required to mitigate the impacts of the development on road safety, traffic efficiency and the integrity of transport infrastructure. Works must be appropriately designed for the existing posted speed limit.
- Site plan demonstrating site access, internal manoeuvring, servicing and parking areas consistent with the relevant parts of AS2890 and Council requirements.
- Details of measures to address impacts and/or provide connections for public transport services and active transport modes, such as, public and school bus services, walking and cycling.
- Details of measures to ameliorate the impacts of road traffic noise, dust, and/or glare generated along the proposed transport route/s.
- Details of any Traffic Management Plan (TMP) proposed to address the construction and operation phases of the proposed development. The TMP should be prepared and implemented in accordance with *Australian Standard 1742.3* and the *Work Health and Safety Regulation 2017.* It is recommended that any TMP include, but not necessarily limited to, the following;
  - A map of the primary transport route/s highlighting critical locations.
  - An induction process for vehicle operators and regular toolbox meetings.
  - Procedures for travel through residential areas, school zones and/or bus route/s.
  - any proposed temporary measures such a Traffic Guidance Scheme (TGS)
  - A Driver Code of Conduct for heavy vehicle operators.
  - A complaint resolution and disciplinary procedure.
  - Community consultation measures proposed for peak periods.

Where road safety concerns are identified at a specific location along the proposed haulage routes, TfNSW suggests that the TIA be supported by a targeted Road Safety Audit undertaken by suitably qualified persons in accordance with the Austroads Guidelines.

Any roadwork on classified (State) road/s is to be designed and constructed in accordance with the current Austroads Guidelines, Australian Standards and TfNSW Supplements.

---- end of Attachment A -----

SINGLETON
COUNCIL

Council Reference: 23/54130

10 August 2023

Joe Fittell
Department of Planning
Locked Bag 5022
PARRAMATTA NSW 2124

Dear Joe,

SUBJECT: DPIE request for Advice – Restart of Redbank Power Station and Use of Biomass (excluding native forestry residues from logging) as a Fuel – SSD-56284960

I refer to your request via the NSW Major Projects Planning Portal for advice from Singleton Council on the Request for SEARs Input for the proposed Restart of Redbank Power Station and Use of Biomass (excluding native forestry residues from logging) as a Fuel Project.

Council staff have undertaken a review of the Scoping Report provided to inform SEARs and provides this letter as its response to the Department's request.

The Proposed Restart of Redbank Power Station and Use of Biomass (excluding native forestry residues from logging) as a Fuel (The Project)

The initial proposal sought to restart and operate the power plant using waste wood residues as fuel, it also proposed that pilot trials using alternative fuels will be conducted to support the operations of the power station. The application for consent proposed to operate alongside the Site's existing development consent until the existing development consent expires in 2031.

In recognition of the concerns of some sectors of the community in relation to the use of native forestry waste residues, the application has been amended to exclude native forestry bio-material waste from logging activities, the applicant will also relinquish the current approval to use coal tailings as a fuel at Redbank.

The fuel sources proposed will be ecologically sustainable biomass (in compliance with all relevant legislative requirements and excluding native forestry residues from logging) to deliver net zero CO2 power generation including from:

- Purpose grown energy plantations;
- Perennial grasses;
- Energy crops;
- Waste biomass from invasive species control;
- Waste biomass from approved clearing activities such as for major infrastructure developments, in accordance with a land management (native vegetation) code, from approved civil infrastructure, road clearing works, right of ways and related approved projects;
- Agricultural waste biomass products or residues;
- End of life waste woody biomass manufactured and produced into a fuel to specification ("Domestic Biomass") (subject to EPA approval as an eligible waste fuel); and
- Other sources of eligible waste fuels.

The first stage would involve the start-up of operations using biomass sourced primarily from approved land clearing operations (from existing civil and road works), biomass from invasive species as defined by Local Land Services NSW and potentially a limited amount of purpose grown biomass.

The second stage would involve the introduction or increased use of purpose grown biomass which will be further increased over a period of 2-4 years from approval, and, if approved and declared an eligible waste fuel by the NSW EPA, the introduction and use of Domestic biomass.

The EIS should Consider the following Strategies and Plans

- Hunter regional Plan 2041
- Singleton Local Strategic Planning Statement 2041
- Singleton Community Strategic plan 2022-2032
- Singleton Housing Strategy
- Singleton Sustainability Strategy 2019–2027

As discussed in the Scoping Report, the NSW Government supports thermal energy recovery as a residual waste management option where it can deliver positive outcomes for the community while protecting human health and the environment. The EIS should clearly demonstrate the positive outcomes for the wider community and recognise that the Singleton community will bear many of the impacts of the proposed project that has state and national benefits.

Areas of concern include:

- Air Quality Impacts
- Water Quality and Security
- Potential lost opportunities around alternative land use and biodiversity enhancement options

General Matters

Planning Agreement

A Planning Agreement (VPA) for the Project will be required. Council has spent significant time reviewing the contributions made to the Singleton community by the mining and energy industry and in November 2017, Council resolved to apply a 1% levy on capital investment value to all future mining and energy project voluntary planning agreements.

