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Mr Nathan Heath
Senior Planning Officer
Social and Other Infrastructure Assessments
Department of Planning, Industry and Environment

Dear Mr Heath

Upper South Creek Advanced Water Recycling Centre (SSI 8609189)
EPA advice on Environmental Impact Statement (Submission 2: Water Quality)

I am writing to you in reply to your invitation to the NSW Environment Protection Authority (EPA) to provide additional advice on the Environmental Impact Statement (EIS) for the Upper South Creek Advanced Water Recycling Centre (AWRC) project (SSI 8609189).

In its letter of 24 November 2021 (Ref: DOC21/1042313), the EPA provided the Department of Planning, Industry and Environment (DPIE) with advice on noise and vibration, air quality and contamination impacts in relation to the project, and advised that additional comments regarding water quality (including effluent impacts) would be provided in separate correspondence at a later date. This letter provides the second part of the EPA's advice on the EIS.

The EPA reviewed the following EIS documents:

- *Environment Impact Statement*, dated September 2021, prepared by Sydney Water (the EIS)
- *Volume 2: Project information and Consultation*, dated 30 September 2021, prepared by Sydney Water
- *Appendix F: Hydrodynamics and Water Quality Impact Assessment*, dated 24 September 2021, prepared by Aurecon / ARUP (the WQIA)
- *Appendix G: Ecohydrology and Geomorphology Impact Assessment,* dated 22 September 2021, prepared by Streamology (the EGIA)
- *Appendix K: Surface Water Impact Assessment*, dated 23 July 2021, prepared by Aurecon / ARUP (the SWIA)
- *Appendix M: Groundwater Impact Assessment*, dated 29 June 2021, prepared by Aurecon / ARUP (the GIA)

Comments on water quality impacts from effluent, as well as consideration of surface water and groundwater impacts in relation to the project are provided at **Appendix A**.

The comments note that the EIS has significant limitations in assessing the impacts of the AWRC's effluent discharges and surface water impacts on receiving water quality. Appendix A sets out additional information that must be provided in order for the EPA to undertake a complete assessment of the proposal.

Comments provided in relation to effluent impacts on water quality have been developed in consultation with the Water, Wetlands and Coastal Science Branch (WWCSB) within DPIE's Environment, Energy and Science Group (EES) Group.

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Should you require clarification of any of the above, please contact Daniel Burchmore on 9995 5995 or email daniel.burchmore@epa.nsw.gov.au

Yours sincerely

SARAH THOMSON
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APPENDIX A

1. Impacts of effluent discharges on water quality

The EPA recognises that the Upper South Creek AWRC is a significant water infrastructure project with major implications for the future direction of wastewater management in Western Sydney. The operation of the AWRC occurs in tandem with major urban expansion as part of the Western Parkland City. This urban expansion may have significant implications for pollutant loads and inflows into the Hawkesbury Nepean River system, as well as recycled water demand. Consequently, it is critical that the EIS accurately assesses the impacts of the AWRC effluent discharges in different future water quality scenarios using a fit-for-purpose model.

Based on the projected quality and quantity of effluent discharges outlined in the WQIA, treated effluent discharges from the AWRC may represent a hugely valuable resource in terms of providing environmental flows to the Hawkesbury Nepean River and also in offsetting or diluting other diffuse and point source discharges. However, these projections are based on Water Quality Response Models (WQRMs) that are hindered by significant modelling limitations. While the WQRMs developed as part of this EIS represent a huge investment in the right direction, due to a range of uncertainties associated with the current modelling approach, the EPA is unable to assess whether the WQIA in Appendix F adequately quantifies the likely impacts of the AWRC operations on the Hawkesbury Nepean River system. In particular, the EPA considers that insufficient justification has been provided as to the need for wet weather discharges from the AWRC to South Creek.

The EPA considers that additional information is required to better justify the AWRC proposal and assess the impacts of its effluent discharges on water quality. Further examination is needed in the following areas:

- **improvements to the WQRMs** to address current limitations regarding the modelling of effluent discharges from the AWRC;
- **improved assessment, analysis and presentation of environmental impacts** determined from the WQRMs;
- **consideration of alternative discharge locations within the Nepean River** due to inadequate toxicant dilution (and other mitigation measures to water quality impacts);
- **further information regarding whether AWRC discharges will meet the requirements of the EPA's Hawkesbury-Nepean Nutrient Framework**;
- **further justification of the need for wet weather discharges into South Creek from AWRC**, given water quality objectives and 'best practice' approaches to sewer infiltration and treatment plant design;
- **greater assessment of the environmental impacts of discharging of brine from the AWRC into the Malabar sewage system**; and
- **consideration of growth planning in the Western Sydney region**.

