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

Email: sally.munk@planning.nsw.gov.au

10 October 2023

Dear Sir/Madam

**State Significant Development Application – SSD-62423490
Kooragang – Port of Newcastle Clean Energy Precinct – Concept DA**

I refer to your correspondence dated 18 September 2023 regarding the abovementioned matter.

I advise that Australian Rail Track Corporation (ARTC) has no objections to the Concept Development, however Department of Planning should consider the following when determining the application:

- Northern Site (Ammonia) Adequate controls whilst constructing next to the railway at the Ammonia Tank location
- General - ARTC will want to understand how the hydrology will change as result of the introduction of the all the changes
- Eastern Site – if the Area Transmission corridor needs to be upgraded, Port of Newcastle will be required to follow ARTC Third Party Process and comply with ARTC engineering standards. Application can be submitted to HVPropertyServices@ARTC.com.au
- the State Environmental Planning Policy (SEPP) (Infrastructure) 2007 and Development Near Rail Corridors And Busy Roads – Interim Guideline, published in the NSW Government Gazette No.158 on 19 December 2008 when determining this application. A copy of the guidelines can be found by following the below link: [Development near rail corridors and busy roads interim guideline 2008](#)

Should you have any further enquiries with regard to this matter please do not hesitate to contact me at HVPropertyServices@ARTC.com.au

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Mark Robinson'.

Per
Mark Robinson
Acting Manager Property – Hunter Valley

Your ref: SSD-62423490
Our ref: DOC23/830126-2

Sally Munk
Principal Planning Officer
DPE Planning

By email: sally.munk@planning.nsw.gov.au

Dear Sally,

Input into Secretary's Environmental Assessment Requirements – Clean Energy Precinct Concept Plan – Newcastle City LGA (SSD-62423490)

I refer to your Major Projects Portal request on 18 September 2023 seeking input into the Secretary's Environmental Assessment Requirements (SEARs) for the Clean Energy Precinct Concept Plan, located at 20 and 150 Cormorant Road in Kooragang (Lot 22 DP 1155723, Lots 3 and 7 DP 1207051, Lots 29-33 DP 1184229, Lot 8 DP 119752 and Lot 16 DP 262783). The proposed development is within the Newcastle City local government area.

The Biodiversity Conservation Division (BCD) of the Department of Planning and Environment (the Department) and National Parks and Wildlife Service (NPWS) are providing joint SEARs for the proposed development. BCD and NPWS understands that the Port of Newcastle is proposing to construct and operate a clean energy precinct which will enable the production, storage, distribution and export of clean energy including green hydrogen and green ammonia. BCD understands that the proposal is a State Significant Development (SSD-62423490) project under the *Environmental Planning and Assessment Act 1979*.

BCD notes that the proposed development includes prime breeding habitat for the Lower Hunter population of green and golden bell frog (*Litoria aurea*) which is listed as Endangered under Schedule 1 of the *Biodiversity Conservation Act 2016* and Vulnerable under the *Environment Protection and Biodiversity Conservation Act 1999*. Therefore, the proposed development may result in a significant impact to this species.

NPWS notes that the Environmental Impact Statement (EIS) needs to appropriately address the potential for impacts on the natural, cultural, social and recreational values of the nearby Hunter Wetlands National Park, its Ramsar-listed wetlands of international significance, and neighbouring lands acquired under Part 11 of the *NSW National Parks and Wildlife Act 1974* (NPW Act) that are managed as part of the national park. The Part 11 lands (NPWS lands acquired but not gazetted) were not shown on the project proposal maps).

BCD and NPWS have reviewed the document '*Scoping Report | Infrastructure and Ammonia Storage (within proposed future Clean Energy Precinct)*' as prepared by WSP (dated 7 September 2023) and has prepared Standard SEARs which are presented in **Attachment A**. See **Attachment B** for site specific SEARs. It is noted the list of lots within the project site in Table 3.1 of the Scoping Report is incomplete and does not identify all lands affected by the proposed electrical infrastructure (e.g. Lot 2 DP1207051). Details of guidance documents are provided in **Attachment C**.

If you have any further questions about this issue, please contact Jayme Lennon, Senior Conservation Planning Officer, on 9585 6935 or at huntercentralcoast@environment.nsw.gov.au

Yours sincerely

A handwritten signature in black ink, appearing to read "S. Crick".

Steven Crick
A/Director Hunter Central Coast Branch
Biodiversity and Conservation Division
3 October 2023

Enclosure: Attachments A, B, C

Attachment A – Standard Environmental Assessment Requirements

Biodiversity
1. Biodiversity impacts related to the proposed development (SSD-62423490) 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 <i>Biodiversity Conservation Act 2016</i> (s6.12), <i>Biodiversity Conservation Regulation 2017</i> (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 <i>Biodiversity Conservation Act 2016</i>.
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 of 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.

Lands managed by the National Parks and Wildlife Service

16. The EIS must:

- a. include an assessment of the nature, extent and duration of any potential direct or indirect impacts on the nearby parks, namely Hunter Wetlands National Park, its Ramsar-listed wetlands of international significance, and neighbouring lands acquired under Part 11 of the *NSW National Parks and Wildlife Act 1974* (NPW Act), addressing all matters outlined in *Developments adjacent to National Parks and Wildlife Service lands: [Guidelines for consent and planning authorities](#)* (DPIE-NPWS 2020) inclusive of the NPWS managed land-specific matters:
 - i. address the proposals effect on land management operations and the interface of NPWS managed lands, considering NPWS ability to deliver critical operations such as low-flight operations, bush fire management obligations especially wildfire response (including peat layer fires) and maintain radio communications.
 - ii. consider the risk of reduced environmental quality and landscape amenity due to increased potential impacts around noise, water, noxious odours and light pollution from the development site (construction and operation) and its effect on park users.
 - i. consider the importance of the NPWS managed land as critical habitat for migratory shorebirds and other wetland dependent threatened entities, including an important population of green and gold bell frogs (*Litoria aurea*), address interface habitat connectivity with the proposed development site.
 - ii. assess potential risk to the hydrology and ecological function of the Hunter Estuary Wetlands Ramsar site ensuring actions accord with the *Management principles for Australian Ramsar sites are established under the Environment Protection and Biodiversity Conservation Act 1999 and Regulation*.
 - iii. consider application of Part 12A of the NPW Act and assess impacts on any declared [Assets of Intergenerational Significance](#) (AIS) and the application of their adopted conservation actions plans as part of the BDAR.
 - iv. apply heightened biosecurity process to reduce the risk of potential spread or incursion of weeds and pests onto NPWS managed land as a result of the development, apply [Hygiene guidelines - Protocols to protect priority biodiversity areas in NSW from Phytophthora cinnamomi, myrtle rust, amphibian chytrid fungus and invasive plants](#) (DPIE 2020).
- b. identify measures proposed to prevent, control, abate, minimise and manage any potential direct, indirect and cumulative impacts on NPWS managed land, including an evaluation on the adequacy and effectiveness of the stated measures proposed.
- c. quantify any residual impacts to NPWS managed lands.
- d. ensure consultation occurs with NPWS, refer all correspondence to the NPWS Manager, Lower Hunter Area via email at npws.lowerhunter@environment.nsw.gov.au.

17. Where development will, or is likely to encroach or occupy land reserved or acquired under the *National Parks and Wildlife Act 1974* (NPW Act), either on a temporary or proposed permanent basis, the EIS must:

- a. ensure consultation is undertaken with NPWS, and landowner's consent from the Minister administering the NPW Act is obtained where required.
- b. assess any act proposed on NPWS managed land, ensuring it is permissible or authorised under the NPW Act, by addressing:
 - i. the objects under section 2A of the NPW Act
 - ii. the management principles under section 30E of the NPW Act
 - iii. the [adopted plan of management](#), OR
 - iv. relevant overriding legislation is clearly specified, OR
 - v. revocation of land reserved or transfer of unreserved land under the NPW Act, if relevant.
- c. clearly specify:
 - i. the area of NPWS managed land that requires temporary occupation or use, including routes of access, ancillary construction facility (use for storage of vehicles, plant, equipment or materials) or any interface encroachment to enable development.
 - ii. dilapidation assessments and report are to be prepared identifying the condition of affected NPWS assets likely impacted as a result of the proposal including access roads, track and walking trails prior to accessing NPWS managed lands, this will support any "made good" or asset repair activities required at the expense of the proponent.
 - iii. the area of NPWS managed land to be permanently occupied, stating the authorisation pathway required under Part 12 of the NPW Act, covering any critical access, utility or service corridors that form part of this proposal.
 - iv. alternative options are explored to avoid encroachment or occupation of NPWS managed land, any justification must be critical, limit environmental impact to the greatest extent practicable and represent the only available, feasible or rationale option.

18. Where revocation of lands reserved, or transfer of lands acquired under the NPW Act is required, the EIS must:

- a. prepare the revocation package in accordance with the [NSW Environment and Heritage Policy Revocation, recategorisation and road adjustment](#) in consultation with NPWS.
- b. assess and calculate the loss of natural and cultural values to the reserve system and to the people of NSW and prepare an offset or compensation package.

Attachment B – Project specific environmental assessment requirements

Biodiversity

The population of green and golden bell frogs on Kooragang Island is considered a very important population that will be required to be assessed for serious and irreversible impacts under 9.1. (5) of the Biodiversity Assessment Method. The proposed development centres on the part of the island with the most important breeding area for the species. The proposed development has the potential to cause further decline of the species that, by reference to the draft recovery plan for this species, is currently in a rapid decline. Pursuant to criteria in clause 6.7 (2) (a) of the Biodiversity Conservation Regulation 2017, it is considered the development could have the potential to cause serious and irreversible impacts to the green and golden bell frog. The assessment must include a detailed assessment of the likely direct and indirect biodiversity impacts of the development on this species.

