

What is Western Soil Treatment?

Maddingley Brown Coal has applied for planning and environmental approval to build a facility to safely manage tunnel spoil from the West Gate Tunnel Spoil Project. The facility – Western Soil Treatment – is adjacent to the Maddingley Brown Coal mine and Category C licensed landfill.

If chosen as a site to receive the soil – known as tunnel spoil – from the West Gate Tunnel Project [WGTP], the facility 24 hours a day, 7 days per week, to support the operational continuity of the project once when tunnelling begins.

What is the West Gate Tunnel Project (WGTP)?

The WGTP is a major road infrastructure project that will end Melbourne's reliance on the West Gate Bridge by building tunnels linking the West Gate Tunnel and the Port of Melbourne/Footscray Road.

The project is a partnership between the Victorian Government and Transurban and will be built by construction contractors, the CPB Contractors - John Holland Joint Venture (the JV).

The project requires excavation and construction of two tunnels, in-bound and out-bound, and construction of an elevated motorway.

How will the spoil be transported?

To build the West Gate Tunnel, approximately 1.6 million cubic metres of rock and soil will need to be removed.

The spoil from the tunnel project will be wet when transported, eliminating the potential for dust. Specialist trucks contracted by the JV will be used to transport the wet soil to the Western Soil Treatment site.

The trucks will be sealed and covered for the journey. The trucks will be GPS tracked to use only approved routes, with the in and out routes split for trucks during the day, this will halve the daytime number of trucks using Bacchus-Marsh Rd and the Avenue of Honour.

Like on all major projects, detailed traffic assessments and a road safety audit have been carried out to ensure the most suitable routes are used and traffic impacts are appropriately managed.

The builder will work with the local community to ensure they are informed about impact and, where possible, implement any mitigation measures.

How will you compensate for the impact to roads?

A detailed traffic assessment has been undertaken that shows the roads can manage the volume of trucks required.

Some upgrades to signage, lighting and intersections will be completed before the facility receives spoil.

Western Soil Treatment will work closely with Moorabool Shire Council to ensure local roads are maintained through an appropriate payment to Council.

What contaminants are anticipated to be present in the spoil?

With projects like the West Gate Tunnel Project in former industrial areas, it is not uncommon to find that the soil is sometimes contaminated.

Extensive soil testing was completed during the planning phase for the West Gate Tunnel Project, and the testing carried out found low levels of PFAS (Per- and polyfluoroalkyl substances) on site, which is what was expected to be found. You can read more about PFAS [here](#).

It is anticipated that actual levels of PFAS contamination in project spoil will be significantly below the limits approved in the EPA classification for the Western Soil Treatment facility.

How contaminated is the soil?

Modelling indicates that the soil will be contaminated with low levels of PFAS, around 0.7 micrograms per litre¹.

Any soil with a higher level of contamination will be taken to a licensed facility for disposal no longer than 21 days after it arrives on site.

How will the facility work?

Covered and sealed trucks arriving at the site will unload the soil into designated bays. The soil, which will be wet, like thick mud, will be held in bays lined with layers of compacted clay, cement, lime and other materials to ensure they are watertight.

Test storage bays have been constructed and tested and proven to stop wastewater reaching groundwater.

A sample from each batch of soil arriving daily will be sent to a laboratory for testing. This testing will be conducted in line with national policies for managing PFAS and EPA regulations.

The soil will be held in the storage bays for a maximum of 21 days before being moved into the second area, a lined containment cell that is engineered to the highest safety standards.

¹<https://westgatetunnelproject.vic.gov.au/construction/soil-management/expected-pfas-levels>

What about water run-off?

Water from the facility will be drained into a purpose-built pond. A treatment plant will remove traces of PFAS through a state-of-the-art filtration process, leaving clean water that meets drinking water standards.

If contamination falls below an EPA-set criteria, the soil will be moved to a containment cell engineered to the highest safety standards. If higher levels of contamination are found, the soil will be taken to a licensed offsite facility for disposal.

How does the lined containment cell work?

The containment cell is lined with multiple layers to collect and safely capture leachate – water that seeps out of the soil. The efficacy of the cell's liner is monitored by the sampling and analysis of groundwater monitoring bores.

Following feedback from stakeholder engagement conducted in February and March 2020, the design of the containment cell was strengthened to further reduce the already low risks.

How are you managing waste water?

A state-of-the-art wastewater facility will treat water to remove traces of PFAS.

Water from the wet spoil, storage bays and containment cell will drain into a large wastewater pond.

There, the wastewater will be passed through a filtration system that uses carbon filters

Any PFAS in the water will bond to the carbon filters. Full filters will be taken to a licensed facility for disposal.

