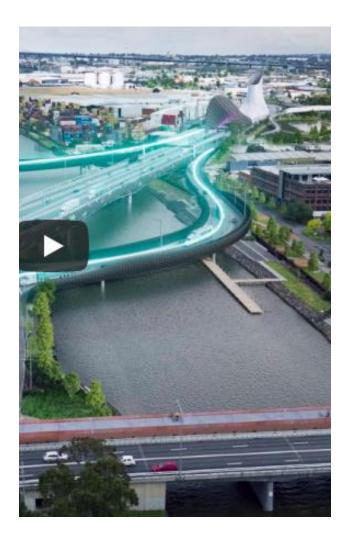


2 July 2020



# West Gate Tunnel Project (WGTP) - Status and Overview

**Speaker: Bruno Pronesti - Cleanaway** 



- Construction managed by CPB Contractors and John Holland Joint Venture (CPBJH JV), contracted by Transurban
- Major infrastructure road project to connect the West Gate Freeway with the Port of Melbourne, CityLink and the City of Melbourne
- Project requires construction of two tunnels for in-bound and out-bound traffic, and an elevated motorway
- Tunnelling will commence when a solution for managing the tunnel spoil (soil and rock) is in place
- Cleanaway is awaiting Tender announcement, however the Tenderers have been requested to proceed with approvals process



# Tunnel Spoil (soil and rock)

**Speaker: Bruno Pronesti - Cleanaway** 

How to manage the steady flow of tunnel spoil to determine reuse and disposal?

- Tunnel boring machines will continue drilling for approximately 16-18 months
- Tunnel spoil could have up to 60% moisture content a sludge or slurry consistency
- Initial testing has shown low levels of PFAS (Per- and polyfluoroalkyl substances)
- PFAS is a common contaminant in soil unearthed during major construction projects

All the tunnel spoil will be tested following excavation to ensure the material is safely managed in accordance with EPA requirements.



### Facts on PFAS

**Speaker: Patrick Clarke - Senversa** 

(Per- and polyfluoroalkyl substances)

- Used in wide range of consumer products:
  - fire-fighting foams
  - water resistant fabrics
  - paints
  - non-stick cookware
  - cleaning products
- Like all waste, it needs proper handling to enable safe disposal and optimise reuse



SOURCES: TOXIC-FREE FUTURE: EF

PFAS soil can be safely managed using existing EPA and national guidelines



# Cleanaway's Solution - Our Proposal

**Speaker: Patrick Clarke - Senversa** 

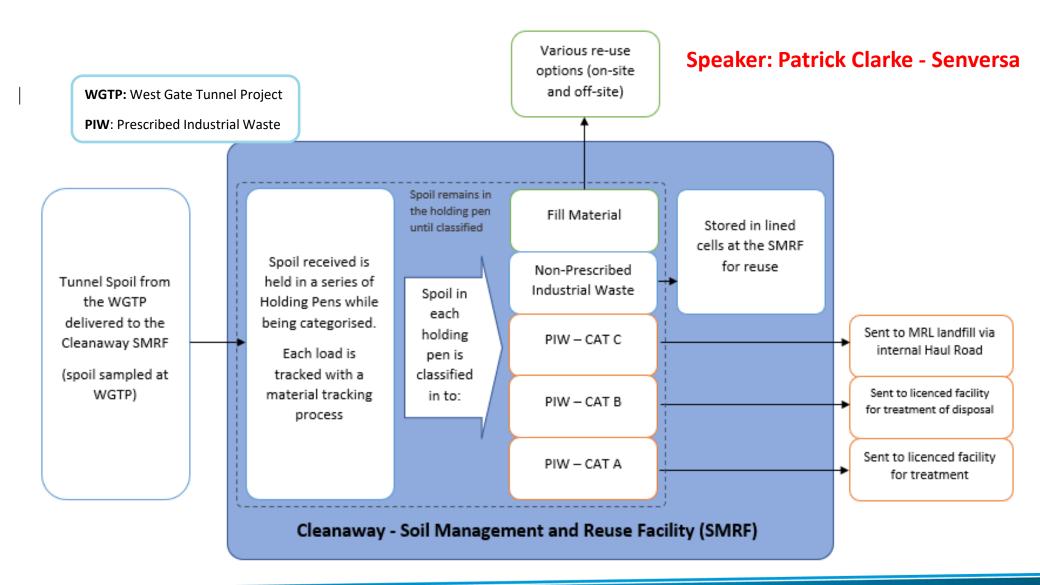
A safe solution to manage the receival, disposal and reuse of tunnel spoil

