

## Environment Protection Act 1970

### Act No. 8056/1970

#### Environment Protection (Industrial Waste Resource) Regulations 2009

#### Classification of tunnel boring machine spoil as non-prescribed industrial waste

Pursuant to regulation 11(1)(b) of the *Environment Protection (Industrial Waste Resource) Regulations 2009* (“the Regulations”), the Environment Protection Authority Victoria (“EPA”) hereby classifies the industrial waste specified in this Classification (“the Classification”) as non-prescribed industrial waste, subject to the conditions and limitations in this Classification.

**EXPLANATORY NOTE:** This Classification is issued to enable the transport and management of per-and poly-fluoroalkyl substances (PFAS) contaminated tunnel boring machine spoil from the premises [attached here as “Schedule 4 - Figure 1 to Figure 2, Site Layout Plan, from your correspondence dated 1 May 2020] to a premises for which the occupier holds an environment management plan approved by EPA (EPA approved EMP) under the *Environment Protection (Management of Tunnel Boring Machine Spoil) Regulations 2020*. Spoil includes soil, rock, sludge and water.

#### **1 CLASSIFICATION NUMBER**

2020/476 (SO 9042848)

#### **2 WASTE PRODUCER AND PREMISES TO WHICH THIS CLASSIFICATION APPLIES**

This Classification applies to:

CPB Contractors Pty Ltd (ACN 000 893 667) (“The Waste Producer”)

Registered Office: Level 6, 567 Collins Street, Melbourne Vic 3000

Premises Address: West Gate Tunnel Project, Zone 302, 1 Whitehall Street, Yarraville, Victoria (“the Premises”)

#### **3 WASTE TO WHICH THIS CLASSIFICATION APPLIES**

This Classification applies to the following waste generated at the Premises:

- Tunnel boring machine spoil (“the Waste”) that is generated during works within the West Gate Tunnel Project – Zone 302 area [attached here as Figure 1 to Figure 2, Site Layout Plan], with a volume not exceeding 1,500,000 m<sup>3</sup> at a maximum rate of 8,000 m<sup>3</sup>/day.

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## 4 PERIOD OF VALIDITY

This Classification commences on 1 September 2020 and is effective until 1 September 2023 unless revoked or varied by the EPA.

## 5 CONDITIONS AS SET UNDER REGULATION 11

For the purpose of this Classification, the following conditions for the management of the waste must be met at all times.

- 5.1 Prior to removal from the Premises, a visual assessment of the condition of the Waste must be undertaken to determine any odour or discolouration, as documented in the Project's Sampling and Analysis Quality Plan (SAQP).
- 5.2 The assessment in 5.1 must be retained by the Waste Producer and kept for a period of at least two years.
- 5.3 Waste sampling, method of analysis and decision-making framework for waste categorization must be as per Schedule 1. In the event of any inconsistency arising between the SAQP and the conditions of this classification, the conditions of this classification shall apply.
- 5.4 Storage of the Waste must prevent liquid and mud from leaving the Premises or entering waterways, stormwater systems or groundwater.
- 5.5 A copy of this Classification must be present at all times at the Premises as well as at the EPA approved premises.
- 5.6 The Waste must be transported to an EPA Approved Premises.
- 5.7 The Waste must not be transported with other waste.
- 5.8 The Waste Producer must immediately notify EPA of any incident or spill of wastes by calling 1300 EPA VIC (1300 372 842), sending an email to [contact@epa.vic.gov.au](mailto:contact@epa.vic.gov.au), or using the EPA Interaction Portal.
- 5.9 The Waste Producer must develop a Spill Management Plan ("SMP") for transportation of the Waste to avoid and safely manage spills.
- 5.10 The Waste Producer must take reasonable steps to ensure that:
  - 5.10.1 Sampling and analysis of the Waste conducted at the EPA approved premises is done in accordance with the SAQP and the relevant EPA approved EMP for the site.
  - 5.10.2 The SMP for the transportation of the waste is kept at all times in each vehicle used to transport the Waste.
  - 5.10.3 All transporters of the Waste are familiar with the relevant SMP held in the vehicle prior to collection and transport of the waste and are competent in the implementation of any measures required by that SMP.
  - 5.10.4 The Waste is only transported in vehicles that have been assessed and approved by the Waste Producer as complying with the standards referred to in Schedule 2.
  - 5.10.5 All drivers are inducted as per the requirements detailed in the Project's SAQP.
- 5.11 The Waste Producer must record the volume of the Waste and number of consignments transported to the EPA Approved Premises, and analytical details of the representative soil samples (as per the Schedule 3 below), and the records must be retained for five years from the date of transport and be able to be immediately produced upon request by an officer of the EPA.

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5.12 By the 21<sup>st</sup> day of each month, following the commencement of waste generation, the Waste Producer must submit to EPA a summary report for the previous month showing the information set out in Schedule 3 below.

**6 DEFINITIONS**

6.1 Sampling and Analysis Quality Plan (SAQP) means the West Gate Tunnel Project – Zone 302 Sampling Analysis Quality Plan for Waste Categorisation of Tunnel Spoil for Reuse of containment at or disposal by EPA approved premises, Revision 5, prepared by Agon Environmental, dated 02 September 2020.

