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Contact: *Justine Clarke*

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Our ref: *D2020/119877*

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Dear Ms Munk

**Re: Western Sydney Energy and Resource Recovery Centre – EIS Exhibition (SSD 10395)**

I refer to your email dated 1 October 2020 requesting WaterNSW's advice in relation to the Environmental Impact Statement (EIS) for the proposed Cleanaway Western Sydney Energy & Resource Recovery Centre (WSERRC). WaterNSW appreciates the opportunity to provide detailed comments on this proposal.

WaterNSW owns and manages the Warragamba to Prospect Pipelines corridor (Pipelines corridor), which forms the southern boundary of the site. The Pipelines are critical water supply infrastructure, conveying water from Warragamba Dam to the Prospect Water Filtration Plant, and are an integral component of the Sydney drinking water supply system (delivering 80% or more of Greater Sydney's water needs). The Pipelines corridor is also a Controlled Area declared under the *Water NSW Act 2014* and associated Regulation, and public access is prohibited. It is essential this water supply infrastructure is protected from the potential impacts of development on adjoining land.

The site also lies within the Western Sydney Parklands and is therefore subject to the provisions of State Environmental Planning Policy (Western Sydney Parklands) 2009, specifically clauses 12 and 13.

WaterNSW has reviewed the EIS and supporting documents, and provides the following comments and requested conditions to be incorporated into any determination that falls in favour of the applicant. These conditions are considered vital to ensure the protection of the critical water supply infrastructure, and WaterNSW's ability to operate and maintain our assets to deliver on our functions and responsibilities as a State corporation.

While WaterNSW notes that the proposal would result in a reduction in waste streams and potentially benefit the NSW community, we **object to the proposal in its current form** due to incorrect assumptions by the proponent, especially in relation to access to the site, as well as insufficient detail addressing WaterNSW's concerns regarding other introduced risks to the Warragamba Pipelines and the relegation of supporting aspects of the development to 'related development', to be assessed and determined separately to this proposal (Table 3.1 p. 66). WaterNSW expects to see appropriate impact assessment detail on the relegated items to holistically consider all the potential environmental impacts and suitable mitigation measures for the development. WaterNSW will not accept any option or design that inhibits our ability to carry out our functions under our Act and restrict future augmentation options.

### ***Access to the project site***

WaterNSW, Arup and the proponent have met on a number of occasions to discuss the potential impacts to WaterNSW lands, assets and infrastructure from the project and access to the site across the Pipelines corridor. On each occasion, it was strongly advised that WaterNSW's preference is for vehicles to enter and exit the site from the North and not to cross over the Pipelines corridor. This advice was provided based on the intensification of risk applied to State critical infrastructure and the low risk of accessing from the North. The option for access to the site across the Pipelines corridor also does not meet WaterNSW's criteria for approving external developments impacting on our controlled area corridors.

WaterNSW notes that the EIS states that WaterNSW has provided in-principle support (p.v; s2.6.7 p.54; Table 3.1 p.65) to access the site across the Pipelines corridor. ***This is not the case.*** The southern access has been presented by the proponent as the only viable option due to limited options for accessing the site to the north. WaterNSW notes that the justifications given to WaterNSW during separate consultation have not been included in the EIS.

It has since been brought to WaterNSW's attention that the proponent may be able to overcome a number of the 'limiting factors' for northern access, and this access route is also preferred by other government agencies. We also understand that the Suez lease on the existing access road is due to expire within the next two years, and therefore may prove a viable option for the proponent. As such, WaterNSW considers that the proponent must further explore a potential northern access route with the relevant government agencies.

Additionally, the proposed design is predicated upon site access across the Pipelines corridor, however the EIS states that the site access construction works do not form part of the current proposal and the details will be included in subsequent, related development approvals. WaterNSW considers the development, including access, should be considered as a whole as the current design would need to change with a change in access from the South to the North.

Notwithstanding the proponent's statements regarding access being subject to related and subsequent consent processes, WaterNSW considers that our consent as the affected landowner for widening of the existing access road onto WaterNSW land should have been agreed to prior to the proponent lodging the EIS.

Further assessment is also required into contingency planning for such times where access may be restricted to the facility, due to WaterNSW repairing, replacing or augmenting the pipelines.

### ***Connection to the Warragamba Pipelines***

The EIS (s12.3.1.3 p. 341; s20.2.2.3 p.460; Figure 20.3 p.461; s20.3.1.2 p. 465) identifies a 50mm connection from the southern Warragamba Pipeline to the site, and the proposal to retain the connection to service construction demands, followed by disconnection and removal. This connection was previously used as a back-up supply for the poultry operation.

