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11 December 2024

Subject: Request for Secretary's Environmental Assessment Requirements (SEARs) for Lucas Heights Resource Recovery Park (RRP) Western Expansion (SSD-78269209)

Dear Ellen,

Thank you for your referral received on 28 November 2024 requesting input on SEARs for the above project from the Biodiversity, Conservation and Science (BCS) Group of the NSW Department of Climate Change, Energy, the Environment and Water (DCCEEW).

BCS has reviewed the Scoping Report prepared by GHD (dated 26 November 2024) and recommends the proponent address the requirements below and at Attachment A.

Biodiversity

The proposal is for a significant expansion of the Lucas Heights RRP. Biodiversity impacts related to the proposed development should be assessed and documented as part of a Biodiversity Development Assessment Report (BDAR) in accordance with Section 7.9 of the [Biodiversity Conservation Act 2016](#) (BC Act) and the [Biodiversity Assessment Method 2020](#) (BAM).

BCS highlights that the BDAR must address all potential indirect (offsite) impacts, particularly at locations downstream and downslope, in accordance with Section 8.2 of the BAM. To undertake an assessment of such impacts, the biodiversity values in downstream and downslope locations must first be identified. This assessment should be done in accordance with section 3.1.3(4) of the BAM which requires that the BDAR must consider all impacts of the proposal on *rivers, streams and estuaries... including riparian buffers*.

Potential indirect impacts of this proposal include native vegetation and threatened species and habitat in:

- riparian zones downstream of Mill Creek from changes in riparian flow and water quality in Mill Creek
- downslope areas from changes in ground and surface hydrology flows from landfill excavations, fills and capping and from changes in water quality.

In relation to point 4 of the recommended biodiversity environmental assessment requirements, please note the minimum information and spatial data requirements are in Tables 24 and 25 of the BAM. Other requirements, such as those relating to the BAM Calculator and Biodiversity Offset Assessment Management System, are detailed in the [guides, tools and databases](#) webpage.

Flood risk management

The scoping report prepared by GHD indicates that the site is not shown as flood affected and does not propose consideration of flooding. As the site is not a residential use there is no current flood information for the site. The presence of an existing waterway, Mill Creek, indicates that portions of the site would be flood affected and be considered a floodway. The proposal includes realignment of Mill Creek closer to the site boundary and Heathcote Road and new water treatment facilities which are beside the realigned creek location.

BCS recommends that a flood impact and risk assessment (FIRA) is prepared to accompany the EIS in accordance with the requirements outlined in Attachment A.

Please contact Greater Sydney Planning team at rog.gsrplanning@environment.nsw.gov.au should you have any queries regarding this advice.

Yours sincerely



Allison Treweek

**A/Director, Greater Sydney Branch
Regional Delivery
Biodiversity Conservation and Science Group**

BCS Environmental Assessment Requirements – Lucas Heights RRP Western Expansion (SSD-78269209)

Biodiversity
1. Biodiversity impacts related to the proposed development are to be assessed and documented in a Biodiversity Development Assessment Report (BDAR) in accordance with Section 7.9 of the <i>Biodiversity Conservation Act 2016</i> (BC Act) and the <i>Biodiversity Assessment Method 2020</i> (BAM). The BDAR must include information in the form detailed in the BC Act (s6.12), <i>Biodiversity Conservation Regulation 2017</i> (s6.8) and the BAM, including an assessment of the impacts of the proposal (including an assessment of impacts prescribed by the regulations). 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 submitted with all spatial data associated with the survey and assessment as per the BAM. 5. 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>.
Flooding
6. The EIS must include a flood impact and risk assessment (FIRA). As a minimum the FIRA must: • Consider the relevant provisions of the NSW Flood Risk Management Manual (2023) and associated guides, information and requirements. • Outline existing flood behaviour and flood constraints on the site and its surrounding areas for the full range of events, including 5%, 1%, 0.5% and 0.2% Annual Exceedance Probability (AEP) and Probable Maximum Flood (PMF) and provide an assessment of the compatibility of the development and its users with flood behaviour. • Determine and describe changes in post development flood behaviour with respect to realignment of Mill Creek. Impacts of flooding on the existing community, Heathcote Road and proposed pollution control management for the facility for full range of events, including 5% AEP, 1% AEP, 0.2% AEP, 0.5% AEP and PMF should be included. The post development scenario must incorporate any changes to landform and significant drainage infrastructure proposed to manage the development. • Provide flood modelling and mapping for the rehabilitated site to enable future land use to be considered. • Consider impacts of climate change due to both increase in rainfall intensities and sea level rise in accordance with flood risk management guideline FB01 Understanding and Managing Flood Risk, DPE 2023. The 0.5% AEP or 0.2% AEP events can be used to

provide an understanding of the scale of change of flood behaviour relative to the 1% AEP event.

- Propose and assess the effectiveness of management measures required to minimise the impacts and risks of flooding to the development and its users and existing community.
- Consider the impacts of hazardous goods and *State Environmental Planning Policy (Biodiversity and Conservation) 2021* Clause 6.8 Flooding. The impact of flooding for a range of flood events on pollution control bunding and stormwater treatment ponds and the potential for storage vessels or waste to become mobilised or discharge to the environment in floods up to the PMF should be considered as part of the risk assessment for the facility.
- Consider the risk of erosion and sedimentation for the realigned creek including consideration of surface protection, the proposed un-natural profile (right angle bends) which is likely to have poor hydraulic performance, changes in velocity and impacts on downstream receiving waters. Provide mitigation strategies to control bed and bank erosion and any changes in velocity.

Water and soils

7. The EIS must map the following features relevant to water and soils including:

- Acid sulfate soils (Class 1, 2, 3 or 4 on the Acid Sulfate Soil Planning Map).
- Rivers, streams, wetlands, estuaries (as described in s.4.2 of the BAM).
- Wetlands as described in s.4.2 of the BAM.
- Groundwater.
- Groundwater dependent ecosystems.
- Proposed intake and discharge locations.

8. The EIS must describe background conditions for any water resource likely to be affected by the development, including:

- Existing surface and groundwater.
- Hydrology, including volume, frequency and quality of discharges at proposed intake and discharge locations.
- Water Quality Objectives (as endorsed by the NSW Government) including groundwater as appropriate that represent the community's uses and values for the receiving waters.
- Indicators and trigger values/criteria for the environmental values identified above 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.
- [Risk-based Framework for Considering Waterway Health Outcomes in Strategic Land-use Planning Decisions](#)

9. The EIS must assess the impact of the development on hydrology, including:

- Water balance including quantity, quality and source.
- Effects to downstream rivers, wetlands, estuaries, marine waters and floodplain areas.
- Effects to downstream water-dependent fauna and flora including groundwater dependent ecosystems.
- 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).
- Changes to environmental water availability, both regulated/licensed and unregulated/rules-based sources of such water.
- 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.
- Identification of proposed monitoring of hydrological attributes.

End of Submission