6.2 EPA Approved Premises means a premises for which the occupier holds an environment management plan approved by EPA under the *Environment Protection (Management of Tunnel Boring Machine Spoil) Regulations 2020*

**7 NOTES**

7.1 This classification may be amended or revoked by the EPA by way of written notice.

7.2 Waste that is required to be disposed to a licensed facility and contains PFAS, is to be classified under one of the following classifications:

- 2019/404 (SO9038429)
- 2019/405 (SO9038429)
- 2019/406 (SO9038429)



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ENVIRONMENT PROTECTION AUTHORITY

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## Schedule 1: Waste sampling and method of analysis

Spoil and spoil water sampling, method of analysis and decision-making framework for waste categorisation must be undertaken in accordance with the Project's Sampling and Analysis Quality Plan (SAQP) which include, but is not limited to the following requirements:

### A. Soil sampling method:

1. For the first ten bays of spoil from each geological domain, initial primary samples must be taken at a rate per bay of between 1:250 m<sup>3</sup> and 1:350 m<sup>3</sup>.
2. If trends in the maximum data values from each of 10 bays indicate that results are trending at <75% of the specification for containment set out in the EPA approved EMP, then testing may be reduced to two primary samples plus 2 duplicate and 2 triplicate samples per 2500 to 3500 m<sup>3</sup> per bay.
3. If the maximum data values from the primary, duplicate and triplicate samples for each of these 10 bays indicate that results will continue to be <75% of the reuse criteria, then although samples are to be taken at a rate of between 1:250 m<sup>3</sup> and 1:350 m<sup>3</sup>, the testing rate of two primary samples plus 2 duplicate and 2 triplicate samples per 2500 to 3500 m<sup>3</sup> must be maintained.
4. If the maximum data values from each of the primary, duplicate and triplicate from these 10 bays indicate that results are trending, or may trend towards >75% of the specification for containment set out in the EPA approved EMP, then testing of all samples taken at a rate of between 1:250 m<sup>3</sup> and 1:350 m<sup>3</sup> must be reinstated until 10 bay tracking of maximum data values re-establishes results are trending <75% of the reuse criteria.
5. Anomalous waste or waste from exception zone 1 (North Yarra Main Sewer alignment, as identified in the SAQP) must attain the 1 sample per 250 m<sup>3</sup> sampling rate using primary samples.
6. Waste must be sampled in accordance with the SAQP prior to being deposited in a containment cell within an EPA Approved premises or disposed of at a licensed facility.
7. Sampling must be undertaken by a suitably qualified person appointed by the Waste Producer. Sample submission sheet must consist of a chain of custody (CoC) which demonstrates the integrity of samples from the site of sample collection, and receipt of samples at testing laboratory.
8. The '21 Day Turnaround Rule' as described in the SAQP may be applied and EPA is notified within 24 hours of the decision.

### B. Analysis:

1. Waste from the identified exception zone 1 or spoil with visual/odour indicators of contamination observed during loading or delivery must be analysed for IWRG 621 full screen suite.
2. Waste from areas where potential acid sulfate soils may be present must be tested and assessed against the criteria listed in EPA Publication 655.1 "Acid Sulfate Soil and Rock".
3. Tested samples from all domains must be analysed for total and leachable concentrations of all PFAS analytes referred to as PFOS, PFHxS and PFOA using commercial laboratory standard methods complying with the analysis procedure for PFAS of AS 4439.3 – 1997,

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with US EPA Method EPA- 821-R-11-007 for the solid component and US EPA 537 for the liquid component

4. For analytical methods, quality assurance procedure, sample integrity reference must be made to:
  - a. IWRG 701; Sampling and analysis of wastewaters, soils and wastes
  - b. IWRG 621; Soil hazard categorisation and management
  - c. AS 4439.3; Wastes, sediments and contaminated soils – Preparation of leachates – Bottle leaching procedure
  - d. AS 4482.1: Guide to the sampling and investigation of potentially contaminated soil and sites
  
5. Chain of Custody documentation must be used, and must include but not be limited to the following information:
  - a. Name of the sampler
  - b. Description of the sample (example – Domain 2)
  - c. Collection date and time
  - d. Departure date from the site of origin
  - e. Receipt of sample at testing laboratory.

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## **Schedule 2: Vehicle standard for transport of waste**

1. To safely transport the waste, there must be no gaps between the tailgate and the tipping body.
2. The tipping body and the load area must be leak proof with no holes or gaps.
3. A leak-free compression seal is required between the body and the tailgate when closed.
4. The tipping body of the vehicle must be fitted with a waterproof PVC tarpaulin cover to protect the waste from adverse weather conditions.
5. The tarpaulin cover must be put in place before transporting the waste.
6. A fire extinguisher, suitable spill kit and safety equipment must be carried and located in an accessible position of the vehicle.

### **Notes:**

Retractable tarpaulin, roll-on roll-off type tarpaulin cover or manual tarpaulin covers with enveloped sides and tie-downs are all appropriate for PFAS impacted waste.

