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Department of Planning, Industry and Environment
Via Major Projects Portal

Attention: Ms Rebecca Sommer

By email: Rebecca.Sommer@planning.nsw.gov.au

19 December 2019

Dear Ms Sommer

**Belmont Drought Response Desalination Plant
Environmental Impact Statement -
Conditions of Approval from the Environment Protection Authority (EPA)**

I refer to your email to the Environment Protection Authority (EPA) received 21 November 2019, seeking the EPA's advice in relation to the adequacy of the proponent's Environmental Impact Statement (EIS) for the proposed Belmont Drought Desalination Plant development.

The proponent, Hunter Water Corporation (HWC), proposes to construct a drought response desalination plant (the 'Project'), also known as the 'temporary desalination plant', adjacent to the Belmont Wastewater Treatment Works (WWTW) in Belmont South, a suburb of Lake Macquarie Local Government Area (LGA) of New South Wales (NSW) (the 'Project area'). The plant would have the capacity to produce up to 15 megalitres per day (ML/d) of potable water for supply to the HWC potable water supply network. Waste water from the project will be discharged through the existing ocean outfall pipe at the Belmont waste water treatment plant. The proponent has advised that it will apply to vary the existing Environment Protection Licence for this treatment plant to include the Project.

The EPA has reviewed the "*Belmont Drought Response Plant - Environmental Impact Statement*" prepared for HWC and dated November 2019 (the EIS) for the proposed activity and development. The EPA is satisfied that the EIS addresses relevant environmental pollution matters of concern for the proposal.

The EPA's Recommended Conditions are provided at Attachment A to this letter.

If you have any questions about this matter, please contact Genevieve Lorang on (02) 4908 6869 or by email to hunter.region@epa.nsw.gov.au

Yours sincerely

MITCHELL BENNETT
Head Strategic Operations Unit - Hunter
Environment Protection Authority

ATTACHMENT A – EPA Recommended Conditions of Approval

Administrative Conditions

1. Except as expressly provided in the conditions below, works and activities must be carried out in accordance with the information contained in:
 - The State significant infrastructure application SSI-8896 submitted to the Department of Planning, Industry and Environment in 2017;
 - The Environmental Impact Statement entitled “Hunter Water Corporation - Belmont Drought Response Desalination Plant - Environmental Impact Statement” prepared by GHD Pty Ltd and dated 8 November 2019 relating to the State significant infrastructure; and
 - All additional documents supplied in relation to the State significant infrastructure.

Operating Conditions

2. All activities must be carried out in a competent manner. This includes:
 - the processing, handling, movement and storage of materials and substances used to carry out the activity; and
 - the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.
3. All plant and equipment installed at the premises or used in connection with the licensed activity:
 - must be maintained in a proper and efficient condition; and
 - must be operated in a proper and efficient manner.

Incident Management

4. The Proponent must have in place adequate procedures including notification requirements to the Appropriate Regulatory Authority and other relevant authorities for incidents that cause, or have the potential to cause, material harm to the environment (Part 5.7 of the POEO Act).

Water Quality

5. The Proponent must comply with section 120 of the *Protection of the Environment Operations Act 1997* which prohibits the pollution of waters, except as permitted by a condition of an Environment Protection Licence.
6. The proponent must discharge all waste-water from the plant via the Belmont Sewage Treatment Plant ocean outfall pipe.
7. Within 3 months of approval, the proponent must submit a report to the Environment Protection Authority (EPA) containing the following information:
 - a) Details of any additional or alternative measures that could practically and reasonably be employed to improve dilution within the near-field mixing zone;
 - b) Assessment of the potential impacts of all chemicals that are to be used in the treatment processes, including anti-scalants, coagulants, membrane cleaners and disinfectants, on the environmental values of the receiving waterways with reference to relevant guideline values or benchmarks; and
 - c) Details of the method used to derive site-specific guideline values for the project in comparison with the method outlined in the National Water Quality Guidelines (ANZG, 2018).