Water and soils - nil

Flooding and coastal erosion - nil

National Parks and Wildlife Service

- Recognition of land acquired under Part 11 of the NPW Act
 - The project site is located immediately adjacent to lands acquired under Part 11 of the *National Parks and Wildlife Act 1974* (NPW Act).
 - None of the mapping included in the document '*Scoping Report | Infrastructure and Ammonia Storage (within proposed future Clean Energy Precinct)*' as prepared by WSP (dated 7 September 2023) identifies these lands as land acquired under the NPW Act pending reservation. These lands are an important part of the regional context of the proposal and are to be managed consistent with the Hunter Wetlands National Park Plan of Management and the NPW Act.
 - The dataset containing the boundary of Part 11 land under the NPW Act across NSW is available on the SEED portal as part of the *NSW National Parks and Wildlife Service (NPWS) All Managed Land - Dataset*.
 - It appears that, in order to establish electrical infrastructure on Lot 2 DP1207051, access may be required through land acquired under Part 11 of the NPW Act. This access would be subject to authorisation by NPWS.
- Inclusion of additional stakeholders
 - The wetlands of the NPWS managed land adjacent to the development site provides significant habitat for migratory shorebirds recognised under international agreements and are popular bird watching sites. NPWS recommends adding the Hunter Bird Observers Club to the list of key community stakeholders for this proposal.
 - The Kooragang Wetland Rehabilitation Project, which commenced in 1993, is being managed by Hunter Local Land Services, and should be added to the list of State Government stakeholders.

Attachment C – Guidance material

Title	Web address
Relevant legislation	
<i>Biodiversity Conservation Act 2016</i>	https://www.legislation.nsw.gov.au/#/view/act/2016/63/full
<i>Coastal Management Act 2016</i>	https://www.legislation.nsw.gov.au/#/view/act/2016/20/full
<i>Commonwealth Environment Protection and Biodiversity Conservation Act 1999</i>	http://www.austlii.edu.au/au/legis/cth/consol_act/epabca1999588/
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<i>Fisheries Management Act 1994</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+38+1994+cd+0+N
<i>Marine Parks Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+64+1997+cd+0+N
<i>National Parks and Wildlife Act 1974</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+80+1974+cd+0+N
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
<i>Water Management Act 2000</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+92+2000+cd+0+N
<i>Wilderness Act 1987</i>	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
Koala (<i>Phascolarctos cinereus</i>) Biodiversity Assessment Method Survey Guide	https://www.environment.nsw.gov.au/research-and-publications/publications-search/koala-phascolarctos-cinereus-biodiversity-assessment-method-survey-guide
Threatened reptiles Biodiversity Assessment Method survey guide	https://www.environment.nsw.gov.au/research-and-publications/publications-search/threatened-reptiles-biodiversity-assessment-method-survey-guide

Title	Web address
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
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/
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
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approvedmethods-water.pdf
National Parks and Wildlife Service	
Guidelines for developments adjacent to NPWS lands	www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/development-guidelines
Revocation, recategorisation and road adjustment policy	www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/park-policies/revocation-recategorisation-and-road-adjustment
National parks and other lands managed by NPWS	https://datasets.seed.nsw.gov.au/dataset/npws-all-managed-land
Hunter Wetlands National Park Plan of Management	www.environment.nsw.gov.au/research-and-publications/publications-search/hunter-wetlands-national-park-plan-of-management

Title	Web address
SOS Hygiene guidelines - Protocols to protect priority biodiversity areas in NSW from Phytophthora cinnamomi, myrtle rust, amphibian chytrid fungus and invasive plants (DPIE 2020)	https://www.environment.nsw.gov.au/-/media/OEH/Corporate-Site/Documents/Animals-and-plants/Wildlife-management/saving-our-species-hygiene-guidelines-200164.pdf
Assets of Intergeneration Significance (Part 12A of the NPW Act)	https://www.environment.nsw.gov.au/topics/parks-reserves-and-protected-areas/park-management/assets-of-intergenerational-significance

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 <i>Water Management Act 2000</i>, Water Sharing Plans Clause 24 of the <i>Water Management (General) Regulation 2018</i> 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 (including through inflow and seepage), 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 <i>Water Management Act 2000</i>, 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 <i>Water Management Act 2000</i> should be detailed by the proponent.	Water Sharing Plans Sections 3, 5, 60A & 60I of the <i>Water Management Act 2000</i> WAL must nominate a work to satisfy s60D of the <i>Water Management Act 2000</i> and this is completed by a dealing application under s71W of the <i>Water Management Act 2000</i> Exemptions or exclusions information: ○ ○ Clause 21-23, 34-50, sch.1 and 4 <i>Water Management Regulation 2018</i> ○ Sections 4.41 and 5.23 of the <i>EP&A Act 1979</i> ○ FAQs - Where can I take water without a water access licence?

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	The development of a thorough groundwater conceptual model with supporting cross section and extraction mining depth supported by field data.	NSW Aquifer Interference Policy Groundwater Guidelines
7	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.	<i>Water Management Act 2000</i> Part 1, Division 1, Section 5(2d; 4c) & Part 3 Div 2 Sect 97 <i>Water Management Act 2000</i> Part 1, Division 1, Section 5(4a;5a; 6a; 7a; 8a)) NSW Aquifer Interference Policy Groundwater Guidelines
8	Proposed surface and groundwater monitoring activities and methodologies and details of a proposed water management plan.	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
9	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)
10	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

Our Ref: C23/623

03/10/2023

Your Ref: PAE-62425964

Sally Munk
Department of Planning, Industry and Environment
c/o: Major Projects Portal

Dear Sally,

Request for input into the Secretary's Environmental Assessment Requirements for the proposed Clean Energy Precinct Concept DA SSD-62423490

Thank you for your referral of 18/09/2023 seeking input on the proposed SEARs from DPI Fisheries, a division of NSW Department of Primary Industries.

DPI Fisheries is responsible for ensuring that fish stocks are conserved and that there is no net loss of key fish habitats upon which they depend. To achieve this, DPI Fisheries ensures that developments comply with the requirements of the *Fisheries Management Act 1994* (FM Act) (namely the aquatic habitat protection and threatened species conservation provisions in Parts 7 and 7A of the Act, respectively), and the associated *Policy and Guidelines for Fish Habitat Conservation and Management (2013)*. In addition, DPI Fisheries is responsible for ensuring the sustainable management of commercial, recreational and Aboriginal cultural fishing, aquaculture, marine parks and aquatic reserves within NSW.

DPI Fisheries has reviewed the scoping report and notes that key fish habitat intercepts the project area. This proposal has potential to include direct and indirect impacts to key fish habitat, both onsite and downstream.

DPI Fisheries therefore recommends that the SEARs should request the following:

- Information on the likely direct and indirect impacts to key fish habitat within and adjacent to the development footprint associated with construction and operation of the facility including impacts associated with development-related works (e.g. earthworks etc.) directly within key fish habitat, development-related works directly adjacent to key fish habitat, and hydrological impacts to adjacent and downstream key fish habitat;
- Information on how the development will avoid, minimise and mitigate, and where necessary, offset development and operational impacts to key fish habitat.

DPI Fisheries' standard minimum information requirements for environmental assessment are clearly detailed in section 3.3 of the DPI Fisheries *Policy and Guidelines for Fish Habitat Conservation and Management (2013)*. Please ensure that the proponent addresses these requirements in their environmental studies. This will facilitate effective assessment of the proposal and reduce delays.

General information requirements that may be of assistance in the preparation of an environmental assessment for this proposal are listed below in Attachment 1. Attachment 2 contains links to important DPI Fisheries reference documents.

If you have any queries, please contact Cherie Colyer-Morris, Fisheries Manager, Coastal Systems (Central) at cherie.colyer-morris@dpi.nsw.gov.au.

Yours sincerely,

C. Colyer-Morris

Cherie Colyer-Morris

Fisheries Manager, Coastal System

Attachment 1 – General information requirements for environmental assessment

Fisheries NSW recommends that development proposals comply with the *Policy and Guidelines for Fish Habitat Conservation and Management (2013)* (referred to hereafter as P&GLs) (found at <https://www.dpi.nsw.gov.au/fishing/habitat/publications/pubs/fish-habitat-conservation>)

Issue	Information requirements for environmental assessment
A: General Requirements	▪ site address and contact details ▪ property description (e.g. Lot and DP numbers) ▪ a clear description of the proposal including details of construction methods and materials ▪ map(s) of the development area and adjacent areas - this should include nearby waterways, adjacent infrastructure (such as jetties) and land use ▪ clear photographs of the site (at low and high tide in estuaries), including photographs of any riparian and aquatic vegetation present (including pest species such as <i>Caulerpa taxifolia</i>) ▪ location of any oyster leases or other aquaculture facilities and recreational and commercial fishing areas within the subject waterway ▪ a description of the potential direct and indirect impacts on aquaculture, commercial and recreational fishing from the development ▪ a clear description of the physical and hydrological features of the development area (which may extend upstream and downstream of the development site in the case of flowing rivers or tidal waterways) ▪ approximate depth contours within 20 metres of the proposal ▪ a clear description of aquatic environments including: - fish in the locality, including threatened and protected species, populations, ecological communities, pest species or presence of 'critical habitat' under the FM Act or EPBC Act - an aquatic and riparian vegetation survey map of the area which shows the location and/or coverage of saltmarsh, mangrove, seagrass, macroalgae, macrophytes, riparian vegetation and snags - description of aquatic habitat TYPE on site (see Table 1 in the P&GLs) - description of the waterway CLASS (see Table 2 in the P&GLs) ▪ details of the nature, timing, magnitude and duration of the proposed disturbance to the aquatic environment ▪ assessments of predicted impacts upon any threatened species (fish and marine vegetation) (i.e. completion of a 7 part test and/or species impact statement(s)) and other aquatic flora and fauna ▪ details of any mitigation measures to limit environmental impacts ▪ details of the general regional context, any protected areas, other developments in the area, and/or cumulative impacts ▪ a copy of the land owner's consent where relevant ▪ notification of any other matters relevant to the proposal and of interest to NSW DPI
Dredging and reclamation activities	• purpose of works • type(s) and distribution of marine vegetation in the vicinity of the proposed works • method of dredging to be used • timing and duration of works • dimension of area of works including levels and volume of material to be extracted or placed as fill • nature of sediment to be dredged, including Acid Sulphate Soil, contaminated soils etc • method of marking area subject to works • environmental safeguards to be used during and after works • measures for minimising harm to fish habitat under the proposal • spoil type and source location for reclamation activities • method of disposal of dredge material • location and duration of spoil stockpiling, if planned

Activities that damage marine vegetation	• type of marine vegetation to be harmed • map and density distribution of marine vegetation • reasons for harming marine vegetation • methods of harming marine vegetation • construction details • duration of works/activities • measures for minimising harm to marine vegetation under the proposal and details of compensatory habitat development to replace lost vegetation. • method and location of transplanting activities or disposal of marine vegetation.
Activities that block fish passage	• type of activity eg works in a stream that change flow or morphological characteristics • length of time fish passage is to be restricted • timing of proposed restriction • remediation works