Additional detail on each of these issues is outlined below. These comments were developed in consultation with the Water, Wetlands and Coastal Science Branch (WWCSB) within DPIE's Environment, Energy and Science Group (EES) Group.

Improvements to Water Quality Response Models (WQRMs)

The WQRMs developed in the WQIA are hindered by several key scientific knowledge gaps in our understanding of the Hawkesbury Nepean River system that impede the development of a more robust model. These knowledge gaps have previously been identified by the Hawkesbury Nepean Science Working Group which includes representation from EPA, Sydney Water and the EES Group within DPIE. A strategic roadmap has been developed to address these gaps in a prioritised manner. These knowledge gaps (as well as other issues regarding the WQRMs) are outlined below:

- The WQIA is based on the results from a complex model suite that generally represents the industry standard for this type of exercise. However, there are a number of omissions (as identified by the Hawkesbury-Nepean Science Working Group) that compromise this effort. **Recognition of these issues and the wider process being undertaken to address them should be provided, as well as some discussion of their implications for model performance** (i.e. the ability of the models to reasonably replicate spatial and temporal patterns in key parameters) and scenario assessments.
- **It is stated that the modelling suite is 'fit for purpose' based on expert reviews, however none of these reviews have been provided or referenced**, nor have any summary statistics on model performance, uncertainty, or sources of error been included. This makes it extremely difficult to determine the validity of the assessments made in the WQIA.
- It appears that the modelling does not utilise South Creek MUSIC models developed by EES to assess urban stormwater scenarios. Instead this has been done solely using SOURCE, which is not designed to assess changes in flow and pollutant loads due to urbanisation. **Justification should be provided regarding the absence of the MUSIC models**.
- The generalised values/assumptions utilised for stormwater management in the South Creek catchment (i.e. 'Parkland' and 'BaU') are vague and are unlikely to reflect variation according to developer compliance, development age and maintenance. **It would be useful to provide upper and lower estimates and their implications for impacts**.
- **Diffuse boundary inputs to the WQRMs are a major driver of the model** and are also likely to be one of the major sources of error. **It is not possible to assess the validity of these inputs in the absence of any summary statistics or other information from the model calibration report**. It would be preferrable to provide these summaries in the WQIA, and also to discuss sources of error and their implications for the impact assessments. It is noted that this was done in a limited sense to provide a sensitivity analysis of the underprediction of flows at Wallacia Weir.
- The WQRMs used in the impact assessment were run against a number of scenarios in a wet year and a dry year. However, **the model was not run against an average or typical year to give an idea of what impacts could be expected most of the time. All three conditions (wet, dry and typical) are necessary to understand the impacts of the discharge comprehensively**. It is also unclear how a wet and a dry year align with the wet, mildly wet, moderately wet, and extreme wet weather conditions that have been used to define the discharge arrangements. Providing this information would assist in understanding typical operating conditions.
- Harmful algal (cyanobacteria) blooms represent a significant risk in the Hawkesbury Nepean River system. The EIS presents a cyanobacteria risk model based on functions of temperature, salinity, nutrients and a proxy for stratification, however **there is no justification or references for these functions, nor any validation against the extensive data available for the Hawkesbury Nepean River system**. It is noted that a previous review of cyanobacteria risk by EES identified that extended dry weather is a major risk factor in the freshwater tidal river, however this cannot be accounted for by the current formulation of the model described in the WQIA.
- Chlorophyll (a proxy for phytoplankton biomass) is a primary indicator of stress in response to nutrient loading. The modelled longitudinal median chlorophyll concentrations presented in the WQIA (Figures 6-85 and 6-86) indicate a spatial pattern at odds with long term data (Figures 5-46 and 5-47), calling into question the WQRM's ability to accurately represent processes controlling this important indicator. **Modelled values throughout the system are well below expected** and are lowest in the freshwater tidal pool (Windsor to Wisemans Ferry) which data show to be the chlorophyll maximum reach within the Hawkesbury Nepean River system. **These discrepancies need to be discussed, and the implications for model performance and the effects-based assessment must be highlighted**.
- There are also **discrepancies between the spatial variation in modelled and measured nitrogen and phosphorus apparent in the WQIA**. In the case of phosphorus, the EPA

contends that it is not possible to faithfully reproduce spatial and temporal trends without accounting for the transport, settling, and resuspension of sediment along the tidal reaches of the system. This issue has been identified as a major knowledge gap by the Hawkesbury Nepean Science Working Group.