- Construct a Soil Management and Reuse Facility (SMRF) next to MRL
- Situated within a quarry void, 10 metres below ground (meaning it will be mostly hidden from view)
- EPA approval process includes classifying the tunnel spoil to determine how it's handled, reused or disposed once it arrives at the SMRF
- Tunnel Spoil classified as Prescribed Industrial Waste to be moved off site to an external licensed facility
- Tunnel Spoil classified as Fill Material and Non-Prescribed Industrial Waste (low level contamination) to be held in Lined Cells prior to reuse at the SMRF and MRL

SMRF is designed to safely contain tunnel spoil while classification occurs.



# Soil Management and Reuse Facility (SMRF)



## **Testing and Classification Process**

**Speaker: Patrick Clarke - Senversa** 

Environmental Management Plan sets out the process for managing the tunnel spoil EMP will be verified by an independent environmental auditor, prior to EPA approval

- Samples of tunnel spoil to be collected by an independent third party
- Soil samples are taken to an independent NATA\* approved laboratory for chemical analysis for testing and classification (\*national accreditation body for laboratories)
- Independent 3<sup>rd</sup> party will classify the material using EPA approved sampling and analysis plan
- An Environmental Auditor to verify the waste classification processes



# Receival and Handling Safeguards

**Speaker: Patrick Clarke - Senversa** 

- Upon arrival at the SMRF, trucks will be guided by traffic controls and directed to tip into allocated Holding Pen
- Tunnel Spoil stored in Holding Pens will be classified as either:
  - Fill Material meaning the waste can be used without restriction
  - Non-Prescribed Industrial Waste (NPI) or
  - Prescribed Industrial Waste
- Tunnel Spoil classified as Non-Prescribed Industrial Waste can be placed into Lined Cells to dry out for reuse at MRL as per licence conditions
- Prescribed Industrial Waste will be taken off site to an external EPA licensed facility.
- Waste classifications will be reviewed by an independent environmental auditor

## **Environmental Safeguards**

### **Speaker: Patrick Clarke - Senversa**

### **Groundwater and Surface Water Management**

- Water that comes into contact with the tunnel spoil is called Spoil Water and will be initially retained within the Holding Pens and Lined Cells
- The Lined Cells will include a drainage collection system to ensure Spoil Water is captured and managed to protect the surrounding environment
- Spoil Water will be decanted from the Holding Pens and Lined Cells to a lined Settlement Pond, to allow removal of sediment, and then to a lined Spoil Water Holding Pond.
- All Spoil Water will be and put through an onsite water treatment plant to remove PFAS.
- Treated water will be reused onsite for dust suppression and construction purposes at the SMRF and at MRL or discharged to stormwater

# Recap of End to End Solution

### **Speaker: Patrick Clarke - Senversa**

### End to end solution

#### Source

Tunnel spoil is transported from WGTP to Cleanaway's SMRF in regulatory approved vehicles using GPS tracking, by project contractors CPB/H JV





#### Sampling

Samples of the tunnel spoil will be collected by an independent third party and sent to a NATA accredited laboratory for analysis in accordance with EPA waste classifications.

#### Storage

Lined Cells at SMRF will only hold materials classified as Non-Prescribed Industrial Waste which contains very low levels of PFAS for drying out and potential reuse.



#### Reuse

Tunnel spoil classified as Fill Material and Non-Prescribed Industrial Waste can be reused at the SMRF and Cleanaway's Melbourne Regional Landfill.



### Classification

Tunnel spoil will be classified as either:

- Fill Material meaning the waste can be used without restriction
- Non-Prescribed Industrial Waste (NPI) or
- Prescribed Industrial Waste



### Disposal

Tunnel spoil classified as Category C Prescribed Waste will be disposed at Cleanaway's Melbourne Regional Landfill. Tunnel spoil classified as Category B or A Prescribed Waste will be moved off-site to an external EPA licensed facility.



## Transport Safeguards From WGTP to MRL Speaker: Adam Terrill - Tract

- Tunnel spoil to be transported by WGTP Contractors to the SMRF in approved vehicles, using material tracking system
- Trucks will be covered and sealed in line with EPA requirements during transportation
- Trucks will travel along the Western Freeway and take the Christies Road exit
- Dedicated entry and exit points to the SMRF on Middle Road will be established,
  with a potential 2<sup>nd</sup> access point on Christies Rd, south of the main MRL weighbridge
- Improvement works are proposed for the section of Middle Road between Christies Rd and the SMRF entrance to ensure no impact to local residents.

