Moss Vale Sewage Treatment Plant Upgrade - Review of Environmental Factors (REF)



REF Publicly Displayed for Community Information



Protecting the Environment and Public Amenity



Designing for Long Term Community Demands



Designing Works to a High Standard for Reliable Operations



Essential Upgrading of Moss Vale STP to Protect Public Health



This fact sheet outlines the upgrade works proposed for the Moss Vale Sewage Treatment Plant and the environmental investigations undertaken to date.

Sewage generated within Moss Vale is transferred through a combination of gravity sewers and sewage pump stations to the Moss Vale Sewage Treatment Plant (STP). The existing Moss Vale STP was last upgraded in 1996 and is now operating at near its design capacity. To cater for the projected residential growth in Moss Vale and potential future industrial development in the Southern Highlands Innovation Park a further upgrade of the STP is required. This upgrade will:

- Improve process and operational performance
- Provide treatment capacity to meet current and future population demands in the catchment
- Provide treatment infrastructure to meet environmental objectives from the regulator the NSW Environmental Protection Agency (EPA) and
- Protect the sensitive environment (Wingecarribee River via Whites Creek) that the STP discharges into which is part of the Sydney Drinking Water Catchment

Investigations

As part of the development of the design for the upgrade of the Moss Vale STP Council has been undertaking various investigations into the impact the proposed works would have on the environment.

As endorsed at the Council meeting of 28th June 2023, the (final) draft of the REF is being publicly displayed on Council's website. The REF (in full) can be viewed by searching for Moss Vale STP Upgrade in the search bar on Council's homepage.

The REF is a comprehensive document required to identify and assess potential impacts of the project. It includes extensive studies with modelling on areas including catchment water quality (upstream and downstream) and effluent discharge impact assessment, flora, fauna, air quality (odour) impacts, noise, heritage and contamination.





Design

The design of the STP Upgrade has been based on predicted future residential growth in the catchment to a design horizon of 2046 equivalent population of 15,500 people. By upgrading the facility initially to 20,000 equivalent people spare capacity will be provided to treat industrial discharges from the Southern Highlands Innovation Park as it develops providing a resilient, robust and reliable service.

As the Moss Vale STP is located within the Sydney Drinking Water Catchment the STP Upgrade is required to provide a 'Neutral or Beneficial Effect (NorBE) to the receiving waters the STP discharges into. By incorporating technological improvements, realised since the Moss Vale STP was last upgraded, to improve each step of the treatment process (from receival and screening of raw sewage to the discharge of high quality effluent off site, and the handling and disposal of sludge/biosolids) even though the capacity of the Moss Vale STP is increasing water quality in Whites Creek/Wingecarribee River will improve.

The design has been undertaken in a way to balance stringent water quality (effluent discharge) requirements, construction and operational cost factors (whole of life costs).

Key Findings of the REF

The necessary investigations to allow for the environmental assessment of the project have been undertaken over several years, liaising with regulatory stakeholders whose requirements have influenced key decisions in the design development. Information regarding regulatory requirements and their associated influence on key decisions is contained within the (final draft) REF.

The key findings of the REF is that it is unlikely that there would be significant adverse environmental impacts associated with the Moss Vale STP Upgrade project.

Although there has been a focus on effluent discharge impacts on the receiving catchment given that the STP is in close proximity to residential areas another project priority is reducing the risk of odour emanating from the STP. The design has addressed this issue through several operational changes and technological improvements to the treatment process.

The Odour Impact Assessment modelling indicates that odour concentrations are predicted to decrease by an average of 45% across sensitive receptors under normal operations – providing a healthier and cleaner environment to neighbouring residents.

Project Timeframes

Now that the REF is in final draft form Council can seek concurrence from the EPA for the proposed upgrade and approval from the Department of Planning & Environment to proceed with the construction of the proposed works.

It is anticipated that tenders for the construction of the Moss Vale STP Upgrade will be called later this year with a view to commence construction in mid 2024. Construction of the proposed works on a 'brownfields' site whilst maintaining the operation of the existing treatment plant presents unique challenges, including the careful management of interfaces. Given the scope and complexity of the project construction timeframes are expected to be 18 to 24 months.

The community will be provided with updates throughout the project. As with most construction projects of this scale there will be impacts to the local community during the works. Council will communicate with potentially impacted community members, with the aim to mitigate or minimise the impacts they may be subject to.

More Information

For more information and to stay updated on this project please visit Council's website at www.wsc.nsw.gov.au/projects or contact the Project Delivery team at capital.projects@wsc.nsw.gov.au

Connecting with Council



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