Department of Planning and Environment



Wingecarribee Shire Council 68 Elizabeth Street Moss Vale NSW 2577

Approval number: 16068

Notice of determination

Section 60 approval for upgrade of the Moss Vale Sewage Treatment Plant

I am writing to inform you that on 29 September 2023, I, the Director Local Water Utilities, as delegate of the Minister for Water, in accordance with section 60 (c) of the Local Government Act 1993 have granted approval for the upgrade of the Moss Vale Sewage Treatment Plant, Kennedy Close, Moss Vale.

The approval is subject to the following conditions:

- Consistency with design a local water utility can only construct drinking water treatment works that are consistent with those approved. Some degree of variation is acceptable to ensure that the practical realities associated with design and construction are accounted for.
- Consistency with standards Local water utilities must always adhere to any relevant legal, regulatory, industry or technical standards in completing the works (including environmental planning requirements where relevant).

The approval operates from 28 September 2023.

Scope of approval

The approval relates to the works detailed in the following documents:

- Moss Vale STP Design Basis -Final 20201106.pdf
- Moss Vale STP Detailed Design Report Final.pdf
- Moss Vale STP Upgrade S60 Application Summary Statement.docx
- Moss Vale STP upgrade EPA Comments March 2023.pdf
- Moss Vale STP upgrade EPA Comments WSC Response April 2023.pdf
- Moss Vale STP Upgrade REF Final Draft May 23.pdf
- RFTXXX XXX Moss Vale STP Upgrade General, Civil, Functional, Mechanical, Process and Equipment Specifications for Tender

and in the following drawing sets:

- Hydraulic Profile C012-C014
- PID P001 to P048
- Site Arrangement C010
- Bioreactor C130 to C139
- Clarifier C170 to C175
- Chemical dosing facility C550 to C551, C560 to C564
- Sodium Hypochlorite dosing facility C595 to C598

The work involves replacement of the existing sewage treatment plant (with minor reuse of components of the existing plant) to provide both an increase in treatment capacity and an improvement in effluent discharge quality. The approval relates to stage 1 of the upgrade works only.

The detailed scope of work includes the following components:

• A new inlet works sized for 10 ADWF at Ultimate (17 ADWF at Stage 1)

- A new lift pump station
- The existing catch/balance ponds to be converted to storm ponds
- A new bioreactor splitter box
- Two (2) new bioreactors designed as Four Stage Bardenpho (FSB) but able to be operated as Modified Ludzak Ettinger (MLE) in stage 1. Each bioreactor is designed at accept 1.5 ADWF (FSB mode) or 2.25 ADWF (MLE mode) at Stage 1. This increases to 2.0 ADWF (FSB or MLE mode) each at ultimate (Stage 2).
- A new bioreactor aeration supply system
- Two new secondary clarifiers each sized for up to 3 ADWF (FSB mode) or 3.75 ADWF (MLE mode). Provision for a further two clarifiers at ultimate, each sized for 1.5 ADWF at Stage 2.
- Two RAS pumps in duty/standby configuration
- A new scum pump station sized for ultimate (Stage 2) duty, with a single scum pump (duty only) accepting scum from the two clarifiers (four at ultimate) and delivering it to the aerobic digester or bioreactors (via the lift pump station).
- A new filter feed control system
- Tertiary filters
- A new UV system to replace the existing UV system
- An upgraded reclaimed effluent (RE) system
- A new Waste Activated Sludge (WAS) pumping and thickening system
- An aerobic digester consisting of one existing Intermittently Decanted Extended Aeration (IDEA) bioreactor (both used in parallel at Ultimate).
- A new mechanical dewatering facility consisting of a single dewatering train to start but designed to accommodate a second dewatering train operating in parallel in the future and a third at Ultimate if required.
- The existing biosolids hardstand as a backup or if truck movements are temporarily halted
- Retain sludge lagoons as emergency liquid sludge storage
- A foul water pump station (FWPS)
- An alkalinity storage and dosing system
- A new alum storage and dosing facility
- A new chlorine storage and dosing facility
- A new carbon storage and dosing system
- Site provision for future recycled water treatment system
- Site provision for future tertiary clarifiers for trimming effluent TP if needed at Ultimate
- Site provision for a moving bed biological reactor for trimming TN if needed at Ultimate

The Plant upgrades have been designed to enable the plant to be further upgraded in future as Neutral or Beneficial licencing requirements adjust with increasing catchment flows. The initial operating performance is assumed to be required to meet current licence limits in the Environmental Protection Licence.

Reviews/ appeals

Section 9 of the Regulatory and Assurance Framework for Local Water Utilities outlines the review process for decisions made by the delegated departmental decision maker.

Should your council wish to review part or whole of this decision then make contact with the contact officer below.

The department will monitor the conditions attached to your approval.

Your contact officer for this approval is Ian Burrows, Senior Regulatory Assessments Project Officer, who can be contacted via email at ian.burrows@dpie.nsw.gov.au.

Sincerely

Jane Shepherd

Director Local Water Utilities
Department of Planning and Environment - Water