B. Aquatic habitat assessment	The aim of the aquatic assessment should be to define the presence of 'key fish habitat' within the study site, adjacent areas (upstream and downstream), and the broader regional area. There may be a range of potential fish habitats that could be impacted by a particular activity. Some points to consider include: - geomorphic characteristics of the waterway (i.e. what characteristics of a CLASS 1-4 waterway does it have (see Table 2 in P&GLs)? Is it a gully, intermittent stream or major river? Does it have deep pools or in-stream gravel beds? Is it a wetland? Does the watercourse connect with other watercourses upstream or downstream? What is the slope/gradient?) - is it mapped as key fish habitat? (see www.dpi.nsw.gov.au/fisheries/habitat/protecting-habitats#KFH for maps of key fish habitat per Local Government Area) - flow regime of the watercourse (e.g. is it an intermittent or permanently flowing stream? What is the range of water velocity of the flow? What are the maximum and minimum or percentile flows (in megalitres/day) for the watercourse?) - description of local wave and current regimes (in tidal areas) - description of the water quality (e.g. discolouration, sedimentation, turbidity, pH, dissolved oxygen, nutrients) - types of surrounding land use (e.g. agricultural, urban, aquaculture) - condition of riparian vegetation (i.e. present or absent. Are the species native or exotic? Is the density of vegetation thick or sparse?) - condition of freshwater aquatic vegetation (i.e. present or absent. Are the species native or exotic? Is the density of vegetation thick or sparse? Is it continuous or sparse in coverage? What is the aerial extent of major vegetation types? Is the vegetation healthy or degraded?) - condition of marine vegetation (i.e. information on type, species, shoot density and/or percentage cover. Is the vegetation continuous or sparse in coverage? What is the aerial extent? Is the vegetation healthy or degraded? Is wrack (dead seagrass or macroalgae) present?) - presence of wetlands nearby (including freshwater wetlands and saltmarsh) (i.e. are wetlands protected under any legislation (e.g. SEPP 14 coastal wetlands, Ramsar wetlands)? Are the wetlands in a healthy or degraded condition?) - substrate type (e.g. rock, sand, gravel, silt) - presence of refuge areas (e.g. adjacent wetlands, upstream pools) - presence of spawning areas (e.g. gravel beds, snags, reed beds, saltmarshes) - presence of natural or artificial barriers to fish passage upstream and downstream (e.g. waterfalls, cascades, weirs, dams, floodgates, road crossings) - types of migratory fish or other aquatic species likely to inhabit the areas (based on known distribution range within the scientific literature) - timing of construction in relation to any fish migration seasons - timing of construction in relation to flow conditions relative to expected wet seasons presence of any listed threatened or protected aquatic species or 'critical habitat' under the FM Act and EPBC Act
C. Aquatic fauna assessment	For aquatic fauna studies, sites where fish and/or other aquatic fauna are well documented, and no threatened species are recorded, a site inspection and desktop review of the study site and regional area may be the required level of assessment. During the completion of the planning phase for a new project, it may be determined that a detailed aquatic survey is required. Detailed surveys are to be undertaken only after direct consultation with NSW DPI as permits are required for sampling aquatic fauns under the FM Act. The Department of Planning and Infrastructure has developed a document entitled <i>Aquatic Ecology in Environmental Impact Assessment</i> (Lincoln-Smith 2003) which may also assist in the survey design. Note that a detailed survey may be required: - where the project is on a CLASS 1 or 2 watercourse (see Table 2 in P&GLs) or where it has been identified that there may be a significant impact on a threatened aquatic species; and/or - where the project crosses through, over or within a 'critical habitat' and a Species Impact Statement is required.
D. Assessment of likely impacts	- indicate the location, nature and extent of habitat removal or modification (both direct and indirect) which may result from the proposed action; - discuss the potential impact of the modification or removal of habitat (potential direct and indirect sources of impact are stated in the letter with this attachment). Note: In defining the proposal area, discussion must be provided regarding possible indirect effects of the proposal on species/habitats in the area surrounding the subject site: for example, through altered hydrological regimes, soil erosion or pollution.
E. Ameliorative measures	The environmental assessment should consider and provide detail on how the proposal has been or may be modified and managed to minimise impacts and conserve aquatic habitat on the subject site and in the study area.

Attachment 2 – Guidelines for assessment

Title	Location
<i>Policy and Guidelines for Fish Habitat Conservation and Management (2013)</i>	https://www.dpi.nsw.gov.au/fishing/habitat/publications/pubs/fish-habitat-conservation
<i>Fish Passage Requirements for Waterway Crossings and Policy (2003) and Guidelines for Fish Friendly Waterway Crossings (2003)</i>	https://www.dpi.nsw.gov.au/fishing/habitat/threats/barriers
<i>Degradation of native riparian vegetation along NSW watercourses is listed as a key threatening process (KTP) under the Fisheries Management Act DPI-Fisheries recommends that this activity is avoided.</i>	https://www.dpi.nsw.gov.au/fishing/threatened-species/what-current/key-threatening-processes/degradation-of-native-riparian-vegetation



DOC23/839462-4

29 September 2023

Sally Munk
Principal Planner Industry Assessments
NSW Department of Planning and Environment
4 Parramatta Square
PARRAMATTA NSW 2150

Submitted via Major Projects Portal

**Secretary's Environmental Assessment Requirements (SEARs)
Port of Newcastle Clean Energy Precinct – Concept DA (SSD-62423490)**

I refer to your request for the NSW Environment Protection Authority's (EPA) Secretary's Environmental Assessment Requirements (SEARs) for the proposed Port of Newcastle Clean Energy Precinct Concept State Significant Development Application (SSD-62423490).

The EPA understands that the proposal includes the construction and operation of a Clean Energy Precinct for the production, storage, distribution and export of hydrogen and ammonia using common user-shared infrastructure.

The EPA has considered the details of the proposal as provided by the proponent and has identified the information it requires to assess the proposal. These requirements are provided in **Appendix A**.

The Environmental Impact Statement (EIS) for the proposal should consider potential cumulative environment and human health impacts from the precinct once it is fully developed, having regard to existing industry nearby.

The EPA notes that the nature of the contamination across the precinct and the environmental context of the site is complex. The EPA recommends that [certified consultants](#) with demonstrated experience in similar sites are engaged and that a site audit statement is prepared for the precinct.

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

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

The proponent should be made aware that any commitments made in the EIS may be formalised as approval conditions and be placed as conditions under an Environment Protection Licence.

Yours sincerely

A handwritten signature in dark ink, appearing to read 'LA', is positioned below the 'Yours sincerely' text.

LAUREN MUSGRAVE
Unit Head – Environment Protection Planning

Attachment

1. Appendix A – Environmental Assessment Requirements
2. Appendix B – Guidance Material

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APPENDIX A:

Secretary's Environmental Assessment Requirements (SEARs) for Port of Newcastle Clean Energy Precinct – Concept Plan SSD-62423490

1. General

The following potential environmental impacts of the precinct should be assessed, quantified and reported on in the EIS for all phases of the project cycle:

- air
- human health
- noise and vibration
- water
- soils and contamination
- chemicals, waste and hazardous materials
- climate change.

The EIS should describe mitigation and management measures to prevent or mitigate the above impacts, including cumulative impacts, to reduce risks to the environment and human health. The EIS should include an assessment of the likely effectiveness of these measures and any expected residual impacts once implemented.

The EIS should also justify undertaking the proposal in the manner proposed, having regard to the potential cumulative environmental impacts.

2. Air

The proposal should seek to ensure that sensitive receivers are protected from adverse cumulative air and odour impacts associated with the precinct proposal (both during construction and once fully operational) and nearby industry.

Describe baseline conditions

Provide a description of existing air quality using available information and site representative ambient monitoring data. The description must include a consideration of, but need not be limited to:

- meteorology and climate
- topography
- surrounding land-uses
- identified sensitive receptors.

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 should:

- identify all predicted potential discharges of fugitive and point source air emissions and odour
- identify comparable facilities within the airshed and consider the cumulative impacts of air emissions from these facilities along with the precinct activities, including once the precinct has been fully developed
- assess all risks to the environment, human health and amenity associated with predicted cumulative emissions of air pollutants, including odour
- demonstrate the proposal's ability to comply with the relevant regulatory framework

Describe management and mitigation measures

The EIS should outline measures to mitigate air quality and odour impacts from the precinct, including, where possible, specifications of pollution control equipment and management protocols for both point and fugitive emissions, including cleaner production processes.

3. Human Health Risk Assessment

The proposal should adequately consider risks to human health posed by the activities proposed in the precinct and develop mitigation measures accordingly.

A Human Health Risk Assessment must be undertaken in accordance with the *Environmental Health Risk Assessment: Guidelines for assessing human health risks from environmental hazards* (enHealth).

4. Noise and vibration

The proposal should seek to ensure that sensitive receivers are protected from adverse noise and vibration impacts from the precinct and ancillary activities once the precinct is fully developed.

Assess impacts

The proponent must provide a Noise and Vibration Assessment prepared in accordance with the *NSW Noise Policy for Industry* (EPA, 2017). Any assessment should include, but not be limited to:

- details of the construction and operational noise and vibration impacts on nearby sensitive receivers and structures, including cumulative noise impacts once the precinct is fully developed
- a consideration of necessary modification factors as detailed in Fact Sheet C of the *NSW Noise Policy for Industry* given the nature of the proposal
- an assessment of impacts from existing and future traffic noise once the precinct is fully developed, in accordance with the *NSW Road Noise Policy* (Department of Environment, Climate Change and Water, 2011)
- consideration and implementation (where relevant) of sections 2.4.2 and 2.8 of the *NSW Noise Policy for Industry* regarding industrial areas and noise management precinct approaches.

Describe management and mitigation measures

The EIS should include:

- details of the proposed management and mitigation measures to be implemented, including the attenuation that will be achieved and the revised noise impact predictions following mitigation
- where relevant noise or vibration levels cannot be met after application of all feasible and reasonable mitigation measures, a quantification of the residual level of noise impact
- for precinct traffic noise impacts, a description of the precinct-wide ameliorative measures considered (if required), reasons why and procedures for calculation of noise levels.

5. Water

The proposal should mitigate the risk of water pollution events, with particular consideration of potential impacts on nearby sensitive receiving environments. Additionally, it should adopt a precinct-wide risk-based approach consistent with the *Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions* (Office of Environment and Heritage, EPA, 2017).

