

#### INDEPENDENT AUDIT REPORT 01 - RCC RESPONSE

6th March 2020

EPM Projects Pty Ltd Level 2, 146 Arthur Street, North Sydney NSW 2060

PROJECT: CRANBROOK SCHOOL REDEVELOPMENT

EPM REF: TR-EPM-439

Attention: Mr. Michael Nasiry

Dear Sir.

In response to the environmental audit completed on the 5<sup>th</sup> February 2020, and subsequent report '19256 R2' completed by Zoic Environmental Pty Ltd dated 26<sup>th</sup> February 2020, Richard Crookes Constructions Pty Ltd has the following response to the non-compliances identified.

<u>Item SSD D29 (Zoic Ref Z108, P. 65) Soil Classification</u> – RCC acknowledge that there is an earlier soil classification report prepared by Douglas Partners which had identified areas of the project sand/soil as ENM, however a more recent report completed by Environmental Consulting Services Pty Ltd (ECS) which identifies the sand to the site as VENM was provided. This soil classification from ECS has been corroborated by the receiving yard (Boral). Records of both the more recent ECS soil classification report and note from Boral area attached to this letter.

RCC request that this item which is currently noted as con-compliant be reviewed again by the auditors, as RCC believe we are compliant.

<u>Zoic Item Z139 (P. 70) Waste - Disposal of Spoil</u> - RCC has addressed this item in comments provided to above item SSD D29 (Z108).

<u>Zoic Item Z141 (P. 70) Amenity - Trees</u> - RCC had installed fencing and physical separation to Tree Protection Zones during site establishment and prior to audit on 5<sup>th</sup> February 2020. Following the audit signage has been installed, and information regarding the TPZ's has been included within the worker induction.

Zoic Item Z144 (P. 71) Biodiversity (Sediment Control) – Although currently this area is outside of the site boundary, RCC had provided sediment control measures by providing woodchip mulching and sediment fencing within the area identified in the report and prior to audit on 5<sup>th</sup> February 2020. Additional sediment control measures will be applied by RCC once this area becomes part of the construction zone, at a later stage of the works.

<u>Zoic Item Z146 (P. 72) Amenity (Site Inductions)</u> - RCC have no objections to the points raised within this item and have a visitor induction form and briefing which is provided to visitors.

Zoic Item Z172 (P. 75) Stormwater Control & Discharge – RCC have no objections to the points raised within this item and have rectified/addressed the items raised by cleaning/removing stained soil and constructing a bunded maintenance hardstand. Stabilisation of unvegetated surface along Rose Bay Ave has been provided with sediment fencing and mulching.

Zoic Item Z210 (P. 80) Security & Public Safety (Fencing) - RCC have no objections to the points raised within this item and have rectified/addressed the items raised. It should be noted that the areas identified were around active excavation zones with continually changing benched areas, barricades and edge protection of excavations was in progress and following the course of construction activities.

<u>Zoic Item Z230 (P. 83) Soil & Water Management</u> - RCC have no objections to the points raised within this item and have rectified/addressed the items raised by constructing a bunded maintenance hardstand.





Yours faithfully

David Somerville Senior Project Engineer Richard Crookes Constructions

#### Attachments:

ECS REPORT - VENM Sand Classification report.100
BORAL EMAIL - WENM & Minimum Standards
BORAL EMAIL ATTACHMENT - Standards-for-managing-construction-waste-in-nsw-factsheet
BORAL EMAIL ATTACHMENT - EPL Emu Plains 2026



6 December 2019

Mr Murat Cobanoglu CF Group Piling Pty Ltd PO Box 370, Mascot NSW 1460

**Dear Murat** 

Re: Waste Classification - Sand Cranbrook School Bellevue Hill

Environmental Consulting Services Pty Ltd (ECS) has undertaken an inspection of the stockpiles of sand soils excavated from the sports field at Cranbrook School in Bellevue Hill (the Site). During this inspection samples of the excavated spoil were collected. The location the Site is presented on Figure 1.

Figure 1



At the time of this inspection (4 December 2019) excavation activities associated with archaeological investigations had resulted in the removal of soil from the northern end of the sports field. These excavations had included stripping surface soils, excavation into natural underlying sand and also partial excavation of the former clay cricket wicket area. These excavated materials had been stockpiled on the southern end of the existing sports field.

#### 1 Background

The Site is in a residential area and appears to have been occupied by the school since 1918. Prior to the establishment of the school the Site was part of Cranbrook estate which was a residential property established in the 1850's. Neighbouring residential dwellings range in age up to approximately 80 - 90 years old. There is no industrial development at or near the Site. Historic use of this property is considered to be limited to the residential dwellings.



During the site inspection there was no evidence of any significant impact to the Site from past use or from surrounding activities. The Site use and regional land use appears to have been limited to residential purposes and the development of the school which are not considered to result in significant site impacts.

The Woollahra Local Environment Plan 2012 (LEP) shows that the Site is class 5 on the Acid Sulfate Soil Map (sheet ASS\_002). This classification relates to the potential to impact Acid Sulfate Soils (ASS) on neighbouring properties rather that the presence of ASS on the Site.

The Sydney 1:100 000 geological map sheet (sheet number 9130) indicates that the geology at the site consists of coastal sand over Hawkesbury Sandstone. The conditions at the Site consisted of natural sand soils over sandstone.