Social Impacts and Community Loss

A comprehensive Social Impact Assessment should include the following:

Housing requirements

During Construction Phase – short-term accommodation for temporary works has been identified as a Housing Gap in Singleton's Housing Strategy, the additional impacts of the project on housing stock and affordability should be addressed.

During operation – The Project has proposed to provide 382 FTE jobs with the majority being in the Hunter and Singleton LGA, the associated housing demand should be considered as a potential impact of Singleton's housing market and affordability.

Air Quality

The burning of biomass has significant public health impacts from particulate pollution, which would exacerbate existing poor air quality in the region. Given the expected life of the proposed Project, the relationship between air quality and climate change indicators published by AdaptNSW should be considered in the EIS, including the Project's role in either improving or exacerbating the impact. For example, The EIS should include an assessment of the air quality impacts associated with a projected decrease in rainfall during spring and winter months.

The EIS and air quality assessment should quantify the effectiveness of any proposed controls, including how successful existing controls have been in reducing the impact of the existing operation, to enable certainty regarding the impact of the proposed Project.

Air quality is frequently raised as an area of community concern, with current expectations that air quality will improve with the reduction in coal mining in the area. The EIS should address the continued and unanticipated air quality impact that this project will pose on the Singleton Community particularly as it relates to human health and the environment.

Water Quality and Security

The Water Impact Assessment should include analysis of the opportunity costs to the Singleton community through analysis of alternatives that may arise in a post-mining scenario to give an accurate picture of the true costs associated with the proposed project. Scenarios such as previously disturbed riparian areas being rehabilitated or allowed the opportunity to naturally recover should be considered without further disturbance as the mining industry contracts over coming years.

Biodiversity

Given the lack of information around the sites of the proposed biomass, a Biodiversity Assessment Waiver Report is not appropriate, and a Biodiversity Impact Assessment should be undertaken to give consideration to:

- Specific sources and potential sites of the purpose grown biomass, particularly if the growth phase over these sites is to be considered as a mitigating measure for the emissions.
- Transport Routes and the Singleton Council Local Strategic Planning Statement's Concept Biodiversity Corridors that cross over Long Point Road West to the northeast of the proposed site.
- Singleton Council High Biodiversity Values mapping currently being prepared, which could impact certain areas on the site and other areas considered part of the proposed development.

Biosecurity

Potential biosecurity risks should be considered and further justifies the need for potential fuel sources to be identified during the assessment, the scoping report has mentioned many facilities will be in a 300-400km radius, the biosecurity risks should be considered after adequate information is provided around potential sources and if they may be obtained from interstate locations, this needs to be adequately addressed.

Traffic and Transport

- Transport Routes should be specifically identified and included in the EIS to allow a comprehensive impact assessment.
- The shift to 200 truck movements per day will pose a significant increase in local air pollution and impacts on the local community, particularly noting fuel had been previously primarily conveyed to the site via conveyor and truck movements were therefore occasional.
- Consideration should also be given to the community costs, both monetary in maintenance and repairs and reduced safety as a result of road degradation due to increased heavy vehicle movements.

Greenhouse Gas Assessment and Climate Change

The EIS should provide detail on how the Project will support the policy framework in the following areas:

- The inputs used to calculate the emissions and offsets should be clearly identified in the Life Cycle Assessment. Particularly as the scoping report has identified the growth phase of the purpose grown biomass will create carbon sinks to offset the carbon emissions through burning to create a near net zero emission outcome. The EIS should substantiate how these offsets can be ascribed to this project when they are not owned or controlled by the same entity and when compared to alternative options where biomass is not burnt, and the terrestrial carbon stock is retained.
- Indirect emission such as the increased truck movements generated by operations should also be included when calculating emissions.
- Given the time lag between carbon emissions and offset measures, further information should be provided in the EIS around the accuracy of these assumptions when future scenarios are largely unknown.
- Alternative uses of the proposed biomass should be considered and included in the EIS to gain an accurate calculation of the opportunity costs of being used as fuel for electricity generation.

- Consideration should be given to the incentivisation for farmers to grow crops exclusively to burn due to the creation of a biomass burning facility and market, and the impact on existing primary production land that may result.

The extent to which this Project aligns with the Framework, and contributes to meeting the Framework's objectives, is likely to be an important public interest consideration.

Waste Management

The EIS should consider Singleton Council's Waste Management Strategy that is currently seeking feedback and will go on exhibition later this year. This will address Council's commitments to achieving the targets set out in NSW *Waste and Sustainable Materials Strategy 2041.*

It is expected that the EIS would detail and account for all waste scenarios, particularly as RRO/Es are not a given for this project.

Clarification is requested around the statement in the scoping report under *6.1.13 Hazards and risk – waste,* regarding reversion back to the burning of beneficiated dewatered tailings and run-of-mine coal in the operation of the Power Station. This revised report proposes the surrender of existing consents to relinquish approval to use coal tailings as a fuel at Redbank so it is expected that this is not a scenario for consideration.

Concluding Comments

I would like to thank you for the opportunity to provide advice into the Restart of Redbank Power Station Project SEARs. Please contact me on 02 6578 7286 if you have any questions.

Yours sincerely

Michelle Reichert

Development Planner