

PROJECT UPDATE Te Whare Wai Para Nuku Moa Point Sludge Minimisation Facility

SEPT 2025



News & Progress

The final major piece of internationally sourced equipment and powerhouse of Te Whare Wai Para Nuku - the thermal hydrolysis unit and sludge cooler - has arrived on site from the United Kingdom.

The mechanical crew will install these two crucial pieces of equipment inside the Main Process Building in November once hi-spec floor coatings and several other installations have been completed.

There is a lot of progress happening inside the building with painting on all four floors and steelwork, the installation of electrical equipment in the two switchrooms, air conditioning, fire suppression systems and process pipework in the boiler room.

Equipment for preparing and storing a polymer is also being installed. The machine mixes polymer into the sludge to aid the dewatering process.

The roof

Outside, the first section of roof has been installed on the south-eastern side of the building, providing an important weatherproof space for the electrical switchrooms and the team working there.



Under the plastic wrap, work continues installing the external facade.



The existing treatment plant

Work continues up at the treatment plant installing pipework that will connect the new pumps to the existing sludge tanks and transport the sludges down to Te Whare Wai Para Nuku.

Teams will now get to work on post-construction checks, the critical first phase of commissioning.

Digester tanks

Work continues pouring the 'tidy' concrete slabs around the pump support plinths, which will allow for easy hosing and cleaning of the area. The staircase between the digester tanks has reached full height and work is underway erecting the walkways around the top.

A concrete pad between the building and the road has been completed to house a dust filter and the fire suppression equipment.

Mechanical teams have also started installing pipework and nozzles inside the digester tanks. These will be used to keep the sludge circulating.

Odour treatment tanks

Construction is now finished at the odour treatment plant with the last main tasks completed. This has included erecting the 19m flue that will discharge treated air along with the 3m diameter fans installed in the fan building.

Turn the page to find out more about commissioning...



What is commissioning?

When Te Whare Para Nuku is completed, Wellington City Council will be expecting more than just a finished facility. They expect systems that work, safety measures that hold and performance that matches design.

Commissioning is a systematic checking process across the life cycle of the project.

At each stage the team confirm that systems work as they were designed to and comply with contractual and regulatory obligations.

This starts long before any switch is turned on during pre-design and design, ensuring project goals were clearly defined and documented by the project team.

They remain responsible through handover, verifying that all commissioning deliverables are complete and accurate.

Pre-construction commissioning activities have also included factory acceptance testing, demonstrating that equipment is made and built to requirements and performs as it should.

This is supported by a host of documentation that is used post-installation to run tests with the aim of replicating factory test results.

With major equipment such as the thermal hydrolysis unit, the manufacturer or supplier helps our crews check and install the equipment on site.

Ensuring every bolt, wire and connection is done correctly and systems work as required. Manufacturer/supplier support continues across the operating life of the equipment.

We also carry out a wide and comprehensive range of checks across mechanical, structural and electrical systems.

Input and output tests are carried out to confirm the correct information is flowing through control panels.

Other tests monitor equipment that rotates to see if fans and motors, spin at the right speed and in the right direction.

As part of commissioning the odour treatment plant, we will soon start "seeding" the bio scrubbers.

This involves adding nutrients and bugs to the tank that will "eat" the odours from the untreated air sucked from the facility.

After a few days settling in we will feed untreated air into the tank and test the discharge before it is discharged from the flue to ensure it meets expected performance levels.



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Meet Mike

"I'm happy to be involved with Te Whare Wai Para Nuku and to be a part of this great team. I'm looking forward to the challenge of successfully delivering this strategically important infrastructure project for Wellington City."



Mike is a Process / Chemical Engineer who has over 30 years of experience working on a range of wastewater infrastructure projects throughout the world.

He was involved in the commissioning of the original Moa Point Wastewater Treatment Plant, back in 1998! So he's very familiar with the plant, it's unique processes and the very windy working conditions at Moa Point!

Originally from Canada Mike brings a breadth of experience and technological knowledge, including project management, design and he has completed the commissioning on numerous industrial and municipal wastewater and biosolids treatment projects.