This process leaves behind clean water that meets drinking water standards. This water will be used for onsite for dust suppression, forming a closed-loop wastewater treatment cycle.

What environmental checks will be in place?

Western Soil Treatment will be operated in line with strict EPA regulations.

The facility will be built and operated in line with the approved Environmental Management Plan.

The Environment Management Plan - which is available online [here](#) - details how the facility will receive, handle, analyse and dispose of the soil, including the removal of traces of PFAS chemicals from wastewater.

The Environmental Management Plan covers all aspects of the facility, including soil management and handling, sampling and analysis, wastewater treatment and disposal.

It also includes requirements for regular checks by an EPA appointed independent auditor.

How did you consider feedback from community consultation in the proposal?

The proposal has been refined over eight months of consultation with stakeholders, regulators and agencies.

In early 2020, MBC engaged with stakeholders and the community about its proposal. This engagement included four community information sessions, 12 targeted stakeholder briefings and two community pop-ups.

As a result of this feedback, the proposal was further strengthened to further decrease already low risks. Changes include:

- A wastewater treatment plant to remove traces of PFAS, leaving clean water that meets drinking water standards.
- Additional layers of lining in the containment cell
- Additional layers of lining on the base of storage bays
- The construction and testing of a storage bay to prove the construction is sound
- Additional studies to confirm no adverse impacts on trees on the Avenue of Honour.

Why haven't you released all of the planning and environmental reports?

The tender process is yet to be completed and many of the materials contain commercially sensitive information.

The EMP has been published on the EPA website.

Other planning and environmental reports and documents are expected to be made available at the end of the tender process, if a contract is awarded.

How will Western Soil Treatment keep the community updated?

Western Soil Treatment is genuinely interested in engaging with the community and provides a range of services as part of our ongoing commitment to keeping you informed and supporting our local community:

- A dedicated website with project information and updates, including engagement opportunities at westernsoiltreatment.com.au
- An email address – info@westernsoiltreatment.com.au - to receive enquiries. There is also a form on our website.
- A Community Liaison Officer to assist with community and stakeholder engagement for this project. Email Alice O'Mara, Community Liaison Officer, at alice@westernsoiltreatment.com.au
- A dedicated 24-hour hotline, 1300 978 199, to receive enquiries, feedback and complaints.

In addition, the Maddingley Brown Coal Community Consultative Committee (MBCCC) provides members of the community with an opportunity to engage with MBC. The MBCCC is an ongoing point of contact with the community and helps MBC to provide information to the community about activities on site and consult the community about those activities.

When will MBC start building its facility?

While these approvals are an important step, the process continues, and the project will only proceed if Western Soil Treatment is selected by the West Gate Tunnel Project's builders.

Stakeholders and the community will be notified before construction commences.

When will MBC start receiving spoil?

MBC will not receive any West Gate Tunnel spoil until a contract is issued by the project's builders and its facility is built.

For the latest information or to contact our team, visit westernsoiltreatment.com.au or email us at info@westernsoiltreatment.com.au.

MANAGING IMPACTS

What impact will there be from traffic?

Traffic on the Avenue of Honour has been a common concern. The Avenue of Honour carries 13,900 vehicle movements a day on average.

Average additional traffic is projected to increase by 450 vehicle movements per day with the peak increase at 850 per day. This represents a 3 per cent increase in traffic on average with a peak increase of 6 per cent. Trucks will be directed to use the Parwan Exford road as an alternative to the Avenue for return trips at peak hours and to not use the Avenue at all during events such as the strawberry festival or Anzac Day.

Any damage to road ways will be fully repaired by the project. Upgrades undertaken of roads for the project such as widening pavements and tree protection works are also to be paid for by the project.

Temporary speed limits will be in place in selected zones for the duration of the project to manage any risks generated from additional traffic.

Why does the Avenue of Honour have to be used?

Based on the feedback received from the community during initial stages of consultation, Maddingley Brown Coal have completed additional studies that confirmed no adverse impacts on trees on the Avenue of Honour.

A detailed traffic assessment has been undertaken that shows the roads that can safely accommodate the trucks required to deliver tunnel spoil to the proposed site.

The Avenue of Honour is a declared haulage route for heavy vehicles by Regional Roads Victoria. This is due to its condition, size and current use by the market growers in the region as the preferred transport route.

Some upgrades to signage, lighting and intersections will be completed before the proposed facility receives spoil, should planning approval and a contract be received. The trucks will use the alternate route of Parwan-Exford roads during peak times on the Avenue of Honour and community events and festivals.

Western Soil Treatment will provide funds to Moorabool Shire Council for road maintenance and upgrades required as a result of the project. Western Soil Treatment will continue to work closely with Moorabool Shire Council to support the maintenance of local roads.