Describe baseline conditions

The EIS should:

- describe existing surface and groundwater quality. An assessment should be undertaken for any water resource likely to be affected by the proposal for all conditions
- state the environmental values listed for the catchment and waterway type relevant to the proposal, the ambient *Water Quality and River Flow Objectives* for the receiving waters and the indicators and associated trigger values or criteria for the identified environmental values (see *ANZECC 2018 Guidelines for Fresh and Marine Water Quality*)
- where groundwater may be affected the EIS should identify appropriate groundwater environmental values and justify the choice. A consolidated and approved list of environmental values are not available for groundwater resources
- provide site drainage details and surface runoff yield.

Assess impacts

The proponent must provide a Water Pollution Discharge Impact Assessment prepared in accordance with the relevant EPA guidelines [here](#) to show that all practical measures to prevent water pollution and protect human health and the environment from harm are investigated and put in place. The assessment should include, but not be limited to:

- an assessment of the potential impact of any discharges on the environmental values of the receiving waterways consistent with the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (ANZG, 2018)
- demonstration of how the precinct will be designed and operated to protect the *NSW Water Quality and River Flow Objectives* for receiving waters where they are currently being achieved or contribute towards achievement of the Objectives over time where they are not being achieved
- identify and assess any potential impacts on quality or quantity of groundwater, describing their source.

The proponent should consult with the EPA as soon as possible if a mixing zone is proposed. 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.

Describe management and mitigation measures

The EIS should:

- outline stormwater management to control pollutants at the source and contain them on site
- outline erosion and sediment control measures
- describe wastewater treatment measures that are appropriate to the type and volume of wastewater and are based on a hierarchy of avoiding generation of wastewater; capturing all contaminated water (including stormwater) on the site; reusing/recycling wastewater; 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. contingency plans), appropriate disposal methods and generation of leachate. Containment of spills and leaks must be in accordance with EPA's guidelines in relation to *Storing and Handling of Liquids* and the most recent versions of the Australian Standards referred to in the Guidelines. Containment should be designed for no-discharge
- describe hydrological, groundwater and geomorphological impact mitigation measures.

6. Soils and contamination

The proposal should ensure that contaminants are managed through a precinct-wide approach so that the land is suitable for its proposed use across the proposed precinct. Investigation and remediation work must be carried out in accordance with guidelines made or approved by the EPA under s 105 of the

Describe baseline conditions

The EIS should:

- provide any details on soil types, properties and actual and potential soil contamination. This process should include an examination of historic monitoring data and studies for the site and additional investigations should be conducted to adequately characterise contamination across the areas proposed for development, along with identification of “hot-spots” for contamination within those areas
- provide details on the level of existing capping of contaminated soils (for example: extent; depth; permeability) for the areas proposed to be developed in the precinct. This should include details of the capping of the top of historic waste cells as well as the presence / absence of capping on the sides of the historic landfill structure nearby to proposed development areas.

Assess impacts

The proponent should identify any likely impacts resulting from the construction or operation of the precinct, including the likelihood of:

- disturbing existing contaminated soil
- compromising the existing capping layer above known contaminated materials, through construction of footings or through the construction of service trenches
- creating preferential pathways for the migration of existing contaminated groundwater, through for example the construction of service trenches and pipeline easements
- increased pressure on contaminated soil porewater through the weight of the structures proposed and what this may mean for any enhanced migration of contaminated groundwater either down through the soil profile or laterally to the sides of the former landfill cells
- adverse impacts on construction workers, and then occupants of the completed precinct, from any soil vapour risks
- further contamination of soil by operation of the activity
- subsidence or instability
- soil erosion
- disturbing acid sulfate or potential acid sulfate soils.

Describe management and mitigation measures

The EIS should describe and assess the effectiveness or adequacy of any soil management and mitigation measures during construction and operation of the precinct including:

- protection of construction workers from any soil vapour risks
- measures proposed to manage compromising the existing capping layer above known contaminated materials, through construction of footings or through the construction of service trenches
- measures proposed to prevent the creation of preferential pathways for the migration of existing contaminated groundwater, through for example the construction of service trenches and pipeline easements
- measures proposed to prevent or manage increased pressure on contaminated soil porewater through the weight of the proposed structures
- monitoring proposed to ensure the precinct has not increased the migration of contaminated groundwater either down through the soil profile or laterally to the sides of the former landfill cells
- any measures necessary to protect occupants and visitors to the completed site from any soil vapour risks

- 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)
- 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)
- erosion and sediment control measures.

Level of assessment

The nature of the contamination and the environmental setting is complex. Consultants with demonstrated experience in similar sites should be engaged to assist with this work and reports should be prepared, or reviewed and approved, by a consultant that is certified by an EPA recognised certification scheme.

An EPA accredited contaminated land auditor should also be engaged to oversee contaminated land investigations. By issuing a site audit statement and site audit report there will be greater confidence in conclusions and recommendations as they relate to contaminated land matters for the site.

7. Chemicals, waste and hazardous materials

Assess impacts

The proponent should:

- provide details of the quantity and type of both liquid waste and non-liquid waste predicted to be generated, handled, processed or disposed of at the precinct during construction and operation. Waste must be classified according to the EPA's *Waste Classification Guidelines 2014*
- 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*
- adequately scope the risks of leaks, spills, or a catastrophic failure associated with the proposed ammonia and hydrogen production and storage when the precinct is fully developed, with a consideration of the cumulative risk profile
- include assessment of the risk of an incident involving the proposed tanks resulting from other incidents in the precinct
- assess the proposal's risks and measures to ensure compliance having regard to the requirements of planning instruments and relevant standards for the design, construction and operation of the activities proposed.

Describe management and mitigation measures

The proponent should:

- provide details regarding the transport, handling, storage and use of dangerous goods, chemicals and products, both on site and with ancillary activities, and describe the measures proposed to minimise the potential for leakage or the migration of pollutants into the environment (in particular, air) from the site.
- outline measures to minimise the consumption of natural resources, avoid the generation of waste and promote the re-use, recycling and reprocessing of any waste
- provide details of waste management across the precinct, 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, including reuse, recycling, reprocessing (including composting) or treatment both on- and off-site
 - d. the method for disposing of all wastes or recovered materials in the precinct

- e. the emissions arising from the handling, storage, processing and reprocessing of waste
- 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.

8. Climate change

Please note that the ammonium nitrate and hydrogen production activities proposed to be developed in the precinct may require the preparation of 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 CO₂-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 2030¹.

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
- 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.

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

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

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 CO₂-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 credentialed 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 emissions².

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

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

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 CO₂-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) Scheme³ (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 CO₂-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 surrender. Assurance is to be provided that the review has been conducted by an independent and suitably credentialed 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:

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

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

APPENDIX B: GUIDANCE MATERIAL

Title	Web address
Relevant Legislation	
<i>Contaminated Land Management Act 1997</i>	http://www.legislation.nsw.gov.au/#/view/act/1997/140
<i>Environmentally Hazardous Chemicals Act 1985</i>	http://www.legislation.nsw.gov.au/#/view/act/1985/14
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/#/view/act/1979/203
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/#/view/act/1997/156
<i>Water Management Act 2000</i>	http://www.legislation.nsw.gov.au/#/view/act/2000/92
<i>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</i>	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
EPA's Storing and Handling of Liquids Manual (DECC, 2007)	https://www.epa.nsw.gov.au/~media/EPA/Corporate%20Site/resources/licensing/2007210liquidsManual.ashx
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)	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/clm/managing-contaminated-land-guidelines-remediation.pdf
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-edition
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
Guidelines for the Assessment and Management of Groundwater Contamination	https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/clm/groundwaterguidelines07144.pdf
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



File Ref. No: FRN23/3131 BFS23/5352 8000030898
TRIM Doc. No: D23/92054
Contact: Station Officer Richard Jay

21 September 2023

Sally Munk
NSW Department of Planning and Environment
Locked Bag 5022
PARRAMATTA NSW 2124

Dear Sally,

Re: Advice on Secretary's Environmental Assessment Requirements (SEARs) – Port of Newcastle Clean Energy Precinct – Kooragang Island (SSD-62423490)

Fire and Rescue NSW (FRNSW) acknowledge correspondence received on the 21 September 2023, requesting input into the preparation of the SEARs for the Port of Newcastle Clean Energy Precinct - Infrastructure & Ammonia – Kooragang Island (SSD-62423490). FRNSW have reviewed the SEARs along with the Scoping Report and make the following comments:

There is currently insufficient information available regarding the fire safety and emergency response management aspects of the project. FRNSW requests to be consulted and given the opportunity to review and provide comment regarding the proposed fire and life safety systems at the preliminary and final design phases of the project.

For further information please contact the Operational Liaison and Special Hazards Unit, referencing FRNSW file number BFS23/5356. Please ensure that all correspondence in relation to this matter is submitted electronically to firesafety@fire.nsw.gov.au.

Yours sincerely,

A handwritten signature in black ink, appearing to read "James O'Carroll".

Superintendent James O'Carroll
Manager
Operational Liaison and Special Hazards Unit

Cc: sally.munk@planning.nsw.gov.au



Department of Planning and Environment

Our ref: HMS ID 4632

Ms Sally Munk
Planner
Department of Planning and Environment
PO BOX 404
PARRAMATTA NSW 2124
By email: sally.munk@planning.nsw.gov.au

Request for Secretary's Environmental Assessment Requirements (SEARS) for the Clean Energy Precinct on Kooragang Island, Newcastle (SSD 62423490)

Dear Ms Munk,

Thank you for your referral dated 18 September 2023 inviting SEARS input from the Heritage Council of NSW on the above State Significant Development SSD-62423490 proposal.

The subject site is not listed on the State Heritage Register (SHR), nor is it in the immediate vicinity of any SHR items. Further, the site does not contain any known historical archaeological relics. Therefore, no heritage comments are required. The Department does not need to refer subsequent stages of this proposal to the Heritage Council of NSW.

If you have any questions about this correspondence, please contact Kelly Pleasance, Customer Services Officer at Heritage NSW on (02) 9873 8500 or heritagemailbox@environment.nsw.gov.au

Yours sincerely

Rochelle Johnston

Rochelle Johnston
Acting Director
Heritage Assessments
Heritage NSW
Department of Planning and Environment
As Delegate of the Heritage Council of NSW
25 September 2023

From: [Nicole Davis](#)
To: [Sally Munk](#)
Subject: Heritage NSW - Aboriginal Cultural Heritage - Advice on SEARs - Clean Energy Precinct Concept DA (SSD-62423490) (Newcastle City)
Date: Monday, 25 September 2023 6:26:00 AM
Attachments: [..datacontent\image\Images\logo1644468813661.png](#)
[image001.png](#)

Dear Sally,

Heritage NSW recommends that the following SEAR's be included with respect to Aboriginal cultural heritage (ACH) in relation to the proposed Clean Energy Precinct Concept DA (SSD-62423490) (Newcastle City).