- **There is no consideration given to macroalgae and submerged macrophyte blooms** which constitute a major expression of eutrophication in the HNR during extended low flow periods. **Further assessment should be undertaken to determine the impacts**.
- **Details concerning the Warragamba River modelling require clarification**. It is noted in the WQIA that the model boundary starts at the Warragamba weir which is 1.2 km downstream of the dam wall and does not include the stretch of Warragamba River from the dam wall to the weir. The proposed AWRC discharge is in close proximity to the dam wall and therefore locations upstream and downstream of the discharge will be outside the boundary of the model. However, time series modelling results are provided for locations labelled as 'Upstream AWRC Warragamba' and 'Downstream AWRC Warragamba' which, considering the location of the model boundary, should <u>not</u> be possible to generate. It is difficult to ascertain whether these locations are in relation to the AWRC discharge point, Megarritys Creek and the discharge from the Wallacia STP. In addition, it is not clear if the scenario HN01 which is the background scenario for discharges to Warragamba River includes WaterNSW releases into Megarritys Creek (e-flows).
- The WQIA has assessed the near field mixing zone for a select group of toxicants in accordance with ANZG (2018) guidance on mixing zone evaluation with toxicants included based on analysis of effluent in Appendix F Part 2. However, the EPA requires assessment of dilution and mixing zones for all pollutants that are present in the effluent at non-trivial levels to inform its licensing processes. **Additional dilution modelling will need to be provided for all pollutants that are above ANZG (2018) guideline values in the highly treated effluent and tertiary effluent and will be discharged to South Creek, Nepean or Warragamba River**.
- The dilution modelling has also been limited to extreme wet weather for South Creek and the Nepean River even though:
    - during dry weather, oxidised nitrogen (NOx) is present in the highly treated effluent discharged to the Nepean or Nepean/Warragamba Rivers at concentrations exceeding ANZG (2018) default guideline values; and
    - during mild and moderately wet weather, tertiary effluent – containing nutrients and pathogens at concentrations above ANZG (2018) or a mix of advanced treated effluent (containing elevated NOx) and tertiary effluent – is discharged to the Nepean River

  Further modelling that estimates the dilution of pollutants discharged in the effluent under dry, mild and moderately wet conditions is required to provide a complete assessment of discharge impacts. **The results provided should also note which conditions are considered 'typical' thus indicating what impacts and outcomes will be seen most often**.

<u>Improvements to assessment, analysis and presentation of AWRC impacts</u>

Acknowledging the limitations of the WQRMs identified above, the following comments are made regarding the analysis and assessment of environmental impacts from the AWRC discharges:

- The innovative zonal approach that aggregates data for comparing model predictions against monitoring data for assessing the impacts of the project is a valid way of dealing with variability in field data introduced by diel environmental factors such as tides.
- The analysis of scenarios during the 'wet' and 'dry' year simulations provides an indication of cumulative impacts over an annual timescale during these different hydrological year types,

however it is difficult to extrapolate these results to longer timescales where impacts may compound from year to year (e.g. during extended drought cycles,).