Why did MBC apply for a permit exemption from Heritage Victoria?

MBC completed additional assessments and applied for the permit exemption for the Avenue of Honour at the request of Heritage Victoria. It was – and remains – MBC's position that an exemption was not required because all studies concluded there would be no adverse impacts.

The assessments looked at the existing road condition and pavement of the Avenue of Honor, the potential for adverse affects from diesel fumes and the health of the elms on the avenue.

The reports identified evidence of existing disease on one elm that was considered to have the potential to spread to other trees, and this information was passed onto Council which is responsible for managing the trees.

Should I be concerned about dust?

Dust generation from placement of tunnel spoil in the containment cell is not expected to be an issue due to the wet nature of the spoil material.

Dust generation from construction activities and vehicle movements will have the potential to generate dust if not appropriately managed. Dust suppression will be a continuous activity during potential dust generation periods. Dust will be suppressed using water carts and sprinklers on all trafficked areas. Recycled water will be used for dust suppression.

Continuous dust monitoring devices will be used to monitor compliance with dust levels.

Will the facility be noisy?

Similar to dust noise will be generated by construction and operations at the site. Noise will be managed by use of:

- Perimeter bunds(mounds) around the site.
- Restricting times of activities in parts of the site closer to offsite receptors where noise is potentially a concern.

- Fitting noise suppression devices on equipment such as reversing beepers.

Continuous noise monitoring devices will be used to monitor compliance with noise levels.

Is there a risk to Parwan Creek?

The controls to be put in place at the site will ensure that there is no impact to the environmental or human health.

Liners used in the holding bays and containment cell will ensure that groundwater is protected. Any surface water that could potentially come in contact with spoil containing PFAS will be stored in the leachate dam.

No PFAS contaminated water will be discharged to Parwan Creek.

Any water that has PFAS levels above drinking water criteria for PFAS will be treated prior to reuse on site.

Stringent controls and monitoring will be in place to ensure that there will be no impacts offsite, including from dust, noise or water runoff. A monitoring program for fauna will be implemented as part of the project environmental program.

Will I see the site?

An amenity bund will be placed around the perimeter of the project works area to ensure that operations are screened from any close observers.

There is the potential that observers south of Parwan Creek may have limited views of the containment cell during construction and post closure.

The majority of the containment cell will be placed in the gully adjacent to the existing landfill and coal mine with limited potential for offsite visual impacts. The capped containment cell will have the appearance of a gently sloped mound covered with grasses. The maximum height of the containment cell is below that of the onsite landfill.

Why was the Western Soil Treatment EMP amended?

The EPA has approved an amendment to Western Soil Treatment's Environmental Management Plan. The amendment approves an upgrade of the containment cell, providing even greater protection to the community and the environment.

The level of contamination expected in the soil remains the same – 0.7 Micrograms per litre, or less than half recreational swimming guideline.

The strengthened containment cell adds an even greater layer of protection against already very low risks.

How is the containment cell stronger?

The containment cell design has been upgraded from what is known as Type 3 cell to a Type 2 cell– doubling the strength of the liner system.

The strengthened containment cell adds an even greater layer of protection against already very low risks.

How much PFAS can WST accept?

The upgrade of the containment cell resulted in a change to Western Soil Treatment's EPA-approved acceptance criterion for PFAS.

The level of contamination expected in the soil remains the same – 0.7 Micrograms per litre, less than half the recreational swimming guideline.

Does this increase the risk to the community and environment?

The upgrade effectively doubles the level of protection the containment cell provides.

The level of contamination expected in the soil remains the same – 0.7 Micrograms per litre, less than half the recreational swimming guideline.

Will you be submitting more amendments?

The approved Environmental Management Plan requires Western Soil Treatment to submit further construction audit reports that confirm the containment systems have been built in accordance with the approved designs.

What was wrong with the other EMP?

The revised EMP responds to a legal error made by the EPA in assessing and approving the original EMP.

The previous EMP included a series of conditions. The EPA has admitted it did not have the legal authority to set these conditions.

As a result, all work that was subject to a condition in the previous approval was completed before the revised EMP was submitted for EPA approval.

For example, the previous approval included a condition requiring an independent auditor approve detailed designs. This work was completed before the revised EMP was submitted for approval.

MBC has completed additional hydrogeological modelling and assessment, additional stormwater design and rehabilitation and aftercare management plans.

What's new in the revised approved EMP?

MBC was invited to resubmit an EMP to the EPA after previous approvals for all tenderers were revoked.

Before resubmitting the plan for EPA approval, MBC undertook additional work to further strengthen its Western Soil Treatment Proposal.

The revised EMP includes independent auditor approval of detailed designs for the holding bays and containment cells.