#### 2 Site Conditions

At the time of this inspection the sandy soil were exposed across then excavation area of the Site. The material was considered consistent with the geology of the Site. Surface soils across the Site consisted of white and yellow sand with pale brown top soil.

#### 3 Sand

The stockpiles of sand soil and the excavation at the northern end of the sports field were inspected. These stockpiles consisted of sand and the material in the excavation was yellow sand. Based on the history of the Site and the appearance of this material the surface sand is considered likely to be Virgin Excavated Natural Material (VENM).

To classify the sand material from this site 3 soil samples were collected and submitted for chemical analysis. The range of contaminants tested for included:

- · Petroleum hydrocarbons;
- Polycyclic aromatic hydrocarbons; and
- Heavy metals.

To classify the material the results from the soil sampling need to be reviewed considering the NSW EPA Waste Classification Guideline Part 1; Classifying Waste (2014). The contaminant thresholds from this guideline are summarised in Table 1 – Waste Guidelines.





Table 1 - Waste Guidelines

	Maximum Co		Maximum Co	oncentration w	ithout TCLP		
Contaminant	GSW	RSW	G	SW	RSW		
	CT1	CT2	TCLP1	SCC1	TCLP2	SCC2	
Monocyclic Aromati	c Hydrocarbons	3					
Benzene	10	40	0.5	18	2	72	
Toluene	288	1152	14.4	518	57.6	2073	
Ethylbenzene	600	2400	30	1080	120	4320	
Xylene	1000	4000	50	1800	200	7200	
Total Recoverable I	Hydrocarbons						
TRH C6-C9	650	2600	NA	650	NA	2600	
TRH C10-C36	10000	40000	NA	10000	NA	40000	
Metals							
Arsenic	100	400	5	500	20	2000	
Cadmium	20	80	1	100	4	400	
Chromium (III)	100	400	5	1900	20	7600	
Copper							
Lead	100	400	5	1500	20	6000	
Mercury	4	16	0.2	50	0.8	200	
Nickel	40	160	2	1050	8	4200	
Zinc							
Polycyclic Aromatic	Hydrocarbons						
Benzo(a)pyrene	0.8	3.2	0.04	10	0.16	23	
Total PAHs	200	800	NA	200	NA	800	

It is expected that approximately 80,000m³ of sand will be excavated from this location. The results of analysis of the samples of sand are summarised in Table 2 and the laboratory report is included in Appendix 1.

These results confirm that the sand soils is VENM.

Yours sincerely

Simon Caples





Table 2 - Summary of Results

Oannala Namahan	V/4	\/O	1/0	Guid	lelines
Sample Number	V1	V2	V3	CT1	SCC1/TCLP1
Total Recoverable Hydrocark	ons				
TRH C6-C9	< 20	< 20	< 20	650	
TRH C10-C36	< 50	< 50	< 50	10000	
Monocyclic Aromatic Hydroc	arbons				
Benzene	< 0.1	< 0.1	< 0.1	10	
Toluene	< 0.1	< 0.1	< 0.1	288	
Ethylbenzene	< 0.1	< 0.1	< 0.1	600	
Xylene (total)	< 0.3	< 0.3	< 0.3	1000	
Polycyclic Aromatic Hydrocal	rbon				
Benzo(a)pyrene	< 0.5	< 0.5	< 0.5	8.0	10
Total PAH	< 0.5	< 0.5	< 0.5	200	
Heavy Metals					
Arsenic	4.9	11	10	100	500
Cadmium	< 0.4	< 0.4	< 0.4	20	100
Chromium	< 5	< 5	< 5	100	1900
Copper	6.1	< 5	< 5		
Lead	16	< 5	< 5	100	1500
Mercury	< 0.1	< 0.1	< 0.1	4	50
Nickel	< 5	< 5	< 5	40	1050
Zinc	11	< 5	5.5		

Note: All results in mg/kg



# **APPENDIX 1**



Environmental Consulting Services Grp 118A Australia Street Camperdown NSW 2050





NATA Accredited Accreditation Number 1261 Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: Simon Caples

Report 691712-S

Project name CRANBROOK SAND
Received Date Dec 04, 2019

Client Sample ID			V1	V2	V3
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			S19-De04630	S19-De04631	S19-De04632
Date Sampled			Dec 04, 2019	Dec 04, 2019	Dec 04, 2019
Test/Reference	LOR	Unit		,	
Total Recoverable Hydrocarbons - 1999 NEPM		Offic			
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50
ВТЕХ	1	1 3 3			
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Xylenes - Total	0.3	mg/kg	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	100	111	106
Total Recoverable Hydrocarbons - 2013 NEPM	Fractions	•			
Naphthalene <sup>N02</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)N04	20	mg/kg	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)N01	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene <sup>N07</sup>	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5