The spill kit must comprise containment tubes or absorbents, broom and a shovel.

The safety of driver is the responsibility of the company or the individual (in the case of owner driver). Safety equipment include full-length overalls, abrasion or chemical-resistant gloves, dust masks, respirators or breathing apparatus, safety footwear or chemical-resistant boots, goggles or face shields, eye rinse bottle.

## Schedule 3: Record Keeping and Reporting Requirement

### Results of Analysis (Example Template)

Contaminant of concern	Date Sample Collected	Sample ID	Total Concentration TC mg/kg				Leachable Concentrations ASLP				
			TC1	TC2	TC	95%UCL <sub>avg</sub>	ASLP1	ASLP2	Low pH leach value	High pH leach value	95%UCL <sub>avg</sub> (maximum value)
PFOS + PFOA											
PFOA											

### Monthly Summary Report

Must include, but is not limited to:

1. Reporting Period:
2. Number of consignments:
3. The volume of waste that was:
  - 3.1. Sent to a premises for which the occupier holds an approved Environment Management Plan in accordance with Environment Protection (Management of Tunnel Boring Machine Spoil) Regulations 2020 during the reporting period and specifying which premises.
  - 3.2. Sent to an EPA licensed facility during the reporting period
  - 3.3. Approved for deposition in a containment cell at an EPA approved premises during the reporting period
4. The total number of kilolitres of wastewater that was generated at the Premises during the reporting period that was:
  - 4.1. Treated during the reporting period
  - 4.2. Reused during the reporting period
  - 4.3. Discharged into the sewerage system of a water corporation in accordance with a trade waste agreement during the reporting period



Schedule 4: Site Layout Plan (from the SAQP)  
 Figure 1: Location of Zone 302 Tunnel Section

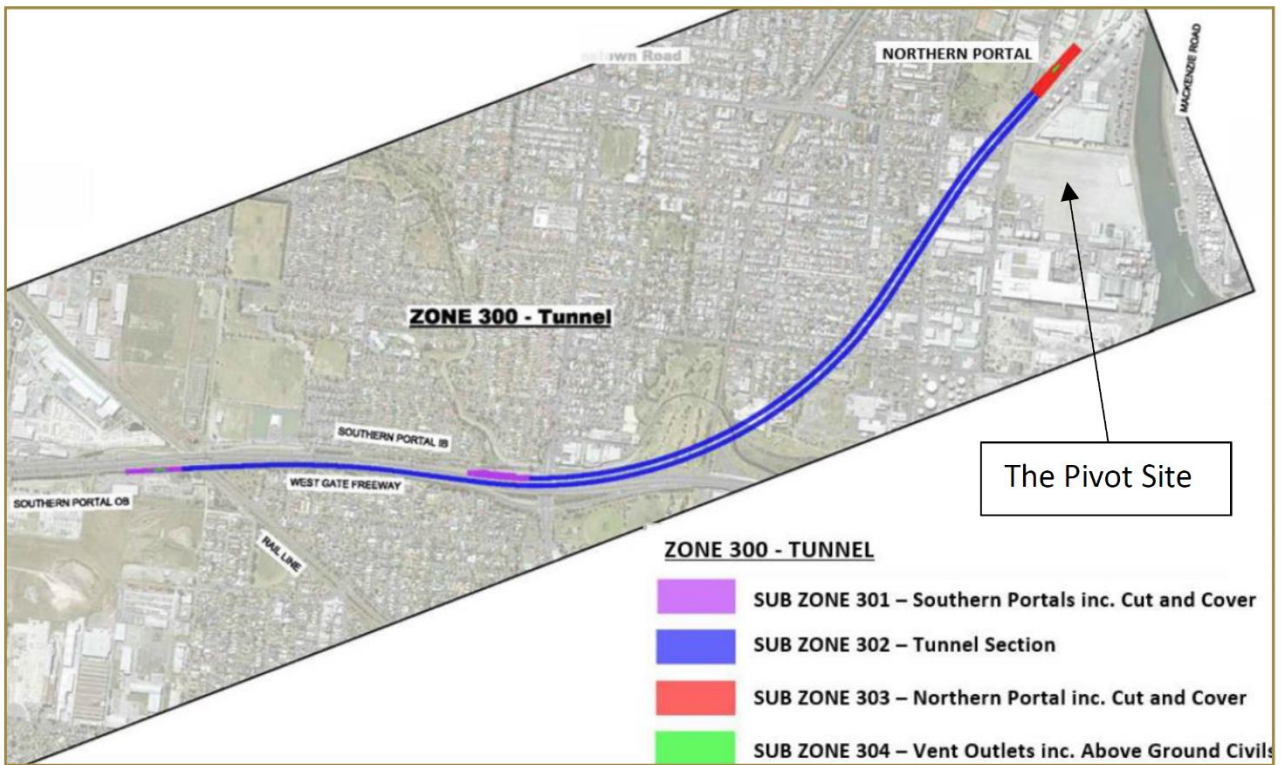


Figure 2: Cross Section of the WGTP Tunnel Alignment