- Further to the above point, there appears to be no consideration given to the effects of climate change on the hydrology of the Hawkesbury Nepean River system and the implications of these for the system. While the prediction window is capped at 2056, **there are still likely to be significant changes to the frequency and severity of extreme events (droughts and floods) during this timeframe. It would be useful to at least discuss the implications of this on water demands, environmental flows, and instream processes**.
- **The qualitative assessment of impacts could be improved by more statistical approaches and provide a more meaningful comparison with guidelines** (e.g. percentage of time a guideline is exceeded).
- **Analysis of water quality trends (section 5) and model results (section 6) would be far more useful if binned and summarised according to flow percentile categories**. This allows a more nuanced understanding of processes and aquatic sensitivity along the Hawkesbury Nepean system and avoids making generalisations based on median values which ignore the significance of more extreme events. For example, the large number of outliers shown in the longitudinal boxplots of chlorophyll (Figures 5-46 and 5-47) bely the tendency for large algal blooms to occur during low flow conditions. Recognition of this is an important consideration for maximising environmental benefits, although as mentioned above it appears that the WQRM is not currently capable of faithfully representing phytoplankton response.
- As noted in the WQIA section 5.3.5.1, there are clear seasonal trends in nitrate concentrations in the Nepean River (winter maxima; summer minima). **It is unclear whether these significant trends were faithfully replicated by the model, nor whether they were considered in the interpretation of modelling results**. For example, nitrate concentrations in the river upstream of Wallacia weir vary by up to four times between summer and winter which would have profound implications for the downstream flux of bio-available nitrogen and subsequent algal growth.
- It is proposed that the AWRC will discharge to South Creek during moderate and severe wet weather conditions. The potential impacts of this occurrence are downplayed in the EIS based on the rationale that:
    1) there is a large background of pollutants from other diffuse and point sources; and
    2) that water residence times are very short in South Creek during high flow conditions.

  While the EPA recognises pollutants enter the creek from other sources and water residence time may be short, it is not a sufficient justification to contribute further to the creek's pollutant load. **It is correct that the instream impacts will be negligible in South Creek itself due to short water residence times during wet weather flows, however the real impacts will be felt once this water reaches the freshwater tidal pool (Windsor to Wisemans Ferry reach) where residence times increase significantly**. **Analysis and discussion of this needs to be included in the WQIA**. It is also noted that the **actual contribution of the AWRC wet weather releases are not quantified** (although this could easily be done) so it is not possible to properly assess this issue. Further comments regarding the AWRC's South Creek discharges are outlined below in the section titled '*Further justification regarding the need for South Creek discharges from the AWRC'.*
- The WQIA includes comparison of various modelled future scenarios of AWRC discharges with modelled 'background' scenarios (assuming no AWRC discharge), However, the timeseries figures provided in Section 6 (Impact Assessment) that are used to justify these comparisons do not appear to include 'background' and simply compare the impacts of AWRC discharges with the current 'baseline' data. **The timeseries data provided in Section 6 of the WQIA should be amended to provide a clear comparison between projected water quality impacts from AWRC discharges and the projected water quality background impacts at 2036**.

Consideration of alternate discharge locations in the Nepean River

As outlined previously, dilution modelling in the WQIA is restricted to a few key toxicants under extreme wet weather conditions. The results of this modelling show that the discharge above Wallacia weir into the Nepean River is not adequately mixed and diluted to meet ANZG guideline values for aluminium, copper, and zinc before it reaches the weir. Mixing and dilution is hampered by the weir which is only 50 metres downstream of the discharge point. It is also noted that a moderate increase in water depth is anticipated in the Wallacia Weir pool (18cm) as a result of the project (Appendix G). Given these issues, **an alternative discharge location and configuration are recommended to increase initial mixing for the Nepean River**. **Following additional modelling to consider a wider range of weather conditions (as recommended above) further amendments may have to be made to discharge locations and configurations**.

Salinity in advanced treated effluent

The proposal does not appear to include any mitigation measures to manage the low levels of salinity in advanced treated effluent (0.03 mg/L). **The proponent should provide additional information on any mitigation measures to manage low salinity in advanced treatment discharges** (such as re-mineralisation).

Compliance with the EPA's Hawkesbury-Nepean Nutrient Framework

It is noted that the proposal indicates compliance with load limits under the EPA's regulatory framework to manage nutrients with the Hawkesbury-Nepean catchment (the Hawkesbury-Nepean Nutrient Framework). The EPA confirms that an environment protection licence (EPL) issued for the AWRC would include conditions requiring compliance with agreed nutrient load limits for combined Sydney Water treatment plants in the Yarramundi Subzone 2 and Sackville Subzone 2 from 2024 onwards, as well as individual load limits on the AWRC.

The EPA requests that further information is provided with respect to AWRC effluent concentrations and their compliance with the Hawkesbury-Nepean Nutrient Framework:

- The assumed effluent quality of tertiary treated effluent from the AWRC is expected to contain a median concentration of 1 mg/L for total phosphorous (TP). Under the Hawkesbury-Nepean Nutrient Framework, new wastewater treatment plants are expected to be able to achieve 'best practice' median effluent concentrations of 0.05 mg/L for discharge to the main stem of the river. Tertiary effluent will be discharged to the Nepean in both dry and wet years, sometimes mixed with advanced treated effluent and sometimes it will be discharged without the benefit of dilution by advanced effluent.