Client Sample ID Sample Matrix Eurofins Sample No.			V1 Soil S19-De04630	V2 Soil S19-De04631	V3 Soil S19-De04632
Date Sampled			Dec 04, 2019	Dec 04, 2019	Dec 04, 2019
Test/Reference	LC	OR Unit			
Polycyclic Aromatic Hydrocarbons	·	•			
Fluoranthene	0	.5 mg/k	g < 0.5	< 0.5	< 0.5
Fluorene	0	.5 mg/k	g < 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0	.5 mg/k	g < 0.5	< 0.5	< 0.5
Naphthalene	0	.5 mg/k	g < 0.5	< 0.5	< 0.5
Phenanthrene	0	.5 mg/k	g < 0.5	< 0.5	< 0.5
Pyrene	0	.5 mg/k	g < 0.5	< 0.5	< 0.5
Total PAH*	0	.5 mg/k	g < 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)		1 %	101	91	101
p-Terphenyl-d14 (surr.)		1 %	117	111	100
Heavy Metals					
Arsenic	2	2 mg/k	4.9	11	10
Cadmium	0	.4 mg/k	< 0.4	< 0.4	< 0.4
Chromium		5 mg/k	g < 5	< 5	< 5
Copper		5 mg/k	6.1	< 5	< 5
Lead		5 mg/k	16	< 5	< 5
Mercury	0	.1 mg/k	g < 0.1	< 0.1	< 0.1
Nickel		5 mg/k	g < 5	< 5	< 5
Zinc		5 mg/k	g 11	< 5	5.5
% Moisture		1 %	< 1	< 1	< 1



#### Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.

A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

<b>Description</b> Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Testing Site Sydney	Extracted Dec 04, 2019	Holding Time 14 Days
- Method: LTM-ORG-2010 TRH C6-C40	, ,	·	•
BTEX	Sydney	Dec 04, 2019	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Dec 04, 2019	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Dec 04, 2019	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Dec 04, 2019	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Dec 04, 2019	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Dec 04, 2019	14 Days

<sup>-</sup> Method: LTM-GEN-7080 Moisture



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Dec 4, 2019 2:00 PM

Dec 6, 2019

Diversified Grp P/L-T/a Enviro Consult Serv Grp **Company Name:** 

Address:

**Project Name:** 

118A Australia Street

**CRANBROOK SAND** 

Camperdown

NSW 2050

Order No.: Report #:

691712

1800 099 880

Phone: Fax:

Priority: 2 Day **Contact Name:** 

Simon Caples

**Eurofins Analytical Services Manager: Alena Bounkeua** 

	Sample Detail									
Melb	ourne Laborato	ory - NATA Site	# 1254 & 142	71						
Sydn	ey Laboratory	- NATA Site # 1	8217			Χ	Х			
Brisk	oane Laboratory	y - NATA Site #	20794							
Perth	n Laboratory - N	IATA Site # 237	36							
Exte	rnal Laboratory									
No	Sample ID	Sample Date	Sampling Time	Matrix	LAB ID					
1	V1	Dec 04, 2019		Soil	S19-De04630	Х	Х			
2	V2	Dec 04, 2019		Soil	S19-De04631	Χ	Х			
3	V3	Dec 04, 2019		Soil	S19-De04632	Χ	Х			
Test	Counts					3	3			

Eurofins Environment Testing Unit F3, Building F, 16 Mars Road, Lane Cove West, NSW, Australia, 2066 ABN: 50 005 085 521 Telephone: +61 2 9900 8400

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#### **Internal Quality Control Review and Glossary**

#### General

- Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
- 2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
- 3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
- 4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
- 5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds
- 6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
- 7. Samples were analysed on an 'as received' basis.
- 8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
- 9. This report replaces any interim results previously issued.

#### **Holding Times**

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

\*\*NOTE: pH duplicates are reported as a range NOT as RPD

#### Units

mg/kg: milligrams per kilogram ug/L: micrograms per litre ug/L: micrograms per litre

org/100mL: Organisms per 100 millilitres NTU: Nephelometric Turbidity Units MPN/100mL: Most Probable Number of organisms per 100 millilitres

#### **Terms**

Dry Where a moisture has been determined on a solid sample the result is expressed on a dry basis.

LOR Limit of Reporting

SPIKE Addition of the analyte to the sample and reported as percentage recovery.

RPD Relative Percent Difference between two Duplicate pieces of analysis.

LCS Laboratory Control Sample - reported as percent recovery.

CRM Certified Reference Material - reported as percent recovery.

Method Blank In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.

**Surr - Surrogate** The addition of a like compound to the analyte target and reported as percentage recovery.

**Duplicate** A second piece of analysis from the same sample and reported in the same units as the result to show comparison.

USEPA United States Environmental Protection Agency

APHA American Public Health Association
TCLP Toxicity Characteristic Leaching Procedure

COC Chain of Custody
SRA Sample Receipt Advice

QSM US Department of Defense Quality Systems Manual Version 5.3

CP Client Parent - QC was performed on samples pertaining to this report

NCP Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.

TEQ Toxic Equivalency Quotient

#### QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%  $\,$ 

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

 $WA\ DWER\ (n=10):\ PFBA,\ PFPeA,\ PFHxA,\ PFHpA,\ PFOA,\ PFBS,\ PFHxS,\ PFOS,\ 6:2\ FTSA,\ 8:2\ FTSA,\ 6:2\ FTSA$ 

#### **QC Data General Comments**

- 1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
- 2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
- 3. Organochlorine Pesticide analysis where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
- 4. Organochlorine Pesticide analysis where reporting Spike data, Toxaphene is not added to the Spike.
- 5. Total Recoverable Hydrocarbons where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
- 6. pH and Free Chlorine analysed in the laboratory Analysis on this test must begin within 30 minutes of sampling. Therefore laboratory analysis is unlikely to be completed within holding time.

  Analysis will begin as soon as possible after sample receipt.
- 7. Recovery Data (Spikes & Surrogates) where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
- 8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
- 9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
- 10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.