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

- The ACHAR must be prepared in accordance with the Guide to Investigating, Assessing and Reporting on Aboriginal Cultural Heritage in NSW (OEH, 2011) and the Code of Practice for the Archaeological Investigation of Aboriginal Objects in NSW (DECCW, 2010), including results of thorough archaeological survey and test excavations (where required);
- Include evidence of adequate and continuous consultation with Aboriginal stakeholders in determining and assessing impacts, developing and selecting options for avoidance of Aboriginal cultural heritage and mitigation measures (including the final proposed measures), having regard to the Aboriginal Cultural Heritage Consultation Requirements for Proponents (DECCW, 2010).

If you require any further information please contact me directly.

Kind Regards

Nicole Davis

Manager Assessments

Heritage NSW

Department of Planning and Environment

E nicole.davis@environment.nsw.gov.au

Locked Bag 5020 Parramatta 2124



From: no-reply@majorprojects.planning.nsw.gov.au <no-reply@majorprojects.planning.nsw.gov.au>

Sent: Monday, 18 September 2023 3:52 PM

To: Tanya Pelz <tanya.pelz@environment.nsw.gov.au>; OEH HD Heritage Mailbox <HERITAGEMailbox@environment.nsw.gov.au>

Cc: Sally Munk <Sally.Munk@planning.nsw.gov.au>

Subject: Major Projects – New Request for Advice - Clean Energy Precinct Concept DA (SSD-62423490) (Newcastle City)

The Department has sent you a request for advice in relation to the Clean Energy Precinct Concept DA. The due date for this request is 02/10/23.

Please sign in to your account to view the details of this request and to upload your advice.

If you have any enquiries, please contact Sally Munk on 9274 6431 /at sally.munk@planning.nsw.gov.au.

To sign in to your account click [here](#) or visit the [Major Projects Website](#).

Please do not reply to this email.

Kind regards

The Department of Planning and Environment



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5 October 2023

Sally Munk
Principal Planner
Industry Assessments
Department of Planning and Environment
12 Darcy Street
PARRAMATTA NSW 2124

Submission via Major Project Portal: <https://majorprojects.planningportal.nsw.gov.au/>

Dear Sally Munk

PORT OF NEWCASTLE CLEAN ENERGY PRECINCT- CONCEPT PLAN

I refer to the Department of Planning and Environment's (DPE) notification of 18 September 2023, via the Major Project Portal, advising a request (SSD-62423490) has been received for the Secretary's Environmental Assessment Requirements (SEARs) for a proposed Clean Energy Precinct (CEP) -Concept Plan on the site of the former Kooragang Island Waste Emplacement Facility.

The development comprises the production and storage of green hydrogen and green ammonia, supporting electrical and pipeline infrastructure, internal roads, car park and administration and warehouse buildings.

The DPE has requested City of Newcastle (CN) to provide advice on any key issues and assessment requirements to be addressed in the SEARs. The Scoping Report (SR) prepared by WSP and dated 4 August 2023 has been reviewed and it is recommended the following matters are addressed in the SEARs:

1. PERMISSABILITY

Clause 5.12 (2) of Chapter 5-Three Ports of *State Environmental Planning Policy (Transport and Infrastructure) 2021* requires the consent authority to have regard to the zone objectives for development when determining a development application. The Environmental Impact Statement (EIS) is to demonstrate that the development meets the objectives of the SP1- Special Activities zone.

While it is noted the design and layout of the development as shown in the SR are indicative only, the scale of the proposed 'Innovation Hub' needs to be such that it can be demonstrated that it is reasonably ancillary to the CEP and not a prohibited land use in the SP1 zone.

2. NEWCASTLE EMPLOYMENT LANDS STRATEGY

It is recommended the Environmental Impact Statement (EIS) is required to respond to the planning principles raised in the Newcastle Employment Lands Strategy, including the following:

- Ensure that development does not curtail the current or future potential operation of the Port of Newcastle.
- Preserve land for potential long-term employment opportunities.

3. FLOOD MANAGEMENT

According to the Newcastle City-wide Floodplain Risk Management Study and Plan (BMT WBM June 2012), the subject land is affected by Hunter River and Ocean Flooding during both the 1% Annual Exceedance Probability (AEP) and Probable Maximum Flood (PMF) events.

Substantial areas within the site are still subject to flood impacts and overland flows and are identified as being of high risk. The site has large areas dedicated as flood management and drainage areas, whereby there are several catchment ponds and extensive drainage infrastructure. The site visit by CN officers as part of the planning focus meeting for the development held in mid-August 2023 highlighted that some of the pond areas at the northern end of the site appear to have been modified. Additional filling will potentially be required to manage the proposed development, as well as modifications of the existing ponds, overland flows, and changes to terrain.

The SR indicates a detailed hydrology, flooding and water quality assessment would be undertaken in the EIS. It is recommended this assessment is undertaken for the entire area of the development site and includes the following:

- A hydrology, flooding and water quality & quantity assessment is undertaken in consultation with Port Stephens Council, State Emergency Service and City of Newcastle.
- A flood assessment is undertaken in accordance with the NSW Flood Risk Management Manual and considers the following flood data for the surrounding areas:
 - ☐ Williamstown-Salt Ash Floodplain Risk Management Study and Plan (BMT September 2017)
 - ☐ Throsby, Styx and Cottage Creek Flood Study (Rhelm August 2023).
 - ☐ Newcastle City-wide Floodplain Risk Management Study and Plan (BMT WBM June 2012)
 - ☐ Hexham Straight Widening Flood and hydrology report (Jacobs October 2021)
 - ☐ Upgrading of Lower Hunter Flood Model at Hexham (DHI June 2008)
- A flood risk management plan (FRMP) is undertaken which considers the following:
 - ☐ CN's Flood Risk Management policies, the relevant requirements of the Newcastle Development Control Plan (NDCP) 2012 and NSW State policies and guidelines. In this regard, internal and external traffic management, parking, and vehicular and pedestrian access areas must be designed to be compatible with the flood risk and to mitigate impacts to the surrounding environment.
 - ☐ The design and layout of the development is to consider elements such as cut and fill, appropriate design levels for vehicular and pedestrian access, with roads and parking areas to be incorporated with the energy infrastructure and building designs to comply with the flood planning level.
 - ☐ The design of essential energy infrastructure is to consider flood resilient design outcomes and make provisions for overland and flood flows.
 - ☐ Address flood risks and management of risks for each progressive stage and for the overall built form (that is, operational risks)

□ Address risks associated during each stage of the construction process.

- The flood analysis and risk assessment is to plan for future expansions on developments on the site and surrounding lands, and the management of infrastructure such as pipelines and overhead infrastructure, services, impact on local roads to/from the site including freight and land transport.

4. STORMWATER MANAGEMENT

It is recommended the development is designed in accordance with Section 7.06 Stormwater of NDCP2012. The site is surrounded by the Hunter River, an estuary, and wetlands. Due to the type of development proposed, it is recommended that a coordinated approach for water sensitive design, drainage, groundwater, hardstand areas is undertaken within a combined environmental management approach. Such an approach would also assist in flora and fauna management. The roads and car parks are to be designed to reduce the extent of hardstand areas and associated collection of sediments and contaminants.

Overall, the design of the development must consider the future stages of the development, including construction and maintenance.

5. TRAFFIC, ACCESS AND PARKING

It is recommended the development is required to be designed in accordance with the relevant requirements of Section 7.03 Traffic, Parking and Access of the NDCP2012, Australian Standard AS/NZS2890 series and TfNSW guidelines.

While the SR has generally identified the potential traffic, access, parking and construction impact assessment requirements, it is recommended the following matters are addressed:

- Tourle Street is part of the Transport for NSW (TfNSW) road network and links Newcastle City to Port Stephens and Newcastle Airport. Traffic impacts due to proposed changes to the road layout (i.e. the concept plan indicates a new roundabout at the Tourle Street/Delta Street entry) interface could impact on the surrounding road traffic and signal operations. Traffic impacts must therefore be addressed in consultation with TfNSW and CN's Traffic and Transport teams. Sightlines must be checked and safety aspects at the above proposed entry must be addressed.
- A single entry/exit via Tourle St/Delta St entry is proposed, which is for the entire overall development. Elements such as safety and emergency management must be considered as any closure of the entry/exit may limit the operations of the development and add risks to the site.
- Internal roads, vehicular access and pedestrian network within the site must be designed to facilitate the developments planned for each stage.
- Adequate provision for off-street parking (includes car, truck, bicycle and motorbike parking) must be provided for staff and visitors and operational parking demand must be addressed. In addition, end-user facilities including toilets, showers and storage must be provided for staff and visitors.

6. MULTI-LEVEL HAZARD ASSESSMENT

It is recommended the EIS is required to be supported by a multi-level hazard assessment which considers the combination of hazardous storage proposed and the nature of neighbouring land uses, including the heliport in the Steel River Industrial Estate, and major transport links (i.e. Cormorant Road and rail lines). Consideration is also to be given to the

risks associated with the transportation of ammonia/hydrogen during the operation of the facility.

7. SAFETY AND SECURITY

It is recommended that the EIS is required to demonstrate how the principles of Crime Prevention Through Environmental Design (CPTED) have been incorporated into the design of the development. Also, consider whether the development could be at risk of an attack/ security incident and requires appropriate protection measures in place.

8. REMEDIATION OF LAND

It is recommended that the EIS is required to consider Chapter 4 -Remediation of Land of State Environmental Planning Policy (Resilience and Hazards) 2012. It being noted this chapter was not included in Table 4.2 -'Environmental Planning Instruments relevant to the project' of the SR.

9. SITE LANDSCAPING

It is noted the development 'aims' to include a 17 hectare 'green corridor'. It is recommended the EIS is required to consider the provision of supplementary landscaping on the site as part of the development. In this regard, it is recommended that the EIS is supported by a Landscape Concept Plan which has had regard to the relevant requirements of Section 3.13 -Industrial Development and Section 7.02 Landscape. Open Space and Visual Amenity of the NDCP 2012.