  The modelled impacts of the discharge into the Nepean for the most likely scenario (SC05) indicates that at times TP concentration in the river is increased during a dry year as a result of the discharge and at other times there is no discernible effect. In a wet year, the impacts of the discharge on the concentrations of pollutants in the Nepean are obvious not only for TP but also total nitrogen (TN), ammonia, NOx and filterable reactive phosphorous (FRP). Of those pollutants it appears that increased TP concentrations attributable to the discharge are discernible for the greatest distance downstream from the discharge point. As such, the modelling results do not provide justification for adopting the higher TP concentration of 1 mg/L in the tertiary effluent that will be discharged from the AWRC to the Nepean River. While it is noted that this 'best practice' concentration level would be the median of all discharges from the AWRC (rather than just tertiary effluent), limited information has been provided regarding the projected median effluent concentrations of TP from the AWRC.

  The EPA requires additional modelling be provided around the median concentrations of effluent discharged from the AWRC, and whether it will comply with 'best practice' TP concentrations outlined in the Hawkesbury-Nepean Nutrient Framework.

Further justification regarding the need for South Creek discharges from the AWRC

As outlined above, additional assessment needs to be made regarding the impact of effluent discharges to South Creek from AWRC, as well as the location of any proposed discharge point to ensure increased dilution of toxicity impacts.

The Hawkesbury-Nepean Nutrient Framework also sets an indicative 'best practice' concentration of 3 mg/L for TN and 0.05 mg/L for TP above average dry weather flows (ADWF) into South Creek. It is noted that the proposed effluent quality for discharges to South Creek from AWRC would result in exceedances of these concentrations for primary treated flows, and that impacts in exceedance of the South Creek Water Quality Objectives would occur, notwithstanding inputs from other sources. Furthermore, the WQIA indicates that adequate dilution cannot be achieved for ammonia and chlorine from wet weather discharges to South Creek.

The WQIA states that wet weather discharges to South Creek are estimated to occur for three to 14 days each year during wet weather events. **For a new contemporary scheme that is based on best practice, there is limited justification for why it should be designed with such a wet weather discharge regime, especially to South Creek where a high expectation for waterway health is being sought in response to the Parkland City vision**. In addition, it appears that Sydney Water is also considering the following key design measures to reduce additional water entering the new network during wet weather events. This should have the effect of limiting the need for wet weather discharges to the environment:

- The network is modelled for a maximum of 10 spill events in 10 years. It is proposed that overflow infrastructure only be provided at pump stations and not along the pipeline network; and
- Provide leak tight sewers to minimise infiltration to the wastewater mains. This is based on modelling with 2% infiltration, which is consistent with Sydney Water's wastewater system planning guidelines for new greenfield growth areas.

The EPA's policy is that for new sewage treatment systems there should be no discharge of sewage effluent to waters from STPs during average and dry weather conditions, and only during wet conditions as a last resort. There should also be no pollution of waters because of sewage overflows during dry weather and that sewage overflows during wet weather should be avoided wherever reasonably practicable. It is also noted that that Volume 2 of the EIS (Project Information and Consultation) gives minimal consideration to increasing the capacity of the AWRC to a level where wet weather flows into South Creek are prevented. **The proponent should provide further information that can demonstrate that the EPA's policy around wet conditions are satisfied, that appropriate prevention of stormwater ingress into the upstream sewer network will be implemented, and that alternatives to the current proposal (such as increasing wet weather capacity at the plant and increased reuse) are considered in depth**.

In the event that Sydney Water provides sufficient justification for the general need for South Creek discharges from the AWRC, an assessment should be made of an alternative discharge location and configuration to increase initial mixing for South Creek for toxicants to address the insufficient dilution of chlorine and ammonia in the currently proposed discharge location.

Assessment of impacts of brine discharge into the Malabar sewage system

The WQIA states that the brine wastewater stream from the advanced treatment process will be transferred by pipeline to the existing wastewater network at Lansdowne and transported to the Malabar Wastewater Treatment Plant for discharge to the ocean. **There is limited assessment of whether the Malabar system has capacity to accept such a new load of wastewater and whether there are any potential risks for its environmental performance to be compromised** (including the requirements stipulated Sydney Water's environment protection licence for Malabar Sewage Treatment System).