#### **Quality Control Results**

Test	Units	Result 1	Acceptan Limits	ce Pass Limits	Qualifying Code
Method Blank					
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	mg/kg	< 20	20	Pass	
TRH C10-C14	mg/kg	< 20	20	Pass	
TRH C15-C28	mg/kg	< 50	50	Pass	
TRH C29-C36	mg/kg	< 50	50	Pass	
Method Blank					
BTEX					
Benzene	mg/kg	< 0.1	0.1	Pass	
Toluene	mg/kg	< 0.1	0.1	Pass	
Ethylbenzene	mg/kg	< 0.1	0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2	0.2	Pass	
o-Xylene	mg/kg	< 0.1	0.1	Pass	
Xylenes - Total	mg/kg	< 0.3	0.3	Pass	
Method Blank					
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene	mg/kg	< 0.5	0.5	Pass	
TRH C6-C10	mg/kg	< 20	20	Pass	
TRH >C10-C16	mg/kg	< 50	50	Pass	
TRH >C16-C34	mg/kg	< 100	100	Pass	
TRH >C34-C40	mg/kg	< 100	100	Pass	
Method Blank					
Polycyclic Aromatic Hydrocarbons				$\top$	
Acenaphthene	mg/kg	< 0.5	0.5	Pass	
Acenaphthylene	mg/kg	< 0.5	0.5	Pass	
Anthracene	mg/kg	< 0.5	0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5	0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5	0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5	0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5	0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5	0.5	Pass	
Chrysene	mg/kg	< 0.5	0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5	0.5	Pass	
Fluoranthene	mg/kg	< 0.5	0.5	Pass	
Fluorene	mg/kg	< 0.5	0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5	0.5	Pass	
Naphthalene	mg/kg	< 0.5	0.5	Pass	
Phenanthrene	mg/kg	< 0.5	0.5	Pass	
Pyrene	mg/kg	< 0.5	0.5	Pass	
Method Blank					
Heavy Metals					
Arsenic	mg/kg	< 2	2	Pass	
Cadmium	mg/kg	< 0.4	0.4	Pass	
Chromium	mg/kg	< 5	5	Pass	
Copper	mg/kg	< 5	5	Pass	
Lead	mg/kg	< 5	5	Pass	
Mercury	mg/kg	< 0.1	0.1	Pass	
Nickel	mg/kg	< 5	5	Pass	
Zinc	mg/kg	< 5	5	Pass	
LCS - % Recovery					
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	%	89	70-130	Pass	



Te	est		Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
TRH C10-C14			%	106	70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene			%	93	70-130	Pass	
Toluene			%	95	70-130	Pass	
Ethylbenzene			%	95	70-130	Pass	
m&p-Xylenes			%	97	70-130	Pass	
o-Xylene		%	95	70-130	Pass		
Xylenes - Total			%	96	70-130	Pass	
LCS - % Recovery				T		I	
Total Recoverable Hydrocarbo	ons - 2013 NEPM Fract	ions					
Naphthalene			%	101	70-130	Pass	
TRH C6-C10		%	85	70-130	Pass		
TRH >C10-C16		%	98	70-130	Pass		
LCS - % Recovery				T			
Polycyclic Aromatic Hydrocar	bons						
Acenaphthene		%	98	70-130	Pass		
Acenaphthylene			%	96	70-130	Pass	
Anthracene			%	100	70-130	Pass	
Benz(a)anthracene			%	91	70-130	Pass	
Benzo(a)pyrene			%	93	70-130	Pass	
Benzo(b&j)fluoranthene			%	98	70-130	Pass	
Benzo(g.h.i)perylene			%	100	70-130	Pass	
Benzo(k)fluoranthene			%	110	70-130	Pass	
Chrysene			%	116	70-130	Pass	
Dibenz(a.h)anthracene			%	104	70-130	Pass	
Fluoranthene			%	104	70-130	Pass	
Fluorene			%	102	70-130	Pass	
Indeno(1.2.3-cd)pyrene			%	104	70-130	Pass	
Naphthalene			%	96	70-130	Pass	
Phenanthrene			% %	102	70-130	Pass	
Pyrene			70	103	70-130	Pass	
LCS - % Recovery				T			
Heavy Metals Arsenic			%	93	70-130	Pass	
Cadmium			%	101	70-130	Pass	
Chromium			%	100	70-130	Pass	
Copper			%	100	70-130	Pass	
Lead			%	101	70-130	Pass	
Mercury			%	102	70-130	Pass	
Nickel			%	101	70-130	Pass	
Zinc			%	100	70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1	Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery							
Total Recoverable Hydrocarbo	ons - 1999 NEPM Fract	ions		Result 1			
TRH C6-C9	S19-De04595	NCP	%	94	70-130	Pass	
TRH C10-C14	S19-De05867	NCP	%	103	70-130	Pass	
Spike - % Recovery							
ВТЕХ		•		Result 1			
Benzene	S19-De04595	NCP	%	90	70-130	Pass	
Toluene	S19-De04595	NCP	%	93	70-130	Pass	
Ethylbenzene	S19-De04595	NCP	%	93	70-130	Pass	
m&p-Xylenes	S19-De04595	NCP	%	94	70-130	Pass	
o-Xylene	S19-De04595	NCP	%	92	70-130	Pass	



Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Xylenes - Total	S19-De04595	NCP	%	93			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons	2013 NEPM Fract	ions		Result 1					
Naphthalene	S19-De04595	NCP	%	119			70-130	Pass	
TRH C6-C10	S19-De04595	NCP	%	93			70-130	Pass	
TRH >C10-C16	S19-De05867	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbon	S			Result 1					
Acenaphthene	S19-De07385	NCP	%	80			70-130	Pass	
Acenaphthylene	S19-De07385	NCP	%	80			70-130	Pass	
Anthracene	S19-De07385	NCP	%	80			70-130	Pass	
Benz(a)anthracene	S19-De07385	NCP	%	84			70-130	Pass	
Benzo(a)pyrene	S19-De07385	NCP	%	70			70-130	Pass	
Benzo(b&j)fluoranthene	S19-De07385	NCP	%	73			70-130	Pass	
Benzo(g.h.i)perylene	S19-De07385	NCP	%	72			70-130	Pass	
Benzo(k)fluoranthene	S19-De07385	NCP	%	77			70-130	Pass	
Chrysene	S19-De07385	NCP	%	82			70-130	Pass	
Dibenz(a.h)anthracene	S19-De07385	NCP	%	76			70-130	Pass	
Fluoranthene	S19-De07385	NCP	%	82			70-130	Pass	
Fluorene	S19-De07385	NCP	%	80			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S19-De07385	NCP	%	74			70-130	Pass	
Naphthalene	S19-De07385	NCP	%	82			70-130	Pass	
Phenanthrene	S19-De07385	NCP	%	83			70-130	Pass	
Pyrene	S19-De07385	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S19-De04900	NCP	%	111			70-130	Pass	
Cadmium	S19-De04900	NCP	%	125			70-130	Pass	
Chromium	S19-De04900	NCP	%	110			70-130	Pass	
Copper	S19-De04900	NCP	%	118			70-130	Pass	
Lead	S19-De04900	NCP	%	126			70-130	Pass	
Mercury	S19-De04900	NCP	%	126			70-130	Pass	
Nickel	S19-De04900	NCP	%	116			70-130	Pass	
Zinc	S19-De04900	NCP	%	126			70-130	Pass	
Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons	1999 NEPM Fract	tions		Result 1	Result 2	RPD			
TRH C6-C9	S19-De04594	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S19-De05026	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S19-De05026	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S19-De05026	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate					_				
ВТЕХ	1			Result 1	Result 2	RPD			
Benzene	S19-De04594	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S19-De04594	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S19-De04594	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S19-De04594	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S19-De04594	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total	S19-De04594	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	



Duplicate									
Total Recoverable Hydrocarbo	ns - 2013 NEPM Fract	ions		Result 1	Result 2	RPD			
Naphthalene	S19-De04594	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S19-De04594	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S19-De05026	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S19-De05026	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S19-De05026	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocark	ons			Result 1	Result 2	RPD			
Acenaphthene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S19-De02929	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S19-De04898	NCP	mg/kg	2.5	2.3	10	30%	Pass	
Cadmium	S19-De04898	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S19-De04898	NCP	mg/kg	8.3	7.2	14	30%	Pass	
Copper	S19-De04898	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	S19-De04898	NCP	mg/kg	29	28	4.0	30%	Pass	
Mercury	S19-De04898	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S19-De04898	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S19-De04898	NCP	mg/kg	34	28	18	30%	Pass	
Duplicate					,				
		1	1	Result 1	Result 2	RPD			
% Moisture	S19-De04595	NCP	%	14	11	27	30%	Pass	



#### Comments

#### Sample Integrity

Custody Seals Intact (if used) N/A Attempt to Chill was evident Nο Sample correctly preserved Yes Appropriate sample containers have been used Yes Sample containers for volatile analysis received with minimal headspace Yes Samples received within HoldingTime Yes Some samples have been subcontracted No

#### **Qualifier Codes/Comments**

Code Description

F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).

N01

Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.

F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes. N04

Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs N07

#### **Authorised By**

N02

Alena Bounkeua Analytical Services Manager Andrew Sullivan Senior Analyst-Organic (NSW) Gabriele Cordero Senior Analyst-Metal (NSW)



#### Glenn Jackson

#### **General Manager**

Final report - this Report replaces any previously issued Report

- Indicates Not Requested
- \* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Environment Testing Melbourne 6 Monterey Road Dandenong South Vic 3175 16 Mars Road Phone: +61 3 8564 5000 NATA # 1261 Site # 1254 & 14271 Site # 18217 Site # 18

Perth Z/91 Leach Highway Kewdale WA 6105 Phone: +61 8 9251 9600 NATA # 1261 Site # 23736

ABN - 50 005 085 521

e.mail: EnviroSales@eurofins.com

web: www.eurofins.com.au

## Sample Receipt Advice

Company name: Diversified Grp P/L-T/a Enviro Consult Serv Grp

Contact name: Simon Caples

**CRANBROOK SAND** Project name:

COC number: Not provided

Turn around time: 2 Day

Dec 4, 2019 2:00 PM Date/Time received:

Eurofins reference: 691712

#### Sample information

- $\square$ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- $\mathbf{V}$ All samples have been received as described on the above COC.
- $\square$ COC has been completed correctly.
- $\boxtimes$ Attempt to chill was evident.
- **7** Appropriately preserved sample containers have been used.
- $\mathbf{V}$ All samples were received in good condition.
- $\square$ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- $\mathbf{V}$ Appropriate sample containers have been used.
- $\boxtimes$ Split sample sent to requested external lab.
- $\boxtimes$ Some samples have been subcontracted.
- Custody Seals intact (if used).

