



Domestic Liquid Module Odour Control Facility (OCF) at Tuas Water Reclamation Plant

PROJECT PROGRESS

As of Dec 2025, the Deep Tunnel Sewerage System Phase 2 (DTSS2) project as a whole is about 80% complete.

All the 5 tunnel contracts have achieved Certificate of Substantial Completion (CSC). Meanwhile construction of the smaller Link Sewers, that join shallower existing sewers to the deep tunnels, is progressing steadily with 75% of pipe jacking works completed thus far.

For Tuas WRP, overall completion is about 57%. Bulk of the superstructures have been completed; notably, the first modules of both Domestic and Industrial Liquids facilities have been structurally completed. MEICA installation works are ramping up, with digesters being hydraulically tested using seawater. Efforts are focused on the deep shafts at the influent pumping station, which drive the overall critical path. At this point in time, all shafts have risen about 40% from the final excavation depth and making steady progress upwards



80% Construction Progress



142 million
4,600

Total Man-hours (Overall)
Workers Daily (Overall)

* as at 30 Nov 2025

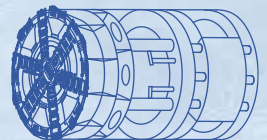
DTSS PHASE 2



Domestic Used Water
650,000m³/d
Industrial Used Water
150,000m³/d



Link Sewer
Internal Diameter
0.3 to 3m



Tunnel
Internal Diameter
3 to 6m

MEICA Contract (Conveyance)

This MEICA project comprises 9 Air Jumpers (AJ) and 4 Odour Control Facilities (OCFs) systems installed along the DTSS Phase 2 tunnels. The AJs and OCFs are critical equipment that enables us to effectively manage the odour air within the deep tunnels. On 9 October 2025, the Certificate of Substantial Completion (CSC) was issued to MEICA contractor, Memiontec Pte Ltd; marking another key milestone in our journey to overall project completion.



MCC Panel Installation



Internal Fittings of OCF



Activated Carbon Column

Handover of Completed Asset to WRN

Following the completion of all 5 tunnel contracts, assets are being progressively handed over to the Water Reclamation Network Department (WRN). As of now, 7 out of 18 locations have been successfully handed over to WRN.



Access MH Inspection



Roller Gate Shaft Cover Inspection



Safety Bollard Inspection

Tuas WRP

Contract 6B

Site Completion Works

The contract for the final-stage works essential for TWRP's completion, (such as final ground levelling, roads, landscaping, perimeter security) and the building to store DTSS2's roller gates has been called.

Contract 4B

Digestion Pre-Treatment and Sidestream Nitrogen Removal Facilities

The digestion pre-treatment process known as Thermal Hydrolysis Process (THP) is taking shape on site with the installation of heat exchangers, pumps and working platform.

Contract 3D1

Domestic Liquids Module 1 – MEICA and NEWater

At DLM1's headworks, screens for filtering debris, conveyors for material transport, and hoppers for collection have been installed. The first of six primary sedimentation tanks, which help settle solid particles, is now in place.

Contract 2A

Influent Pumping Stations

18 of the 26 pumps that pump used water from the deep tunnels into TWRP for treatment have been installed. This includes 8 domestic pumps and all 10 industrial pumps.



40.2 million

Man-hours worked



14/20

Contracts awarded



57%

Construction progress

Closing a Chapter: Celebrating 6 Years of Safety Excellence at Our Safety Training Facility



Since 2019, more than 28,000 people have undergone the experiential safety training facility located at the North Staging Ground in Tuas. The goal was to allow each and every personnel, regardless of background, language or nationality to physically appreciate the importance of safety via training simulators. This endeavour, over the last 6 years, was only made possible by the dedicated McConnell Dowell's team of project manager, trainers, guards, administrator and specialist.

On 7 Nov 2025, we gathered to mark the close of a chapter and to express our heartfelt appreciation. For the past 6 years, this team has upheld and championed safety excellence ensuring that thousands of staff and workers involved in the Tuas WRP project and the broader DTSS2 programme were well-trained and prepared. This facility has been instrumental in reinforcing that safety is not merely a requirement on site, but a shared culture and responsibility.

Sharing Knowledge, Inspiring Innovation at Tuas WRP



4th Systems Engineering Course
30 September 2025



MOM WSH Learning Journey
30 October 2025



Smart Expert Panel
2 December 2025



Home Team Science & Technology Agency Learning Journey
5 November 2025



MOE Learning Journey
10 November 2025



PUB/MSE Learning Journey
28 November 2025



LKY School of Public Policy Young Leaders and Changemakers Summer Camp
2 July 2025

Over the past few months, Tuas WRP welcomed several distinguished guests as part of knowledge-sharing and learning initiatives to experience the scale and innovation behind this next-generation water infrastructure. These visits underscore Tuas WRP's role as a hub for collaboration and knowledge exchange in sustainable water management.

Cogs in the Wheel: Quantity Surveyors

In this issue, we feature our very own Quantity Surveyors from DTSS 2 project, who are instrumental on the project.

Why did you choose QS as a career?

Maryanne: Becoming a QS was not part of my original career plan. The opportunity came through during my studies and, being partly influenced by my father's own career in this line, I decided to give it a go. And I've found the work to be quite interesting, seeing projects from beginning to completion.

Chee Chuan: I was always interested in building Lego bricks when I was young. Over time, this interest evolved into a curiosity about how buildings stand and how systems work together to allow them to function as intended.

What keeps you motivated in DTSS2 project?

Maryanne: You don't often get the chance to work on a project like DTSS2, something this large and complex. Working with so many experienced professionals has been a great learning opportunity. Furthermore, the DTSS2 team spirit is amazing. We help each other and work through challenges to find the best solutions. This sense of teamwork is something I really value in a job.

Chee Chuan: DTSS 2 is a mega and complex project. Being involved in the development and completion of such a nationally significant project is a once-in-a-lifetime opportunity and contributes directly to Singapore's journey towards water independence.



Maryanne Chia
Contract Manager
DTSS2 Department



Tay Chee Chuan
Assistant Director
DTSS2 Department



Discussion session between PUB and Consultant (Jacobs) Quantity Surveyors. Chee Chuan (right, in yellow).

Valuable lesson learnt and key takeaway from this project

Maryanne: One of the most valuable lessons I've learned is that communication really is everything. Effective communication lines with all parties involved in the project helps prevent confusion and conflicts. I've also learned the value of asking questions, no one expects you to know everything, and people are always ready to share their knowledge.

Chee Chuan: Clear communication is critical. Alignment of expectations and end goals leads to win-win outcomes, while misalignment often results in conflict and friction.

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