Consideration of growth planning in the Western Sydney area

The EIS states that Sydney Water is seeking approval to build and operate Stage 1 of the project, to treat wastewater flows and discharge to the Warragamba, Nepean River and South Creek of up to 50 million litres per day (ML/day). Future stages will be timed to support growth, with an ultimate capacity of 100 ML/day by 2056. While this is based on a worst-case scenario, the ultimate level of discharge will be dependent upon the take up of recycled water in response to the distribution network proposed for the Sydney Western Growth Area and Western Sydney Aerotropolis Growth Area and level and timing of development in these areas.

The EIS recognises the importance for an adaptive approach for the future development of the scheme. While this is supported a similar approach should also be delivered through conditions of approval. In particular **with a discharge based on a worst-case scenario (that includes impacts to the waterway) a review should be required every five years to assess the performance of the scheme and to validate any predictions**. This would also provide an opportunity to re-evaluate any limits placed on the discharges including caps on flow, review programs and works in relation to take up of recycled water and better understand flows from development including the Western Sydney Airport. Such an approach may also help drive recycling water outcomes if there is a risk that flow limits could be restricted.

Application of EES comments to Nepean and Warragamba River AWRC discharges

The EPA notes that EES has also provided extensive comments regarding AWRC effluent impacts on water quality to the Wianamatta-South Creek catchment as part of its submission dated 1 December 2021. The EPA concurs with these comment and **recommends the proponent give consideration to their applicability to the proposed AWRC discharges to the Nepean River and Warragamba River**.

2. Surface Water

The EPA has reviewed the SWIA at Appendix K and understands that a range of mitigation measures are proposed to manage impacts to surface water during the construction and operational phases of the project.

As with effluent impacts on water quality, it is noted EES has previously provided extensive comments regarding surface water impacts from the AWRC to the Wianamatta-South Creek catchment in their submission dated 1 December 2021. These comments noted that revised stormwater assessment modelling is required to determine if the project will meet EES water quality objectives. In addition to the comments provided by EES, the EPA also provide the following comments:

- The SWIA notes that sediment basins will be incorporated into the construction phase to manage site run-off. However, it is unclear what proposed discharges will occur from these basins, and whether any such discharges would include contaminated water from excavations or stockpiles. The SWIA notes that in the event that contaminated water from AWRC construction activities is to be discharged into waterways, a discharge impact assessment would be required to demonstrate the discharge will not have significant deleterious impacts to the receiving water body. Any construction stage stormwater discharges from the AWRC should require a discharge impact assessment on receiving waterways as a condition of approval.

- **Further justification is required for choosing to trench across Kemps Creek and South Creek for the construction of the treated water and brine pipelines**. Streams of order 1 or 2 are not included in the assessment for crossing impacts, and justification for this is not provided. Kemps Creek and South Creek are being trenched (rather than directionally drilled under) for the treated water discharge main and the brine discharge main, respectively. There is no indication of the depth and width of these waterways at the crossing point, although it is noted in the EIS

that the South Creek crossing location doesn't pond in the dry season like the other waterways so normal drainage will be temporarily obstructed. Further justification is required for choosing to trench across Kemps Creek and South Creek.

3. Groundwater

The EPA notes that the proposed project may result in potential impacts to groundwater systems including mobilisation and migration of contaminated groundwater, disruption of surface water / groundwater connectivity and altered groundwater water quality and flow regimes. Consequently, the GIA (Appendix M) has recommended the implementation of continued groundwater level and groundwater quality monitoring during the construction and operations phases of the project through a Groundwater Monitoring Program. This will allow for comparison between collected groundwater data and the existing baseline dataset to identify impacts during all phases of the project.

The proposed project will involve the extraction of groundwater and wastewater from dewatering activities during the construction of the treatment facility and pipelines, as well as the release of alkaline concrete washwater. The EPA notes that the agreed approach to manage this material has not yet been developed but may include discharge to a receiving surface water body or stormwater collection system. **Should the proponent wish to discharge groundwater, wastewater or concrete washwater material to stormwater or a receiving waterbody, this discharge may require regulation under an EPL and meet relevant requirements under water quality guidelines**.