#### Contact notes

If you have any questions with respect to these samples please contact:

Alena Bounkeua on Phone : or by e.mail: AlenaBounkeua@eurofins.com

Results will be delivered electronically via e.mail to Simon Caples - simon@ecsgroup.com.au.





#### **Chain of Custody**

Diversified (	Group Pty Ltd	BROOK				Mana	ager: S	imon C	Caples			Ph: 04	15 225	474		Em	ail: simon	@ecsgro	oup.com.	au
Event Numb	ber:		Ma	trix		Analy	ysis													
Lab Number	Sample Number	Sample Date	Soil	Water	Other	втех	ТРН	РАН	Phenol	Ammonia	Cyanide	Metals	TCLP Metals	Asbestos	50,17E					
	VI	4/12	×												X					
	VZ	in	X												×					Water to
	U3	Is a	×			1								100	X					
							4													
														1						
Metals: As	Cd Cr Cu Ni Pt	Zn Hg				Com	ments:		Z ate:	D	th.	TA	Ţ	7 55 10	Signed:					112/19 2

#### **David Somerville**

From: Ainge, Justin <justin.ainge@boral.com.au>
Sent: Wednesday, 4 March 2020 10:48 AM

To: Sid Balakrishnan

**Subject:** VENM & Minimum Standards

Attachments: EPL Emu Plains 2062.pdf; standards-for-managing-construction-waste-in-nsw-

factsheet.pdf

#### Good Morning Sid,

Please see attached our EPL and the EPA Minimum Standards. We are licenced to take VENM into our site which is determined by your waste classification. Loads are Inspected both at your site and at our end.

Kind Regards,

#### **JUSTIN AINGE**

Senior Account Manager, Recycling NSW/ACT

Mobile: 0401 899 399

Email: <u>Justin.ainge@boral.com.au</u>

Boral Recycling 39 Widemere Rd Wetherill Park, NSW 2164 www.boral.com.au



Fact sheet April 2019

# Standards for managing construction waste in NSW

The NSW Government is introducing new Standards for managing construction waste.

#### When do the Standards start?

The Standards for Managing Construction Waste in NSW start on 15 May 2019.

# Why are the Standards being introduced?

The Standards are being introduced to:

- minimise the risk of harm to human health and the environment from asbestos and other contaminants found in construction waste
- ensure operators of construction waste facilities implement appropriate processes and procedures to manage these risks
- improve industry and community confidence in the quality of resources recovered from construction and demolition waste.

# Who has to comply with the Standards?

The Standards apply to all construction and demolition waste facilities.

Construction and demolition waste facilities are waste facilities with an environment protection licence for waste storage, waste processing or resource recovery, if the facility is in the:

- metropolitan levy area and it receives 6,000 tonnes or more of construction waste in any 12-month period or
- regional levy area, and it receives 6,000 tonnes or more of construction waste in any 12-month period from the metropolitan levy area.

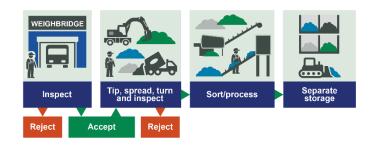
# What are the main requirements of the Standards?

The Standards require construction and demolition waste facilities to:

- implement a two-stage inspection process to ensure asbestos waste and other unpermitted wastes do not enter the facility
- implement sorting and waste storage requirements to improve the quality of recovered resources and avoid crosscontamination of materials
- ensure construction waste is only transported from the facility if it has been handled in accordance with the Standards on-site
- ensure that all staff managing, supervising or undertaking tasks required by the Standards have been appropriately trained.

Please refer to the Standards for further details of specific requirements.

Figure 1: Construction waste flow diagram



#### What is construction waste?

Construction waste is waste that results from the construction, demolition, repair or alteration of buildings or infrastructure. It is also the material resulting from the processing of this waste.



This is further defined in Part 8A of the Protection of the Environment Operations (Waste) Regulation 2014.

Do the Standards apply to all loads of waste received at a construction and demolition waste facility?

- The Standards only apply to loads of construction waste.
- The Standards do not apply to loads of commercial and industrial waste or municipal solid waste if they do not contain construction waste.
- There are some exceptions that apply to requirements of particular parts of the Standards e.g. construction waste that complies with a resource recovery order. Refer to the Standards for further details.

What happens if I don't comply?

Compliance with the Standards is a compulsory licence condition for all construction and demolition waste facilities. Failure to comply with the Standards is a breach of section 64 of the

Protection of the Environment Operations
Act 1997 and attracts penalty notices of \$15,000
and court-imposed penalties of up to \$1,000,000
for corporations.

#### **Further information**

The changes and definitions of key terms contained in Part 8A of the Protection of the Environment Operations (Waste) Regulation (from 15 May 2019) can be found with the Standards and answers to Frequently Asked Questions on the EPA website<sup>1</sup>.

If you are unsure if your facility is a construction and demolition waste facility or have any questions, please contact your (EPA) Operations Officer or the EPA Waste Strategy and Policy Team on:

wastestrategy.innovation@epa.nsw.gov.au.