10. SOCIAL IMPACT ASSESSMENT

It is recommended the proposed Social Impact Assessment (SIA) report and Social Impact Management Plan (SIMP) for the proposed development are required to be prepared in accordance with *Social Impact Assessment Guideline for State Significant Projects* (NSW Department of Planning, Industry and Environment (DPIE, 2023); Technical Supplement to support the Social Impact Assessment Guideline for State-significant projects (DPIE, 2023); and *Social Impact Assessment Scoping Worksheet* (DPIE, 2020).

10.1 Assessment Catchment

The SIA is to identify and justify the physical catchment for the assessment, including the suburbs of Stockton, Fern Bay, Fullerton Cove, Tomago and Mayfield area, along with the catchment locations listed in Appendix C SIA of the SR.

10.2 Social baseline

The SIA shall describe the social context at the time of the SIA being undertaken by reviewing, at a minimum the following:

- Include a 'no go' or 'null' project scenario and life-cycle duration scenario as part of analysis considerations for baseline assessment.
- Demographic sources: in addition to the 2021 ABS census (SEIFA), include DPIE's Population, Household and Implied Dwelling Projections by LGA, housing data (rental and mortgaged vacancy rates), Australian Institute of Health and Wellbeing data.
- Policy context: in addition to NSW government policy context documents listed in the proposal's Appendix C SIA Scoping Report, take consideration of CN's Economic Development Strategy (2021) for local employment considerations and Social Strategy (2023) for local social challenges and opportunities.

- Area Profile: the social, physical, cultural and economic profiles. Include housing and accommodation availability and affordability, education, and workforce readiness along with the catchment locations listed in the proposal's Appendix C SIA of the SR. Identify the opportunities the proposed project presents to increase temporary and project life-cycle education and employment, housing and community.
- Features: of the surrounding community, social locality, and/or the landscape that people value (e.g. urban and nature areas, the sense of community or the accessibility of services, to diverse environments or quiet/vibrant neighbourhoods). How these features influence local people's, surrounding community or businesses' way of life, education, employment, housing, health/wellbeing.
- First Nations: the significance the area holds for Aboriginal and Torres Strait Islander community past, present and future.
- Climate change: opportunities the proposed development presents to increase both local community and further-afield levels of social resilience, social comfort and function in affected temperature, water availability and changing weather events in coming periods.
- Vulnerable groups: minority groups and vulnerable groups that are present in surrounding community (e.g. people on low incomes; people living with disabilities, chronic medical conditions or in poor health requiring access to services, people in insecure housing, distributional and intergenerational equity). Opportunities the proposed project presents to increase their level of temporary and project life-cycle education and employment, social inclusion, sense of belonging, community cohesion and connection to Country for example.
- History: the history of the area and proposed project, how people reacted to early project discussions and other proposals in the area.
- Health and safety: disaster (e.g. bushfire, flood, incident on site) responses. Opportunities to include surrounding community in warning alerts and mitigations.

10.3 Predict and assess the social impacts on the social baseline

- Describe and justify the methodologies used to predict and analyse social impacts, assumptions and projections as well as outcomes of the process.
- Consider:
 - possible adverse social impacts: provide justification for why this is acceptable. Describe any measures to mitigate or remove any adverse impacts.
 - possible beneficial social impacts: provide a supported explanation for why this is produced and opportunities to be further advanced.
 - extent of the impact and term (e.g. immediate, longer term, project life-cycle and cumulative)
 - density and clustering of similar development (e.g. the Applicants breadth of interests in the area)
- Additional community and stakeholder consultation may be required depending on impact significance and refinement.

10.4 Mitigation measures, implementation and monitoring via a Plan of Management (PoM)

The PoM shall provide both a detailed assessment and summary table covering:

- area of social impact
- potential impact
- pre-mitigated impact rating
- mitigation measures
- outcomes and targets
- indicate how monitoring will be undertaken, the duration period, and who will undertake and consult the groups involved.

10.5 Cumulative

The SIA shall address the cumulative social impact of existing developments, the proposed development and other proposed developments in the locality.

10.6 Decision making

The SIA shall:

- Describe pre-submission consultation undertaken, including list of those consulted, matters raised during the consultation and how the proposal responds to those matters. Where amendments have not been made to address a matter raised, an explanation should be provided.
- Ensure a process of free, prior and informed consent (FPIC) and along with the consultation agencies and groups listed in the proposal's Appendix C -SIA of the SR, consult with:
 - Awabakal and Worimi groups
 - surrounding vulnerable groups
 - surrounding residents, businesses and local community groups including those in Tomago, Stockton/Fern Bay and Fullerton Cove

11. SECTION 7.12 DEVELOPMENT CONTRIBUTIONS PLAN

The provisions of CN's Section 7.12 Development Contributions Plan apply to the subject land. Under the plan, a contribution rate of 1% of the cost of the development applies to all non-residential developments having a cost of more than \$200,000.

It is recommended the EIS is required to address the requirements of the above plan and is supported by a cost summary report for the proposed development.

12. GREEN AND GOLDEN BELL FROG

According to the SR, a preliminary environmental assessment identified that:

'Of most concern is the Green and Golden Bell Frog, listed as vulnerable under the EPBC Act, that has a high likelihood of occurrence as records for this species occur in the project site and the site is part of key local habitat for this species.'

It is recommended that any field surveys regarding the above frog are required to be undertaken in accordance with the requirements of the Australian Government Department of the Environment, Water, Heritage and the Arts publication *'Significant impact guidelines for the vulnerable green and golden bell frog (Litoria aurea)'* (2009).

13. PLANS

It is recommended the EIS is required to be supported by detailed plans of the development, drawn to a standard drafting scale and containing dimensions, and existing and proposed levels to Australian Height Datum. Such plans are to include a site plan, floorplans and elevations of all of the proposed buildings and infrastructure.

If you have any questions in relation to the various matters raised in this letter, please contact Geof Mansfield City Significant Development Section Manager on 4974 2767 or by email on gmansfield@ncc.nsw.gov.au.

Yours faithfully



Amy Ryan
CITY SIGNIFICANT & STRATEGIC PLANNING MANAGER

Sally Munk
Principal Planner, Industry Assessments
Department of Planning and Environment
4 Parramatta Square
12 Darcy Street
Parramatta NSW 2150

Dear Sally,

Port of Newcastle Clean Energy Precinct Concept Project (SSD-62423490) – Advice on SEARs

Thank you for providing Port Authority of NSW (Port Authority) with the opportunity to provide input into the Secretary's Environmental Assessment Requirements (**SEARs**) for the State Significant Development (**SSD**) proposal for the Port of Newcastle (**the Applicant**) Clean Energy Precinct Concept DA Project (SSD-62423490). Port Authority is generally supportive of the Application, particularly as it would assist in the transition to renewable energy at the port in Newcastle harbour. For the purposes of providing input into the SEARs, Port Authority has reviewed the Scoping Report and Appendices and attended the planning focus meeting on Tuesday 29 August 2023.

Background

Port Authority has the role of Harbour Master in all designated ports within NSW. The general function of a Harbour Master is outlined in section 88 of the *Marine Safety Act 1998* and can be summarised as having 'powers to direct and control the movement, entry and exit of vessels within port areas'. Works that will disturb the bed of a port or are otherwise captured under section 110 of the Ports and Maritime Administration Regulation 2021 (Schedule 4 of the Regulation) are to obtain written permission of the relevant Harbour Master and comply with conditions of the permission.

In Newcastle harbour, Port Authority's Harbour Master controls safe navigation and other movements of vessels within the port or any part of the port. The safety of vessels and safe navigation in Newcastle harbour is the responsibility of Port Authority. Port of Newcastle as the landowner is responsible for developments on their land including on-land works and providing access on water to berths.

YAMBA

PO Box 143
Yamba NSW 2464
T: 61 2 6646 2002

NEWCASTLE

PO Box 663
Newcastle NSW 2300
T: 61 2 4985 8222

SYDNEY

PO Box 25
Millers Point NSW 2000
T: 61 2 9296 4999

PORT KEMBLA

PO Box 89
Port Kembla NSW 2505
T: 61 2 4275 0100

EDEN

PO Box 137
Eden NSW 2551
T: 61 2 66461596

General comments

Port Authority note that this proposal does not include any shipping/berthing within the project description or project site extent, although the Scoping Report refers to the potential for 'export by ship as part of the existing or future proposals'. We understand it is very likely that products would be exported/imported in the future. Port Authority considers these elements should be included at the earliest possible stage.

While the Scoping report notes that 'The project site is accessible to cargo ships via the shipping channel in the South Arm of the Hunter River', and 'some construction equipment and materials may be transported to the project site by shipping', the project site indicated on Figure 1-1 and all other figures in the Scoping Report do not include any direct connection to berths (the nearest berth being the NCIG berth to the east).

For Port Authority to make an informed assessment of the proposal, details of any berth location(s) including size, capacity and length overall (LOA) of vessels and any pipeline connections need to be provided. Impacts on shipping and potential impact on simultaneous operations in close proximity of the facility, in relation to traffic and access, hazard and risk and cumulative impacts, must be addressed in the EIS.

SEARs

Port Authority requests that the Department of Planning and Environment (**DPE**) specifically include the following additional requirements:

Hazard and Risk Management

1. Port Authority requires consultation in regard to any impacts on navigation and simultaneous operations, including hazard, risk and emergency management.
2. Port Authority requires the Preliminary Hazard Assessment (PHA) and risk and hazard assessment in the EIS to consider impacts on navigation and simultaneous operations in the vicinity of the facility including accidental release of hazardous chemicals, transfer by pipeline, berthing and shipping for export/import.
3. Port Authority requires early consultation regarding the Emergency Management Plan to ensure it provides details of actions to be taken in the event of unplanned release of anhydrous ammonia and potential impacts on other terminals and simultaneous operations in close proximity.
4. Port Authority requires that the Proponent, prior to the commencement of operations, prepare an Operational Maritime Risk Management Plan (OMRMP). The OMRMP should be prepared by a suitably qualified person, in consultation with and to the satisfaction of the Harbour Master, and must demonstrate how the Project will not prevent/impact other berth operations (ie. simultaneous operations can be carried out).

Shipping

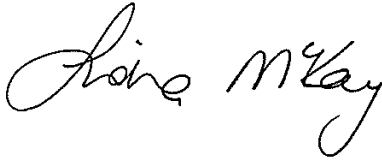
5. Port Authority requires consultation in regards to size of the vessels any proposed berth can accommodate in the future.