WaterNSW advises that the existing connection was closed following vacation of the site by the poultry farm and will not be re-opened. The existing connection is terminated due to the transfer of land and no new water licences will be agreed to, and therefore cannot be used for water supply to the site for any purposes. The proponent must seek an alternative water supply for construction purposes.

### ***Consultation with WaterNSW***

Irrespective of any change to site access being from the North, the proximity of the proposal to the Pipelines corridor and nature of the proposal requires close consultation by the proponent with WaterNSW throughout detailed design and construction phases, as noted in the EIS (p. xxxii).

### ***Neutral or beneficial impact on water quality***

State Environmental Planning Policy (Western Sydney Parklands) 2009 requires all development to have a neutral or beneficial impact (NorBI) on water quality within the bulk water supply infrastructure. This includes Prospect Reservoir, which is located to the East of the subject site. WaterNSW previously agreed with the proponent that the Reservoir was the appropriate location for the assessment of a NorBI, and that a Human Health Risk Assessment (HHRA) was appropriate method for determining a NorBI. Section 9.3.2.4 (p.308) of the EIS concludes that the project will have a neutral impact on the open waters of Prospect Reservoir.

Section 4.2.1 of Technical Report H Hydrology and Flooding Assessment Report notes that drainage pathways from the site do not join with Prospect Reservoir and conclude that a NorBI is therefore achieved. WaterNSW acknowledges this aspect of a NorBI assessment as being in addition to the HHRA above only.

Table 2.5 and Section 7.3 of Technical Report A Air Quality and Odour Impact Assessment identifies WaterNSW's specific requirements in relation to Prospect reservoir being a sensitive receiver, however makes no assessment regarding a NorBI.

Under the SEPP, consent must not be granted unless the Department (as the consent authority) is satisfied that the development will have a NorBI on water quality in Prospect Reservoir.

### ***Stormwater management***

Stormwater flows across the Pipelines corridor from south to north and into a drainage line at the east of the subject site. Both Pipelines also have scour valves that drain towards the site when exercised and these additional flows must be taken into account when designing stormwater management systems for the proposal.

As identified in Technical Report H, the site is also potentially impacted by flooding. All stormwater flows, up to 1% AEP flood event flowing across the Pipelines corridor must be accommodated by development on the subject site. Development must not occur that impedes the flow from the Pipelines corridor causing it to pool in the corridor and potentially impact the integrity of the Pipeline anchor blocks or sills by undermining, or cause the Pipelines to float or be knocked off their anchor blocks or rupture due to flooding stresses.

#### **Requested Conditions:**

- *All surface water from the Pipelines corridor, including from exercising the scour valves, must not be impeded and must be accommodated in downstream water management systems within the development site, up to and including the 1% AEP flood event.*

### ***Erosion and sediment control***

It is critically important that the bulk earthworks are designed and undertaken in a manner that does not impact on the Pipelines corridor. Effective erosion and sediment control must be installed prior to any earthworks.

#### **Requested Conditions:**

- *No stockpiles are to be located adjacent to the Warragamba Pipelines corridor.*
- *Appropriate and adequate dust suppression measures must be undertaken to prevent dust blowing from the project site.*
- *Effective erosion and sediment controls must be installed prior to construction and be regularly maintained and retained until works have been completed and the ground surface stabilised or groundcover re-established,*
- *Erosion and sediment controls are to be designed, installed and maintained in accordance with the 'Blue Book', Landcom (2004) Managing Urban Stormwater; Soils and Construction.*

### **Protection of WaterNSW infrastructure**

Site preparation and construction can pose particular risks to WaterNSW infrastructure. It is vital WaterNSW is actively involved in the development and assessment of detailed design plans and CEMPs for relevant parts of the development including the earthworks, infrastructure and services and construction.

#### Requested conditions:

- *WaterNSW must be consulted on the final Construction Environmental Management Plan (CEMP) for the earthworks, infrastructure and services eight (8) weeks prior to works commencing, to allow for assessment of design and related works procedures and revisions as required.*
- *The proponent must implement all practical measures to prevent damage to WaterNSW water supply infrastructure that may result from construction or operation of the project.*
- *The proposed retaining wall adjacent to WaterNSW land South of the substation must be designed and constructed entirely within the project site, including all footings.*
- *Bulk earthworks must not result in a change of levels at the boundaries of the site with WaterNSW lands.*
- *A pre-condition survey must be undertaken by the proponent, including of the Pipelines, access ways, concrete encasements and drainage structures.*
- *The proponent must repair, or pay all reasonable costs associated with repairing any damaged WaterNSW water supply infrastructure in a timely manner and to the satisfaction of WaterNSW.*

### **Vibration**

The Warragamba Pipelines are concrete lined steel and are susceptible to damage from vibration as a result of construction and operation activities. The EIS includes discussion relating to the potential construction vibration impacts (s13.3.1.1; and Table 13.6 p.361), however details regarding trigger levels are not provided nor adaptive construction methodologies described.