**NSW Environment Protection Authority** 

Email: <u>info@epa.nsw.gov.au</u> Website: <u>www.epa.nsw.gov.au</u>

ISBN 978 1 922260 45 1 | EPA 2019P1543

April 2019

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<sup>1</sup> www.epa.nsw.gov.au/your-environment/waste/industrial-waste/construction-demolition/construction-and-demolition-waste







Licence Details							
Number:	2062						
Anniversary Date:	02-July						

Licensee
BORAL RESOURCES (NSW) PTY LTD
PO BOX 6041
NORTH RYDE NSW 2113

<u>Premises</u>
BORAL EMU PLAINS QUARRY
RAILWAY STREET
EMU PLAINS NSW 2750

Scheduled Activity
Crushing, grinding or separating
Resource recovery
Waste storage

Fee Based Activity	<u>Scale</u>
Crushing, grinding or separating	> 2000000 T annual processing capacity
Recovery of general waste	Any general waste recovered
Waste storage - other types of waste	Any other types of waste stored

Region		
Waste & Resource Recovery		
59-61 Goulburn Street		
SYDNEY NSW 2000		
Phone: (02) 9995 5000		
Fax: (02) 9995 5999		
PO Box A290		
SYDNEY SOUTH NSW 1232		



Licence - 2062

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## Information about this licence

#### **Dictionary**

A definition of terms used in the licence can be found in the dictionary at the end of this licence.

#### Responsibilities of licensee

Separate to the requirements of this licence, general obligations of licensees are set out in the Protection of the Environment Operations Act 1997 ("the Act") and the Regulations made under the Act. These include obligations to:

- ensure persons associated with you comply with this licence, as set out in section 64 of the Act;
- control the pollution of waters and the pollution of air (see for example sections 120 132 of the Act);
- report incidents causing or threatening material environmental harm to the environment, as set out in Part 5.7 of the Act.

#### Variation of licence conditions

The licence holder can apply to vary the conditions of this licence. An application form for this purpose is available from the EPA.

The EPA may also vary the conditions of the licence at any time by written notice without an application being made.

Where a licence has been granted in relation to development which was assessed under the Environmental Planning and Assessment Act 1979 in accordance with the procedures applying to integrated development, the EPA may not impose conditions which are inconsistent with the development consent conditions until the licence is first reviewed under Part 3.6 of the Act.

#### **Duration of licence**

This licence will remain in force until the licence is surrendered by the licence holder or until it is suspended or revoked by the EPA or the Minister. A licence may only be surrendered with the written approval of the EPA.

#### Licence review

The Act requires that the EPA review your licence at least every 5 years after the issue of the licence, as set out in Part 3.6 and Schedule 5 of the Act. You will receive advance notice of the licence review.

#### Fees and annual return to be sent to the EPA

For each licence fee period you must pay:

- an administrative fee; and
- a load-based fee (if applicable).

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The EPA publication "A Guide to Licensing" contains information about how to calculate your licence fees. The licence requires that an Annual Return, comprising a Statement of Compliance and a summary of any monitoring required by the licence (including the recording of complaints), be submitted to the EPA. The Annual Return must be submitted within 60 days after the end of each reporting period. See condition R1 regarding the Annual Return reporting requirements.

Usually the licence fee period is the same as the reporting period.

#### Transfer of licence

The licence holder can apply to transfer the licence to another person. An application form for this purpose is available from the EPA.

#### Public register and access to monitoring data

Part 9.5 of the Act requires the EPA to keep a public register of details and decisions of the EPA in relation to, for example:

- licence applications;
- licence conditions and variations;
- statements of compliance;
- load based licensing information; and
- load reduction agreements.

Under s320 of the Act application can be made to the EPA for access to monitoring data which has been submitted to the EPA by licensees.

#### This licence is issued to:

BORAL RESOURCES (NSW) PTY LTD
PO BOX 6041
NORTH RYDE NSW 2113

subject to the conditions which follow.

Licence - 2062



#### 1 Administrative Conditions

#### A1 What the licence authorises and regulates

A1.1 This licence authorises the carrying out of the scheduled activities listed below at the premises specified in A2. The activities are listed according to their scheduled activity classification, fee-based activity classification and the scale of the operation.

Unless otherwise further restricted by a condition of this licence, the scale at which the activity is carried out must not exceed the maximum scale specified in this condition.

Scheduled Activity	Fee Based Activity	Scale
Crushing, grinding or separating	Crushing, grinding or separating	> 2000000 T annual processing capacity
Resource recovery	Recovery of general waste	Any general waste recovered
Waste storage	Waste storage - other types of waste	Any other types of waste stored

#### A2 Premises or plant to which this licence applies

A2.1 The licence applies to the following premises:

Premises Details
BORAL EMU PLAINS QUARRY
RAILWAY STREET
EMU PLAINS
NSW 2750
LOT 1 DP 62051, LOT 6 DP 62051, LOT 7 DP 62051, LOT 1 DP 81402, LOT 1 DP 114287, LOT 2 DP 114287, LOT 3 DP 114287, PART LOT 4 DP 114287, LOT 5 DP 114287, LOT 7 DP 114287, LOT 2 DP 457029, LOT 3 DP 457029, LOT 4 DP 457029, PART LOT 130 DP 587831, LOT 37 DP 751662, LOT 38 DP 751662, LOT 42 DP 751662, LOT 43 DP 751662, LOT 47 DP 751662, LOT 93 DP 751662, LOT 980 DP 810551, LOT 1 DP 1003940, LOT 2 DP 1003940, LOT 3 DP 1003940, LOT 4 DP 1003940, PART LOT 5 DP 1148344

A2.2 The premises location is shown on the map below.