Note: The information provided in the report required by condition 2 may be used by the EPA to create conditions to be added to the Environment Protection Licence held by Hunter Water Corporation for the Belmont Waste Water Treatment Plant.

8. Prior to the commencement of any surface disturbance and/or construction activities, the Proponent must install and maintain appropriate erosion and sediment control measures at the premises in accordance with the publication "Managing Urban Stormwater: Soils and construction – Volume 1" (Landcom, 2004) and "Managing Urban Stormwater: Soils and construction – Volume 2A, Installation of Services" (DECC, 2008).

Contaminated Land

9. Prior to commencing any site preparation works, the Proponent must provide the EPA with a Detailed Site Investigation (DSI) report, which addresses potential acid sulphate soil and contamination issues at the site. The DSI must be prepared in accordance with the requirements and guidance in the document 'Managing Land Contamination: Planning Guidelines – SEPP 55 Remediation of Land'.

Groundwater Quality

10. Within 3 months of the approval, the proponent must submit an expanded groundwater monitoring program that includes trigger, action and response measures to the EPA. The program must include:
- shallow groundwater piezometers in the moderately disturbed dunes and marsh environment, including Belmont lagoon.
 - visual inspection of vegetation health.
 - additional Acid Sulfate Soil (ASS) sampling in the modelled zone of groundwater drawdown to assess the risk of oxidation of ASS from project operation.
11. The proponent must report all data acquired under the groundwater monitoring program to the EPA annually.

Noise and Vibration

12. Construction activities at the premises must only occur during the following hours:
- 7am to 6pm Mondays to Fridays, inclusive;
 - 8am to 1pm Saturdays; and
 - At no time on Sundays or Public Holidays.
13. Notwithstanding the Construction Hours specified in Condition 2, work may be undertaken outside the hours specified in the following circumstances:
- for the delivery of vehicles, plant or materials where required by the NSW Police Force or other authority for safety reasons; or
 - where it is required in an emergency to avoid injury or the loss of life, to avoid damage or loss of property or to prevent environmental harm; or
 - where different construction hours are permitted in writing by the EPA; or
 - work that causes:
 - no more than 5 db(A) above the rating background level at any residence in accordance with the *Interim Construction Noise Guideline* (DECC, 2009), and
 - no more than the 'Noise affected' noise management levels specified in Table 3 of the *Interim Construction Noise Guideline* (DECC, 2009) at other sensitive land uses, and
 - continuous or impulsive vibration values, measured at the most affected residence are no more than the maximum values for human exposure to vibration, specified in Table 2.2 of *Assessing Vibration: a technical guideline* (DEC, 2006), and

- intermittent vibration values measured at the most affected residence are no more than the maximum values for human exposure to vibration, specified in Table 2.4 of *Assessing Vibration: a technical guideline* (DEC, 2006).

14. Highly noise intensive works exceeding 75dB(A) LAeq(15 minute) noise descriptor at a sensitive receiver must only be undertaken:

- between 8:00 am to 6:00 pm Monday to Friday;
- between 8:00 am to 1:00 pm Saturday; and
- if continuously, then not exceeding three (3) hours, with a minimum respite from those activities and works of not less than one (1) hour.

For the purposes of this condition, 'continuous' includes any period during which there is less than one (1) hour between ceasing and recommencing any of the work.

15. The Proponent must implement all reasonable and feasible noise and vibration mitigation measures to minimise construction noise and vibration impacts in accordance with the "Interim Construction Noise Guidelines" (DECC, 2009) and "Assessing Vibration: a technical guideline" (DEC, 2006).
16. Operational noise generated at the premises must not exceed the project specific noise goals defined in 'Table 4-7 – Project noise trigger levels, dBA' of the "Belmont Drought Response Desalination Plant Noise and Vibration Assessment" prepared by GHD Pty Ltd (Revision 0 dated 11 October 2019).
17. The Proponent must implement all reasonable and feasible noise mitigation measures to minimise operational noise in accordance with "Fact Sheet F: Feasible and reasonable mitigation" contained within the "Noise Policy for Industry" (EPA, 2017).
18. The Proponent must engage a suitably qualified and experienced person to undertake and prepare a report in accordance with the "Noise Policy for Industry" (EPA, 2017) that must identify all annoying noise characteristics, including tonality, low frequency and impulsiveness, which may be generated by the operation of the SSI and, where necessary, investigate, identify and implement additional noise mitigation measures to achieve the relevant project specific noise goals. The report must be submitted to the EPA prior to commissioning of the project.
19. Within 12 months of commencing operation of the project, the Proponent must engage a suitably qualified and experienced person to undertake and report on a representative noise compliance assessment. The noise compliance assessment report must be prepared and submitted to the EPA within 14 months of commencing operation of the project.