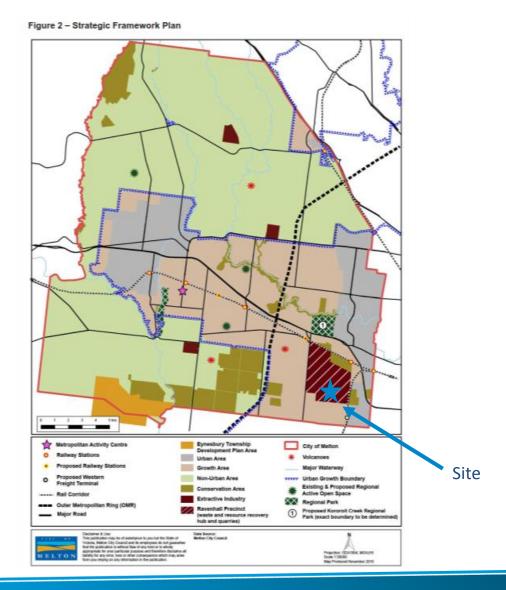


## **Location Site Plan**

### Melton Planning Scheme

- Located in 'state significant industrial area' under Plan Melbourne
- Located in a 'waste and resource recovery hub' in the Melton Strategic Framework Plan.
- Located approximately 2km from current or future residentially zoned land.
- Zoned Special Use Zone 1 (Earth and Energy Resource Industry)
- Surrounding land is identified for industrial uses

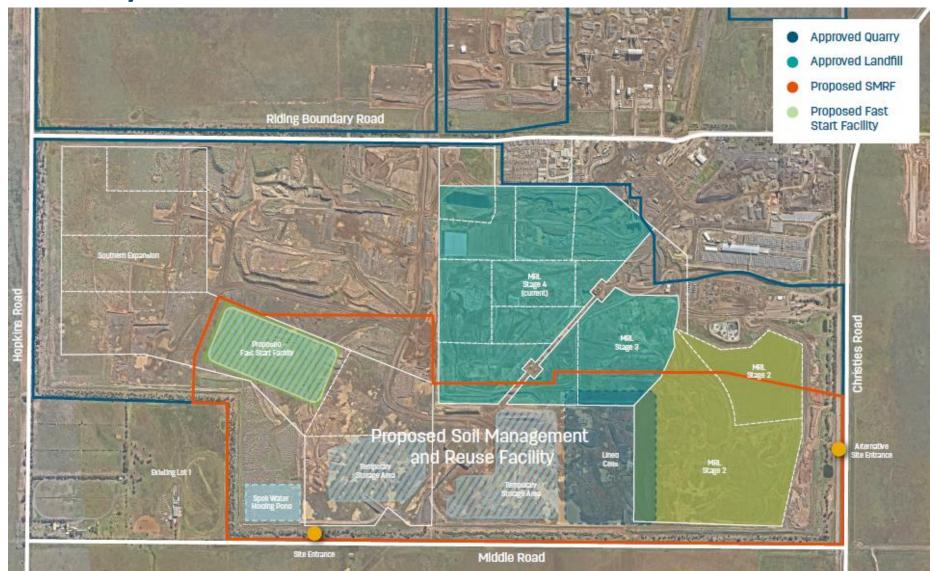
### **Speaker: Adam Terrill - Tract**





# Site Map

### **Speaker: Adam Terrill - Tract**



# Planning and Regulatory Approvals

**Speaker: Adam Terrill - Tract** 

- Cleanaway is seeking planning and EPA approval to construct the SMRF at Ravenhall.
- Application for Planning Scheme Amendment (Specific Controls Overlay) to the Minister for Planning under s20(4) of the Planning & Environment Act 1987 (Vic).
- Discussions underway with a range of authorities and agencies.
- Environmental Management Plan will be subject to verification by an independent environmental auditor, prior to approval by EPA, under new regulations: Environment Protection (Management of Tunnel Boring Machine Spoil) Regulations 2020.

## **Community Engagement**

### **Speaker: Olga Ghiri - Cleanaway**

### Information materials



- Dedicated webpage www.cleanaway.com.au/SMRF
- Community brochure
- Detailed Q&As
- Summary Fact Sheet
- Animated Video









receival, re-use and disposal of Tunnel

Tunnet Spott is the soft and rock to be

CLEANAWAY)

require safe handling to determine potential re-use and disposal outside of the project

Thank you for your time.....QUESTIONS?