Cumulative impact

6. The cumulative impact assessment should include assessment of impact on shipping and the relevant risks/hazards for the Concept DA, as well as the Infrastructure and Ammonia DA, and potential future developments on the site, and adjoining existing and proposed developments (eg. Origin Energy Hunter Valley Hydrogen Hub).

Should you require any further detail on the matters raised in this letter, please do not hesitate to contact Fiona McKay, Principal Environmental Planner on fmckay@portauthoritynsw.com.au or Port Authority's Planning and Sustainability team on planning@portauthoritynsw.com.au.

Yours sincerely,

A handwritten signature in black ink, reading "Fiona McKay". The signature is written in a cursive, flowing style.

Fiona McKay
Principal Environmental Planner

28 September 2023

12 October 2023

Department of Planning & Environment
GPO Box 39
Sydney NSW 2001

APPLICATION NO: SSD-62423490 (Our Ref. 25-2023-12-1)

PROPOSAL: Clean Energy Precinct - Concept DA

PROPERTY: 20 Cormorant Road, Kooragang (LOT: 22 DP: 1155723) & 150
Cormorant Road, Kooragang (LOTS: 3 & 7 DP: 1207051, LOTS:
29, 30, 31, 32 & 33 DP: 1184229, LOT: 16 DP: 262783)

Attention: Sally Munk

Dear Madam,

Thank you for your correspondence dated 18 September 2023 requesting Council's comments for the above development. Council has given consideration to the likely impacts of the proposal and makes the following comments for consideration.

Ecology

Council's Natural Systems Team have reviewed the scoping report and requests the following information be included in the EIS prepared for the project:

Biodiversity

A Biodiversity Development Assessment Report (BDAR) prepared in accordance with the Biodiversity Assessment Method (BAM) 2020 is to be provided with the EIS. The BDAR is to include all threatened flora and fauna species identified in the scoping study, along with the following additional species:

- Eastern Grass Owl
- Mahoney's Toadlet
- Detailed wetland bird survey and assessment for both federal and state migratory species.

Furthermore, where possible, any offsetting requirements in accordance with the biodiversity offset scheme (BOS) should be prioritised for securement within the Newcastle or Port Stephens LGAs.

Finally, the proximity of the proposal to a number of highly sensitive wetland environments including the Hunter Estuary Wetlands (RAMSAR site) and known threatened species and migratory bird habitat requires detailed consideration of direct, indirect and cumulative impacts to biodiversity. The BDAR must include an assessment

of the proposals impacts on air and water quality in relation to biodiversity; including potential impacts of emissions (chemical or heat) and associated discharge events on biodiversity and wetland environments (including LEP mapped wetlands, SEPP wetlands, nationally important wetlands and internationally important wetlands). Special consideration should be given to potential impacts on habitat quality, food sources (insects, fish etc.), flight patterns of migratory birds and amphibians.

Connectivity

The proposed green corridor for the development must be functional and adequately sized/located for the target species and habitat requiring connectivity. The current proposed location for the green corridor provided in the Master Plan Scoping Report does not currently align with the site's environmental constraints.

Hydrology

The BDAR must identify and assess all potential direct and indirect impacts of the proposal, including any associated impacts to surface and ground waters, during both construction and operational phases. A detailed surface water and groundwater impact assessment is to be undertaken as part of the EIS, and impacts considered in the BDAR.

The BDAR and EIS must also consider any potential impacts associated with dredging and/or sea-dumping activities that may be required for future parts of the development.

Heritage

As the site has been identified as an area of high Aboriginal heritage significance, comprehensive assessment including detailed consultation with Aboriginal stakeholders and subsurface investigations are required. Subsurface investigations are to be completed by a qualified archaeologist in accordance with the Code of Practice for Archaeological Investigation of Aboriginal objects in NSW (DECCW 2010). The results of subsurface investigations should inform future management potential archaeological deposits and determine whether an Aboriginal Heritage Impact Permit (AHIP) would be required.

Engineering

Council's Engineering Team have reviewed the scoping report and have provided the following comments:

Traffic

There are no objection to the development and it is anticipated that the development will have minimal impact on Port Stephens Council roads. Nonetheless, it is expected that the EIS will be required to assess and construction and operational traffic impacts.

Flooding

The proposed development is situated within Newcastle LGA and as such site specific flood data is controlled by Newcastle Council. Directions for development on flood prone land indicate that proposed development would need to demonstrate negligible impacts on surrounding floodplain including potentially land within the Port Stephens Council LGA. As outlined in the application, impacts to be assessed would include both project based and the cumulative impacts of the development. Impacts should consider both the existing floodplain and the future floodplain as a result of climate change for the anticipated asset life of the proposed development.

From a general flooding perspective, it is anticipated that the development's impacts would be limited to the downstream areas including Stockton and Carrington, both of which is controlled by Newcastle Council. This would be confirmed with an appropriate flood impact assessment.

Noise

The subject site is located some three kilometres to the south of the Tomago Industrial Precinct and five kilometres to the west of the Fern Bay residential area. It is noted that the Tomago area has only a small sparse residential population. As the nearest sensitive receivers within the Port Stephens Council LGA are located considerable distance from the proposal, noise impacts from the development would be considered unlikely. Nevertheless, a Noise Impact Assessment from a suitably qualified acoustic consultant is expected to be provided with the EIS.

Air Quality

The scoping report references that an Air Quality and Odour Assessment will be included with the EIS and this assessment should consider all requirements outlined within the scoping report.

Thank you for the opportunity to comment on the proposed development. If you wish to discuss the matters raised above or have any questions, please contact me on the number below and I will be happy to help.

Yours Faithfully

CHRISTOPHER PRIMROSE

Port Stephens Council

Phone: 4988 0523

Email: christopher.primrose@portstephens.nsw.gov.au

Web: www.portstephens.nsw.gov.au

Attention: Sally Munk

4 October 2023

SSD-62423490: Request for Secretary's Environmental Assessment Requirements (SEARs) for Port of Newcastle Clean Energy Precinct, Concept DA for City of Newcastle LGA

Dear Sally,

Thank you for referring the abovementioned request for SEARs via the NSW Major Projects Planning Portal on 21st September 2023 inviting comment from Transport for NSW (TfNSW).

TfNSW has reviewed the Scoping Report, prepared by WSP, dated September 2023 prepared for the prospective Clean Energy Precinct (CEP) development comprising a Concept Plan for the proposed development of a precinct for clean energy projects including the production and storage of Hydrogen & Ammonia gases and the distribution of that energy to both domestic and international markets.

The development is proposed to have a capacity to generate 3 GW in renewable electricity and be supported by infrastructure including (but not limited to) site buildings, administration buildings, internal roads, car parking facilities, laydown areas, warehousing, trailer storage yards and associated works storage facilities, whilst establishing new connections to the existing utilities networks, including electricity (via transmission lines), water and sewer (pipelines) in addition to constructing new pipelines and connections to a future gas pipeline, proposed to run adjacent to the project area.

It is further understood the proposal is to construct the precinct over a number of stages of development, with a potential maximum workforce of 5,261 construction workers for the entire CEP Concept Plan. This concept is proposed to enable flexibility subject to stakeholder engagement, emerging technologies, clean energy developer interest over time and provide facilities to support industry development training and innovation.

It is understood development traffic, including staff transport, and heavy vehicle deliveries, will be required to access the site via the intersection of Tourle Street (Cormorant Road) and Delta Road.

TfNSW note, a separate Development Application (SSD-62423494) is also under assessment concurrent to this application (SSD-62423490). SSD-62423494 proposes construction of the site infrastructure works and initial Ammonia storage facility required to enable all future stages of development identified in the Concept Plan. The works identified in SSD-62423494 are also addressed in this Concept Plan and should be considered as the preliminary stage relevant to this application.

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 2056*.

To ensure that TfNSW's key interests are addressed, TfNSW requests that any future application be submitted with an Environmental Impact Assessment (EIA) containing a Traffic Impact Assessment (TIA), prepared by a suitably qualified person/s in accordance with the Austroads Guide to Traffic Management Part 12, Australian Standards and any complementary TfNSW Supplements, and *Roads and Maritime Guide to Traffic Generating Developments*. The TIA should contain information listed in Attachment A: Traffic Impact Assessment (TIA).

OFFICIAL

Transport for NSW

TfNSW encourages early discussions with proponents regarding the traffic and network matters associated with State Significant Development. If you wish to discuss this matter further, please contact the undersigned on ph. 0401 668 223.

On determination of this matter, please forward a copy of the final SEARs to TfNSW at development.west@transport.nsw.gov.au

Yours faithfully,

A handwritten signature in black ink, appearing to read 'Alexandra Power', with a stylized, flowing script.

Alexandra Power

Team Leader Development Services (Renewable Resources)
West Region | Community and Place
Regional and Outer Metropolitan

Attachment A: Traffic Impact Assessment (TIA)

The purpose of the TIA is to address the impact of traffic generation on the public road network and measures employed to ensure traffic efficiency and road safety during construction, operation and decommissioning of the project.

The requested TIA should be tailored to the scope of the proposed development and include, but not be limited to, the following:

- Identify the timeframe for the schedule of works (commencement year and completion year) overlapping timeframe of components during construction (to capture worst case scenario) and identify the construction hours for the project. Addressing proposed staging of the development and where operational activities of earlier stages are proposed to coincide with the construction activities of later stages.
- Detailed plans identifying the proposed location of any:
 - Project-related infrastructure within and outside of the project boundary.
 - Transmission line infrastructure, or any other project-related structures, within a road reserve. Include demarcation of local and classified road reserves.
 - Pipeline infrastructure, identifying locations (footprint) and connection points to existing or future (external) infrastructure.
 - Identify the key access roads with the classified road network required for the project (including any access required from classified road network for components being constructed outside of the project area) and justification of additional access required to a classified road in accordance with section 2.119 of *State Environmental Planning Policy (Transport and Infrastructure) 2021*. This is in particular relevant to the referenced Ancillary Sites (large centralised staging, accommodation and manufacturing sites).
 - Structures on the road network that could be sensitive to blasting (e.g. (road and rail bridges, pump stations, etc.). Note, if any structures are likely to be affected, an assessment of the impact must ensure that the peak particle velocity is limited to an acceptable level to TfNSW.
 - The Scoping Report identifies that ancillary infrastructure are to be located both on-site and off-site including (but not limited to) concrete batching facilities, transmission lines and pipeline infrastructure. The EIS and TIA should identify:
 - **Concrete batching facility** – Identify the source for input materials and quantify the traffic generation associated with the haulage of the source materials. Where the location of source materials is not yet known, worst case scenarios for traffic distribution of those materials to and from the development site are to be addressed.
 - **Transmission line infrastructure** – Identify the scope of works (heights, widths, materials etc) of the proposed transmission lines if occurring over/under classified roads or railway infrastructure or proposed to be located on TfNSW owned lands and identify the transportation requirements of any relevant materials sourced from offsite locations.
 - **Pipeline infrastructure** – Identify the scope of works relevant to construction of the pipeline (or a segment of) at each stage of development, including identifying the transportation requirements of any relevant materials sourced from offsite locations and highlighting external infrastructure projects to which this proposal connects to or relies on for completion of works.
- Cumulative impacts:
 - An assessment should be undertaken as a part of the EIS and TIA to identify the projects that will have overlapping construction periods and assess the cumulative traffic impacts with emphasis on the following:
 - The cumulative impacts from traffic generated from the construction workforces in terms of the origin-destination routes, access, AM/PM peaks where there is overlap with other projects.

