November 2023

Frequently Asked Questions

What is Mount Evelyn Water Treatment Plant (WTP)?

To prepare us for the future and provide greater protection against storm events, Melbourne Water is planning to build a new back-up water treatment plant in Mount Evelyn. The new water treatment plant will ensure water supply is maintained if fire or power failure impacts Silvan Reservoir Water Treatment Plant's operational ability and will also prepare us for the future with greater protection against extreme weather events.

How did you select the location of the new WTP?

The new water treatment plant will be constructed on the Melbourne Water pipe track between Tramway Road, Warrawee Road, Kuyura Road, Murrumbung Road and Wombalano Road.

The location for the Mount Evelyn Water Treatment Plant was selected due to:

1. Proximity to Silvan Reservoir and water treatment plant.
2. Ability to treat water carried by all three underground transfer water supply mains in one location. After this point the water supply mains branch off in different directions to service 50 per cent of Melbourne's water supply.
3. This land is owned by Melbourne Water and is zoned PUZ1 (Public Use Zone – Service & Utility).
4. Flat, mostly cleared land and close to existing roads.

Did Melbourne Water explore other sites for the Water Treatment Plant?

Yes, as part of Melbourne Water's due diligence planning process several locations were assessed to determine the most suitable for the new water treatment plant.

The location assessment was based on the following criteria:

1. The location can effectively treat Melbourne's water supply safely, efficiently and reliably and is able to distribute the treated water supply to Greater Melbourne effectively.
2. The location provides the best value investment and water quality outcome for all Victorians.

3. The location incorporates the highest levels of safety for the community and MW staff.
4. Preference to utilise existing Melbourne Water owned land that is zoned appropriately.
5. The location is upstream away from customer taps to avoid heightened risks of contamination in Melbourne's water supply.
6. The location is close to existing roads and the land is mostly cleared, requiring less tree and vegetation removal to build the water treatment plant.

Other criteria in the assessment included ecology, cultural heritage and soil quality outcomes.

How do you determine the size of the Mount Evelyn Water Treatment Plant?

The Water Treatment Plant size is based on the current and future treatment requirements, safe and industry approved access, space to undertake maintenance and future asset replacements and truck access.

How many trees will be removed by the project?

In a recent design review tree removal was reduced from 89 to 66 trees – a 25 per cent reduction. This was achieved by moving the power line installation to the Tramway Road side of the site and narrowing the internal loop road. Four trees will be pruned for the works.

An arborist will be engaged to undertake all works relating to vegetation.

Why do trees need to be removed?

Melbourne Water recognises that every tree has significant ecological and community value and we have worked hard to minimise the tree removal required for the new treatment plant.

Tree removal is required to accommodate the road alignment, service installation, new power line installation, and construction of water treatment assets.

What is the project's vegetation reinstatement plans?

Due to the Bushfire Management Overlay planning zone, replanting is not approved on the Melbourne Water land and new WTP operational area. Melbourne Water will continue to work with the Mount Evelyn community on environmental improvement opportunities through existing programs such as Melbourne Water's Liveable Communities and Liveable Waterways grants.

In line with the Victorian Government's Biodiversity Offset scheme, we have secured vegetation removal offsets for the vegetation loss and where appropriate will work with local community groups to facilitate additional planting in the local area and enhance biodiversity.

Why did we investigate changing the power line relocation and why is this now a better option?

This year Melbourne Water investigated changing the proposed location of the new power lines to reduce tree removal. The utility owner approved the change in location from the southern side of the pipe track to the northern side (closer to Tramway Road). This change reduced vegetation removal on the southern side of the pipe track maintaining the majority of the existing screening to the site's neighbours on Kuyura/Murrumbung Road.

Why was the power line not installed underground?

The utility owner has instructed the project that the high voltage cable (power lines) cannot be installed underground due to network requirements and protection.

How will the project protect local wildlife during vegetation removal?

Ecology experts were engaged by the project and have undertaken an Ecological Impact Assessment. An experienced fauna handler will conduct a pre-clearance survey before vegetation clearing and undertake activities to safely rehome any fauna if found onsite. If necessary, they will also be present to observe the vegetation removal process.