The noise compliance assessment must monitor noise from the premises across all time periods and assess compliance with the noise limits set out in the approval.

The noise compliance assessment must consider the characteristics of the noise and apply any relevant modifying factor adjustments as required under Chapter 3 of the "Noise Policy for Industry" (EPA, 2017) and where compliance is not achieved, identify all reasonable and feasible noise mitigation measures and timeframes for implementation.

The report must comply with all relevant industry guidelines and standards and include:

- details of the activities (including production rates etc) occurring at the premises at the time of the noise compliance assessment;
- details of the noise monitoring undertaken (personnel, equipment, methods, locations, times, duration, tabulated results, description of noise etc);
- details of any modifying factors required to be applied;
- assessment of compliance with existing noise limits contained within the licence; and

- where any non-compliances are identified, identification of all reasonable and feasible noise mitigation measures required to achieve compliance.

Air Quality

20. The premises must be maintained in a condition which prevents or minimises the emission of air impurities, including dust, from the premises.
21. All operations and activities occurring at the premises must be carried out in a manner that prevents or minimises the emission of air impurities, including dust, from the premises.
22. Trucks entering and leaving the premises that are carrying loads of materials that may generate air impurities, including dust, must have their loads covered at all times, except during loading and unloading.
23. The Proponent must not cause or permit the emission of offensive odours beyond the boundary of the premises.
24. Prior to commencing operation, the Proponent must provide the EPA with written confirmation that all equipment to be used on the premises will meet the relevant concentration standards prescribed in the relevant schedule of the Protection of the Environment Operations (Clean Air) Regulation 2010.

Waste Management

25. The Proponent must, as far as possible, follow the waste hierarchy principles contained in the *Waste Avoidance and Resource Recovery Act 2001* when dealing with any waste generated at the premises.
26. The Proponent must assess and classify any waste generated at the premises in accordance with the "Waste Classification Guidelines – Part 1: Classifying waste" (EPA, 2014) and manage this waste in a lawful manner.
27. The Proponent must not cause, permit or allow any waste to be received at the premises, except that waste which complies with a Resource Recovery Order and Exemption issued under the *Protection of the Environment Operations (Waste) Regulation 2014* and is used for the purpose(s) stipulated by each Resource Recovery Order and Exemption.
28. Waste generated by all activities associated with works and operation of the project must only be:
 - exported to a licensed facility for the storage, treatment, processing, reprocessing or disposal, or to any other place that can lawfully accept such waste, or
 - reused in accordance with a Resource Recovery Exemption and Order.
29. The Proponent must maintain a waste register that tracks any waste received at or transported from the premises that clearly identifies each entity and vehicle involved in the waste transaction and the premises from which or to which the waste originated or was transported to.
30. The Proponent must retain all waste related records in a legible form, or in a form that can readily be reduced to a legible form, for at least 4 years after the record was made.

Chemical Storage

31. All above ground tanks and containers containing material that is likely to cause environmental harm must be bunded or have an alternative spill containment system in place. Bunds must:
 - have walls and floors constructed of impervious materials;

- be of sufficient capacity to contain 110% of the volume of the tank (or 110% volume of the largest tank where a group of tanks are installed);
- have floors graded to a collection sump; and
- not have a drain valve incorporated in the bund structure,
- or be constructed and operated in a manner that achieves the same environmental outcome.