- The cumulative impacts of heavy vehicle movements in terms of AM/PM peaks and routes where there is an overlap with other projects.
- Cumulative impacts and consideration in relation to the timing of movements of OSOMs where other projects will be utilising the same routes as proposed for this development.
- The Scoping Report identifies a total estimate of 5,800 jobs to be generated by the proposed Port of Newcastle Clean Energy Precinct (PoN CEP) development (5,261 construction jobs and 539 operational jobs). What has not yet been identified is the proposed peak workforce volumes relevant to individual stages of construction or the potential for both construction and operational staff to be onsite at any one time.

The cumulative impacts of the accommodation requirements of the proposed workforce should also be addressed in a further assessment which identifies the project's workforce accommodation and transport requirements, concurrent to other nearby project's workforce requirements or proposals, within the local and sub-regional context and must consider the following:

- The accommodation requirements of the project.
 - The local accommodation capacity, including types, and applying context including proximity to relevant town/urban centres and other services which may be utilised by the workforce.
 - Origin and destination of the workforce.
 - The transport options available (Light Vehicles, Shuttle Buses, carpooling etc), any associated incentives or requirements to encourage the workforce to take up those options, and any staff pick up locations external to the project site.
- Heavy vehicle and OSOM routes:
 - Identify the return routes for OSOMs.
 - National Heavy Vehicle Regulator (NHVR) approved routes identified on the Restricted Access Maps (RAV MAP) are to be utilised for the heavy vehicle routes for the proposed development.
 - The Scoping Report has not provided sufficient information to identify whether the PoN CEP Project will require any Oversize Overmass (OSOM) vehicles or loads to be transported to site.

Where OSOM movements are required to support the proposed development, in addition to the requested TIA, due to the transport logistics for OSOM transit, a concept-level route analysis is required to be provided with the SSD application based on high-level 3D swept path analysis to generally indicate locations where civil works are likely to be required. The route analysis is to include at a minimum the following:

- Identify the OSOM route to be utilised and any indicative pinch points within the network vertically, horizontally and laterally and the potential civil works required to accommodate the OSOM vehicles.
- The logistics assessment is to highlight each at-risk road structures that the haulage route crosses including bridges, traffic signals, signage, major culverts, and minor culverts that may not meet the desirable cover to cater for proposed axle loads.
- Pull-over bay locations for the design vehicle or identification of any long haulage segments of the route where overtaking cannot be achieved.
- The design vehicle templates used with the swept path analysis software are also requested in order for TfNSW to review the performance within the software (e.g. Autodesk Vehicle Tracking or Transoft AutoTURN).
- Provide the following measurement parameters of the OSOM components / materials to be moved:
 - Identify all the types of OSOM vehicles proposed to be used for the project.
 - Overall combination length, width, height and mass
 - Maximum component length
 - Maximum component widths

- Maximum load heights (clearance to overhead obstructions such as structures, utilities and vegetation),
- Wheelbase dimensions,
- Maximum trailer articulation angle(s),
- Minimum overhang heights above the road surface,
- Axle loads and axle group loads in terms of both tonnes and Equivalent Standard Axles (refer to Austroads Guide to Pavement Technology).
- Further include details on the number of OSOM movements, the intended time for OSOM movements to occur, and GPS coordinates along the proposed routes for pinch points, traffic management measures and pull-over bays / rest areas along the OSOM routes.
- Identifying road and rail projects occurring along the OSOM route within the anticipated schedule for the movement of the OSOM components. Inclusive of any impacts (e.g civil works or obstructions) that could impede the movement of the OSOM components due to the concurrent road and rail projects occurring along the nominated OSOM route(s).
- Project schedule:
 - Hours and days of work, number of shifts and start and end times,
 - Identify the (approximate) project's targeted construction commencement date/s
 - Phases and stages of the project, including construction, operation and decommissioning.
- Traffic volumes including:
 - Existing background traffic,
 - Project-related traffic for each phase or stage of the project, (including concurrent construction & operational phases)
 - Projected cumulative traffic at commencement of operation, and a 10-year horizon post-commencement.
- Traffic characteristics including:
 - Number and ratio of heavy vehicles to light vehicles,
 - Peak times for existing traffic,
 - Peak times for project-related traffic including commuter periods,

Note: If there is a reliance on shuttle buses/carpooling proposed to mitigate peak traffic volumes for the AM/PM peak of construction then the TIA is required to detail how the shuttle busing/carpooling commitment will be achieved through strategies, protocols, and the like. If carpooling and shuttle bus strategies cannot be supported by detailed methods/procedures that are achievable, enforceable, and practicable, then the shuttle bus/carpooling methods would not be viable and would require the TIA to be amended to assess the worst-case scenario during peak of construction. – Proposed hours for transportation and haulage,

- Specify the design vehicles for the project (in particular identifying the relevant types of heavy vehicles/ OSOM / specialist vehicles and shuttle buses).
- Provide a breakdown of the calculations and assumptions for light vehicles, heavy vehicles requiring escort, heavy vehicles and heavy vehicles requiring NHVR permit and that are exempt from the escort requirements. All these vehicle types should be factored into the traffic generation during AM/PM peaks for the project. – Interactions between existing and project-related traffic inclusive of other major projects that have coinciding timeframes and inclusion of the growth rate for background traffic for the peak construction period.
- Traffic count surveys should be undertaken for a minimum of one day (preference seven days for improved accuracy of data). The traffic count survey is required to be collected outside of public holidays, events and

school holidays. The traffic counts should be undertaken at the key intersections with the state classified road network in accordance with Part 3 of Austroads Guide to Road Design. The data obtained from the traffic count survey should be provided as an appendix to the TIA for the project and used to inform the background traffic counts within the base case (existing background) scenario.

- The AM/PM peaks are required to be measured based on a single trip from origin to destination as a one way vehicular movement from one point to another excluding the return journey.
 - The origins, destinations and routes for:
 - Commuter (employee and contractor) light vehicles, shuttle buses and pool vehicles,
 - Heavy (haulage) vehicles,
 - OSOM vehicles.
 - 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.
 - Route analysis for all vehicle types accessing the site, which includes:
 - Identifying potential constraints and / or pinch points along the route/s.
 - Identify the necessary road network infrastructure and access upgrades required to cater for and mitigate the impact of project related traffic on both the local and classified road network for the development (for instance, road widening, hardstand areas, pullover bays, site access upgrades, intersection turn treatments etc).
 - 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 accesses 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 (Project Area), and moving in each direction through key intersections along the proposed transport route/s.
 - The design vehicle templates used with the swept path analysis software are also requested in order for TfNSW to review the performance within the software (e.g. Autodesk Vehicle Tracking or Transoft AutoTURN).
 - Provide strategic design drawing/s for any identified road infrastructure and access upgrades. It should be noted that any identified road infrastructure upgrades will need to be to the satisfaction of TfNSW and Council. Works must be appropriately designed in accordance with *Austroads Guide to Road Design* for the existing posted speed limit, including provision of Safe Intersection Sight Distance (SISD).
- Note: The design needs to comply with TfNSW Strategic Design requirements for DAs. To assist you in preparing the designs, please refer to the link:
- <https://roads-waterways.transport.nsw.gov.au/business-industry/partnerssuppliers/documents/planningprinciples/strategic-design-fact-sheet-02-2022.pdf>
- Road safety assessment of key haulage route/s.

- 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*.
- Proposed road facilities, access and intersection treatments are to be identified and be in accordance with *Austroads Guide to Road Design* including provision of Safe Intersection Sight Distance (SISD).
- 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.
- Consideration of the local climate conditions that may affect road safety during the life of the project (e.g. fog, wet and dry weather, icy road conditions).
- The layout of the internal road network, parking facilities and infrastructure.
- Impact on rail corridors and level crossings detailing any proposed interface treatments. Note, the rail authority for rail corridors in the vicinity of the site and likely transport route is ARTC.
- Impact on public transport (public and school bus routes) and consideration for alternative transport modes such as carpooling and shuttle buses during construction.
- Identification and assessment of potential environmental impacts of the project, such as blasting, lighting, visual, noise, dust and drainage on the function and integrity of all affected public roads.
- Controls for transport and use of any dangerous goods in accordance with *State Environmental Planning Policy No. 33 – Hazardous and Offensive Development*, the *Australian Dangerous Goods Code* and *AS4452 Storage and Handling of Toxic Substances*.
- A draft Traffic Management Plan (TMP) that could be implemented following approval of the EIS, in consultation with relevant Councils and TfNSW.

19 September 2023

Contact: *Alison Kniha*

Telephone: *0407 088 372*

Our ref: *D2023/96354*

Sally Munk
Department of Planning & Environment
4 Parramatta Square
12 Darcy Street
PARRAMATTA NSW 2150

Dear Ms Munk,

Clean Energy Precinct Concept DA Request for SEARs (SSD-62423490)

Thank you for your Major Projects Planning Portal referral dated 18 September 2023, requesting WaterNSW's advice in relation to the above SEARs.

Please note that the subject site is not located close to any WaterNSW land or assets, and as an SSD any flood works or licensing approvals will be assessed by others. As such, WaterNSW has no comments or particular requirements.

WaterNSW requests that the Department continues to notify us of all developments that may impact on our assets, infrastructure or land, using the email address Environmental.Assessments@waterNSW.com.au. If you have any questions regarding this letter, please contact me at alison.kniha@waterNSW.com.au.

Yours sincerely

A handwritten signature in black ink, appearing to be "Alison Kniha", with a stylized flourish at the end.

ALISON KNIHA
Catchment Protection Planning Manager