Have you considered the Powerful Owls in your planning?

The Powerful Owl is a vulnerable species and of importance to the Mount Evelyn area. Powerful Owl assessments will be undertaken annually during the project life as advised by our ecologist. Assessment outcomes will inform our construction and environmental plans.

Will the water treatment plant always be operational?

Yes, the plant will always be operating.

However, the Mount Evelyn Water Treatment Plant will only ramp up to maximum operation if the Silvan Treatment Plant experiences an outage.

Outside of these times, the Plant will operate at a low, continuous level. This is to ensure the plant can immediately begin treating water if the Silvan Treatment Plant experiences an outage.

Will the Water Treatment Plant operate after hours?

The site will operate and be accessible by approved personnel 24 hours per day, seven days a week. Access afterhours would only be due to an unexpected operational requirement.

Will the Water Treatment Plant be noisy?

The project is entering the detailed design phase in which details of Plant's operation and noise will be verified. The team will seek to select low noise emitting equipment, seek to orientate noise sources away from neighbours and where possible house items within in the building.

The Treatment Plant equipment and backup generators are housed within the building, further minimising operational noise.

Once the Plant is operating, day to day site noise will include:

1. Operational and maintenance staff attending site.
2. Operational deliveries.
3. Occasional testing of building security, testing of the plant's generators, and alarms.

The only sources of external noise anticipated from the building are from the plant's air conditioning units and ventilation fans. Detailed design – will guide further information.

The facility will operate within EPA regulations.

Will chemicals be stored on site?

Yes, chemicals will be stored on site to disinfect the water in the transfer pipelines. All chemicals will be stored in accordance with Australian Standards and Regulations.

The main chemical that is stored on site is a disinfectant known as sodium hypochlorite. This is a non-combustible liquid and is commonly used around the world to disinfect water. It will be stored and used in accordance with Australian Standards and Regulations.

To add the correct amount of disinfectant to the water, we will have equipment analysers on site to test the treated water. These analysers require a small amount of carbon dioxide to assist in accurate measurements. Carbon dioxide (C02) is a non-

hazardous, naturally occurring gas and can be found in natural sources including rivers, lakes, hot springs and even carbonated beverages.

As the treatment plant will be critical infrastructure for the disinfection of Melbourne's drinking water, we will have two backup diesel generators onsite in the case of mains supply outages. 480 litres of diesel will be stored in total, with two emergency generators each with 240 litres storage. The generators will be located within the main plant building to protect against fire risk.

How will chemical spills be prevented?

In accordance with Australian Standards and Regulations, the chemicals will be stored in chemical tanks in a building constructed to flame-zone requirements, which is the highest rating applied to building engineering and construction.

The chemical tank room will have a bund (like a giant concrete bath without a drain) to capture any spills which will be disposed of appropriately via a vacuum tank.

How much sodium hypochlorite will be stored site?

There will be three 24 kilolitre storage tanks within the main plant building. Each storage tank is approximately the same size as a large round water household tank.

What will be the frequency of chemical deliveries to the plant?

During routine operation of the plant a chemical delivery could be expected weekly. When the Plant is in full operation a chemical delivery could be expected daily (including weekends).

What is the delivery truck type and size that is delivering materials to the plant?

Deliveries are made by a semi-trailer which can be up to 19 metres long and 3.8 metres high.

What are the external lighting requirements?

As this is a back-up treatment plant external lighting will only be turned on when operational staff need to attend site at night or in low light to enable safe access...

External motion activated security lighting will be installed and designed in accordance with environmental assessments including ensuring external lighting provides appropriate light levels with minimum environmental impact and avoiding lighting with significant throw onto adjacent vegetation and neighbouring properties.

Is the new Water Treatment Plant a fire safety risk?

The Plant does not change the current bushfire safety risk in the area.