#### Requested Conditions:

- *The Construction Noise and Vibration Management Plan is to be provided to WaterNSW for review.*
- *During construction and operation, specific mitigation measures must be implemented to achieve the vibration limits set out in the German Standard DIN 4150-3: Structural Vibration- effects of vibration on structures (for structural damage).*

### **Earth potential**

The proposal includes the installation of high-voltage cables, to be buried underground in close proximity to the Pipelines corridor. This introduces a risk of earth potential rise, step and touch potentials on, and corrosion risk to, the metal pipelines. WaterNSW must be consulted during detailed design on arrangements for underground cabling (burial depth, conduit/encasing arrangement).

Connection to the high-voltage network is also relegated to 'Related Development' and details are therefore lacking with regards to the risk to the Pipelines introduced by the proposal.

#### Requested Conditions:

- *The proponent must consult with WaterNSW during the detailed design of underground cabling.*

- *Water NSW should be consulted on the design EPR and should also receive any earth grid test/EPR test reports. A third party review of the design and test results may be requested by WaterNSW at Cleanaway's expense.*

### **Transformer and substation explosion risk**

WaterNSW has previously requested the proponent provide information regarding the risk to the Pipelines of an explosion of the transformer and the substation in the south-west corner of the subject site, immediately adjacent to the Pipelines corridor.

The transformer explosion risk is mentioned in Section 14.3.2 of the EIS and design compliance with existing standards have been noted as sufficient mitigation. However, because of the potential size and energy involvement with a generator transformer and its proximity to the Pipelines, the potential impacts can be severe. As such, all the risks needs to be captured in a risk assessment, so that it can be properly addressed in the safety in design workshops.

The risk of explosion and fire related to substation equipment such as large capacitors and oil-filled circuit breakers have not been considered in the EIS. Again, because of the substation proximity to the Pipelines, this risk also needs to be formally captured in a risk assessment and adequate and appropriate controls implemented.

#### Additional assessment required:

WaterNSW requires further assessment to be undertaken regarding transformer and substation explosion risk, other potential electrical hazards and risk mitigation measures as outlined above.

### **Security and fencing**

In the experience of WaterNSW, development adjacent to the Pipelines corridor has a direct correlation with an increased occurrence of security incidents. These can include trespass, malicious damage, rubbish dumping, arson, assault and threatening behaviour. Both temporary and permanent fencing (depending on the stage of development) is required for any interface with WaterNSW land.

#### Requested conditions:

- *Appropriate boundary identification (such as temporary construction fencing) must be installed prior to works commencing and must be maintained throughout the construction period.*
- *A fence 2.1m chain mesh plus 3 strand barbed wire on top, for a total height of 2.4m, is to be installed along the entire length of the boundary with WaterNSW, unless otherwise agreed to by WaterNSW.*

### **Access for WaterNSW**

Vehicle access for WaterNSW must be retained in order to maintain the Pipelines and service the corridor. All adjacent works must not inhibit WaterNSW from undertaking its function to supply drinking water to Sydney. All development related activities must be designed, constructed and operated in such a way that does not restrict WaterNSW from operating and maintaining the Pipelines corridor.

#### Requested conditions:

- *24-hour all-weather access to the WaterNSW Pipelines corridor must be retained or provided for WaterNSW staff and contractors.*
- *Any damage to the Controlled Area and or associated infrastructure caused at any stage must be repaired by the consent holder or the consent holder must pay all reasonable costs associated with repairing the damaged water supply infrastructure, in a timely manner and to the satisfaction of WaterNSW.*

***Incident notification***

WaterNSW requires notification of any incident such as a vehicle accident, discovery of any heritage items, spill or fire that affects or could affect the WaterNSW Pipelines corridor. Any such incident should be reported to WaterNSW on the incident Notification Number 1800 061 069 (24- hour service) as a matter of urgency.

**Requested Conditions:**

- *All incidents that affect or could affect the WaterNSW Pipelines corridor must be reported to WaterNSW on the 24-hour Incident Notification Number 1800 061 069 as a matter of urgency.*

If you have any questions regarding this letter, please contact Justine Clarke at [justine.clarke@waternsw.com.au](mailto:justine.clarke@waternsw.com.au).

Yours sincerely



**CLAY PRESHAW**  
**Manager Catchment Protection**