PLANNING SCHEME AMENDMENT

What is the planning scheme amendment?

A planning scheme amendment is an approval that allows for land to be used for a certain purpose.

The Minister for Planning has approved planning scheme amendment c95moor to allow the Western Soil Treatment to be built and operated.

The approval rezones the land to allow the facility to be built and operated for the 18 months to two years that it will take to complete the West Gate Tunnel Project's twin-tunnels.

The planning scheme amendment is limited to the life of the West Gate Tunnel Project – estimated at between 18 months and two years.

You can read more about the planning scheme amendment and the conditions [here](#).

What does it allow you to do?

The planning scheme amendment allows Western Soil Treatment to build and operate the facility on the chosen site but only after strict conditions have been met.

These conditions include requirements for Western Soil Treatment to submit detailed plans to the Minister for Planning before certain works can occur.

Conditions relate to issues like traffic management and road safety, flora and fauna, noise and dust mitigation, site closure and aftercare management.

The planning approvals include a series of conditions requiring works to upgrade roads and intersections before operation of the facility can commence.

Who approved it?

The Minister for Planning considered and approved the application using his powers under s20(4) of the Planning and Environment Act.

The Minister has powers to consider matters that he considers to be of state significance.

As part of the planning process, the Minister for Planning consulted with Moorabool Shire Council, providing technical reports for Council feedback. Western Soil Treatment supported this decision and consented to reports being provided to Council for review.

The planning scheme amendment, relevant documents and conditions can be viewed on the Department of Environment, Land, Water and Planning website [here](#).

Why did you not ask Council to approve it?

The Minister for Planning considered and approved the application using his powers under s20(4) of the Planning and Environment Act.

The Minister has powers to consider matters that he considers to be of state significance.

The Ministerial planning scheme amendment process is consistent with the planning process undertaken for the broader West Gate Tunnel Project, and for other proposed spoil management sites.

Was the community consulted?

The proposal has been refined over eight months of consultation with stakeholders, regulators and agencies.

In February and March 2020, MBC undertook engagement on its proposal. This included community information sessions, a series of stakeholder briefings and two community pop-ups.

To see how stakeholders' feedback helped shape the proposal, [click here](#).

Was Council consulted?

Councillors and officers were briefed on the proposal before the application was submitted to the Minister for Planning. To see how Council's feedback helped shape the proposal, [click here](#).

The Minister for Planning also conducted statutory consultation with Council under the provisions of s20(5) of the Planning and Environment Act 1987, providing Council with all technical and background documents for review and feedback.

Western Soil Treatment supported this decision and consented to reports being provided to Council for review.

What are the conditions?

The planning scheme amendment allows Western Soil Treatment to build and operate the facility on the chosen site but only after strict conditions have been met.

These conditions include requirements for Western Soil Treatment to submit detailed plans to the Minister for Planning before certain works can occur.

Conditions relate to issues like traffic management and road safety, flora and fauna, noise and dust mitigation, site closure and aftercare management.

The planning approvals include a series of conditions requiring works to upgrade roads and intersections before construction on the facility can commence.

The planning scheme amendment, relevant documents and conditions can be viewed on the Department of Environment, Land, Water and Planning website [here](#).

Who will enforce the permit?

Moorabool Shire Council will be the responsible authority for ensuring compliance with the conditions of the approved Planning Scheme Amendment.

What happens next?

The approval of the Planning Scheme Amendment and EMP confirm the proposal is safe and robust, and that any potential risk to the community or environment has been considered and mitigated.

Western Soil Treatment will only receive West Gate Tunnel Project spoil if it is chosed by the project's builders and issued a contract.

Now that planning approvals are in place, Western Soil Treatment will conduct further detailed planning to meet conditions before major works commence. Please check our website for updates.

Additional hydrogeological modelling and assessment has confirmed there will be no impact to groundwater, and updated stormwater design, rehabilitation and aftercare management plans have been completed.

How are you managing dust/noise/traffic/flora and fauna?

Both MBC's planning and environmental approvals include strict measures for monitoring, managing and reporting on amenity issues. MBC's proposal includes real-time monitoring of dust and weather conditions, noise, and other potential impacts.

To learn how potential impacts are being managed, see our fact sheet [here](#).

If you have a question about how the project may affect you, please visit westernsoiltreatment.com.au or email us at info@westernsoiltreatment.com.au.

How can I complain about the impacts of dust/noise/traffic/flora and fauna?

MBC's proposal includes real-time monitoring of amenity impacts such as dust and noise so we can track and respond to issues as they arise. If you have a complaint about any issue, you can email us at info@westernsoiltreatment.com.au or call our toll-free, 24-hour a day, 7 day a week community information line on 1300 978 199.