The treatment plant has been designed in accordance with Australian Standards and Regulations. As part of the design process, we have undertaken a Bushfire Risk Assessment for the treatment plant. The findings incorporated into our design include:

1. The buildings will be constructed in accordance with the relevant building regulation requirements for a building in a designated bushfire prone area for the protection of water treatment asset within the buildings.
2. Due to the Bushfire Management Overlay planning zone, replanting will not take place on the Melbourne Water land and new WTP operational area.
3. No public access into the fenced site area.
4. Vehicle access on the private access road is restricted to Melbourne Water approved vehicles.
5. The back-up power generators are housed within the main plant building.

Melbourne Water will prepare an operations specific bushfire plan for the site to ensure bushfire hazards are managed.

We will work with Country Fire Authority and Fire Rescue Victoria to develop the Site Emergency Response Plan.

Will the WTP and operational area be accessible to the public?

The treatment plant and surrounding operational area will not be accessible to the public. The operational area including the building and access road will be fenced to ensure public safety. There will be an access gate near Tramway Road on the new plant access road to ensure only Melbourne Water and approved contractor vehicles access the site.

A grassed thoroughfare between the operational site and tree line on Tramway Road side of site will allow public access through the area to connecting trails in the area.

When will construction works on site begin?

We expect works to begin in mid to late 2024, contingent on planning approval being received.

How long will construction take?

Construction will take approximately two years.

What's the project's planning process?

Consistent with the Planning and Environment Act 1987, Melbourne Water has submitted a planning application to Yarra Ranges Council for approval, prior to commencing construction of the new water treatment plant.

For more information on the planning permit process please visit Department of Transport and Planning: Planning permits or the Yarra Ranges Council website.

Who have you been working with on this project?

We have been working with a variety of local community groups and stakeholders as part of this project. We have a dedicated communications and engagement team that regularly engages with the community and local organisations in Mount Evelyn. This includes:

1. Yarra Ranges Council
2. Mount Evelyn Environment Protection and Progress Association (MEEPPA)
3. YMCA Camp
4. Department of Energy, Environment and Climate Action
5. Department of Sports & Recreation Victoria
6. CFA
7. AusNet
8. Yarra Valley Water
9. South East Water
10. Telstra

How have you incorporated community and stakeholder feedback into the project's designs?

Community and stakeholder feedback has been integral to Melbourne Water developing a design that provides the best long-term outcome for the local community and Greater Melbourne.

In response to the Council and community concerns with the previous proposal, the current proposal has sought to make substantial improvements from the previous application in relation to the built form design, minimisation in vegetation removal and impacts the surrounding semi-rural landscape setting. These improvements include:

1. Reduction in overall extent of the facility: Reduction of site footprint, resulting in a 50 per cent reduction to the fenced compound area allowing for continuous community access past the site. The upstream analyser structure at the top of the hill has also been removed.

2. Location of plant equipment: Consolidation of previous external equipment into the WTP building for indoor location away from adjoining neighbours.

3. Visual impact of the facility: Reduction of building massing, with urban designers engaged to provide guidance on selection of exterior textures and finishes to improve the visual integration of the built form with the surrounding landscape.

4. Extent of tree and vegetation removal: Number of trees to be removed has reduced by 25 per cent; Extent of native vegetation to be removed has reduced by 38 per cent.

5. Screening of the facility from adjacent residences: Realignment of the overhead powerlines to the north of the proposed WTP resulted in maintaining tree screening along the Kuyura Road easement adjacent to the residential properties.

6. Community access and maintaining the existing pipe track as a thoroughfare: The facility footprint has been optimised and the loop road narrowed. This has enabled the removal of the originally proposed retaining wall and retention of a section of the existing northern pipe track for continuous public access past the new facility.

How can I find out more about the project?

For any questions you may have about the project, you can get in touch with a member of the project team via:

- Visit our project website www.melbournewater.com.au/mountevelyn
- Email the project team at MountEvelynWTP@melbournewater.com.au
- Call our project information line on 1800 931 169.
- Attend our community information session.

Keep up to date with what's happening

For more information about this project or our other activities please call 1800 931 169 on or visit www.melbournewater.com.au/mountevelyn

Interpreter

For an interpreter, please call the Translating and Interpreting Service (TIS National) on 13 14 50

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