PO Box 398, Parramatta NSW 2124
Level 14, 169 Macquarie Street
Parramatta NSW 2150
www.waternsw.com.au
ABN 21 147 934 787

28 March 2022

Contact: *Juri Jung*
Telephone: *(02) 9865 2503*
Our ref: *D2022/23419*

Javier Canon
Senior Policy Officer
Department of Planning and Environment
4 Parramatta Square, 12 Darcy St
PARRAMATTA NSW 2150

Dear Mr Canon

RE: Environmental Impact Statement – Great Western Battery Project

WaterNSW appreciates the opportunity to review the Environmental Impact Statement (EIS) for the proposed Great Western Battery Project (SSD-12346552).

WaterNSW has reviewed the EIS (dated 23 February 2022), Water Cycle Management Study (dated 8 December 2021), and MUSIC stormwater quality modelling all prepared by AECOM Australia Pty Ltd and provides the following comments.

Water quality in the Sydney Drinking Water Catchment

As the development is located within the Sydney Drinking Water Catchment, Chapter 8 of *State Environmental Planning Policy (Biodiversity and Conservation) 2021* (the SEPP) applies.

Stormwater

The pre-development scenario in the stormwater quality model does not realistically represent the site (i.e. it does not include existing dams function as stormwater structures). When the model is corrected, the proposed stormwater management does not achieve a Neutral or Beneficial Effect (NorBE) on water quality, as required by the SEPP (cl 8.8). The proposed stormwater management measures may also not be sustainable for long-term maintenance and management for such a large asset.

Human Wastewater

The proposed human wastewater management (i.e. pump-out system) during station's operation is not a preferable option within Sydney Drinking Water Catchment. Based on Water NSW's experience, pump-out system often results in mismanagement and poor practices, which adversely impact water quality.

Therefore, WaterNSW requests to be consulted to revise the stormwater and wastewater management documents during the response to submissions (RTS) stage as below:

- Stormwater quality modelling and associated detailed stormwater management plan for a long-term sustainable stormwater management.
- Management and maintenance of the stormwater management measures as a part of the Operational Environmental Management Plan
- Wastewater management report, and
- Conceptual Soil and Water Management Plan(s) for the Construction Phase of the project.

Impacts to existing water supply infrastructure

WaterNSW manages the Fish River water supply scheme within and near the project area. Water supply pipeline associated with the scheme run directly adjacent to Brays Lane, Wallerawang. The proposed new transmission line will traverse the pipeline in some locations (Bray Lane, Lot 8 DP 252472 near Pipers Flat Creek and at Main Street). Any interaction with this pipeline has the potential to disrupt WaterNSW's ability to supply water to its customers (Oberon and Lithgow Councils, Mount Piper power station, and about 230 properties along its route) which poses a significant risk to WaterNSW.

Water NSW is concerned that the EIS has a) not mentioned the crossing of, or interaction with, the Fish River water supply pipeline, and b) not assessed impacts of the project on the pipeline.

WaterNSW considers that the project poses substantial risks to Fish River water supply scheme during construction and the following must be considered:

1. Damage from striking the pipeline (including trenching and underboring) occurring close to, under or over the pipeline and associated infrastructure. Asset protection controls and monitoring when working around the pipeline shall be specified.
2. Damage from vibration and ground movement – WaterNSW requires that the project confirms velocity limits and the foreseeable impacts the works will have on WaterNSW assets. Excavation methods must not trigger the maximum allowable limits set within the German Standard DIN 4150 – Part 3 - "Structural Vibration Part 3: Effects of vibration in structures", when measured at WaterNSW assets. Vibration monitoring should occur prior to and during construction. WaterNSW supports the proposed mitigation measures contained in the EIS (NV1, NV2) and requires that any identified risks to the Fish River water supply pipeline and proposed measures to mitigate those risks be included in the Construction Noise and Vibration Management Plan.
3. Impact of the 330kV transmission line to water supply infrastructure – WaterNSW's main concerns relate to the increased risks from the electrification of the metal pipeline transferring water such as unacceptable coating stress voltage, low frequency induction voltages, touch/step potential and operational/ maintenance barriers. WaterNSW requests any modelling undertaken in these regards and information on how these risks have been considered and incorporated into the project design.
4. Inhibiting access to our inspection points, valves and scour lines – the project works should be designed, constructed and operated in such a way that do not impact the environment or restrict WaterNSW from operating and maintaining the pipeline. WaterNSW can provide a water supply map, identifying where the Fish River pipeline and points exist in relation to the development site, so the proponent can compare their transmission alignment with existing water supply assets. WaterNSW requests direct consultation regarding alignment of the transmission line corridor to ensure our assets are adequately considered and protected, and that our ability to access and operate the pipeline is not inhibited.
5. If this proposal is approved, WaterNSW requests that the proponent supply the final 'works as executed plans' for the transmission corridor to WaterNSW, so that we are aware of the actual alignment and location of the high voltage asset (in relation to our assets), to ensure personnel are protected if working in this area.

Connection to local water supply

WaterNSW understand that the Great Western Battery Project will cart in potable water for the construction stage and connect to the local water supply network during operation. Lithgow City Council will need to be contacted to approve any connections into the local potable water network.

WaterNSW requests that all the potential infrastructure impacts to the existing Fish River water supply pipeline from construction of the project are considered and addressed in the RTS, including advice on asset protection measures.

WaterNSW will review the risk assessment and determine its impact on WaterNSW's ongoing ability to supply water to our customers. If the risks cannot be adequately mitigated to avoid adverse impacts, then development near this existing asset should be reconsidered.

WaterNSW requests to remain as a stakeholder in any further assessment and consultation on this project.

If you wish to discuss further, please contact Juri Jung via email at environmental.assessments@waternsw.com.au.

Yours sincerely

DARYL GILCHRIST
a/ Manager Catchment Protection