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#### A3 Information supplied to the EPA

A3.1 Works and activities must be carried out in accordance with the proposal contained in the licence application, except as expressly provided by a condition of this licence.

In this condition the reference to "the licence application" includes a reference to:

- a) the applications for any licences (including former pollution control approvals) which this licence replaces under the Protection of the Environment Operations (Savings and Transitional) Regulation 1998; and
- b) the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

#### 2 Limit Conditions

#### L1 Pollution of waters

L1.1 Except as may be expressly provided in any other condition of this licence, the licensee must comply with section 120 of the Protection of the Environment Operations Act 1997.

#### L2 Waste

L2.1 The licensee must not cause, permit or allow any waste to be received at the premises, except the wastes expressly referred to in the column titled "Waste" and meeting the definition, if any, in the column titled

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"Description" in the table below.

Any waste received at the premises must only be used for the activities referred to in relation to that waste in the column titled "Activity" in the table below.

Any waste received at the premises is subject to those limits or conditions, if any, referred to in relation to that waste contained in the column titled "Other Limits" in the table below.

This condition does not limit any other conditions in this licence.

Code	Waste	Description	Activity	Other Limits
NA	Tunnel Spoil	As defined in "The Sydney Metro tunnel spoil exemption November 2018"	Resource recovery Waste storage	
NA	Tunnel Spoil	As defined in 'The WestConnex Stage 2 tunnel spoil exemption 2017" or "The Northconnex tunnel spoil exemption 2018"	Waste storage	
NA	Virgin excavated natural material		Waste storage Resource recovery	

- L2.2 The authorised amount of waste permitted on the premises cannot exceed 1,500,000 tonnes at any time.
- L2.3 The Licensee must not receive at the Premises, more than 2,000,000 tonnes of waste per year.
- L2.4 Stockpile surface areas must not exceed:
  - 6,500m² for material stored at the northern tunnel spoil screening/crushing plant;
  - 22,000m<sup>2</sup> for tunnel spoil storage area at the east of the site:
  - 50,000m² for the existing product stockpiling areas; and
  - 65,000m<sup>2</sup> for the existing processing plant area.

Note: Stockpile area names are as labelled in *Figure 7-1* of the *Emu Plains Quarry Tunnel Spoil Processing Project: Air Quality Impact Assessment* (EPA Reference: DOC18/7428).

## 3 Operating Conditions

#### O1 Activities must be carried out in a competent manner

O1.1 Licensed activities must be carried out in a competent manner.

This includes:

- a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
- b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.

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#### O2 Maintenance of plant and equipment

- O2.1 All plant and equipment installed at the premises or used in connection with the licensed activity:
  - a) must be maintained in a proper and efficient condition; and
  - b) must be operated in a proper and efficient manner.

#### O3 Dust

- O3.1 Activities occurring in or on the premises must be carried out in a manner that prevents or minimises the generation of dust.
- O3.2 The premises must be maintained in a condition which minimises or prevents the emission of dust from the premises.
- O3.3 The licensee must ensure no visible dust leaves the premises.
- O3.4 The licensee must ensure that no material including sediment is tracked from the premises.

## 4 Monitoring and Recording Conditions

#### M1 Monitoring records

- M1.1 The results of any monitoring required to be conducted by this licence or a load calculation protocol must be recorded and retained as set out in this condition.
- M1.2 All records required to be kept by this licence must be:
  - a) in a legible form, or in a form that can readily be reduced to a legible form;
  - b) kept for at least 4 years after the monitoring or event to which they relate took place; and
  - c) produced in a legible form to any authorised officer of the EPA who asks to see them.
- M1.3 The following records must be kept in respect of any samples required to be collected for the purposes of this licence:
  - a) the date(s) on which the sample was taken;
  - b) the time(s) at which the sample was collected;
  - c) the point at which the sample was taken; and
  - d) the name of the person who collected the sample.

#### M2 Recording of pollution complaints

M2.1 The licensee must keep a legible record of all complaints made to the licensee or any employee or agent of the licensee in relation to pollution arising from any activity to which this licence applies.

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- M2.2 The record must include details of the following:
  - a) the date and time of the complaint;
  - b) the method by which the complaint was made;
  - c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
  - d) the nature of the complaint;
  - e) the action taken by the licensee in relation to the complaint, including any follow-up contact with the complainant; and
  - f) if no action was taken by the licensee, the reasons why no action was taken.
- M2.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M2.4 The record must be produced to any authorised officer of the EPA who asks to see them.

#### M3 Telephone complaints line

- M3.1 The licensee must operate during its operating hours a telephone complaints line for the purpose of receiving any complaints from members of the public in relation to activities conducted at the premises or by the vehicle or mobile plant, unless otherwise specified in the licence.
- M3.2 The licensee must notify the public of the complaints line telephone number and the fact that it is a complaints line so that the impacted community knows how to make a complaint.
- M3.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

## 5 Reporting Conditions

#### R1 Annual return documents

- R1.1 The licensee must complete and supply to the EPA an Annual Return in the approved form comprising:
  - 1. a Statement of Compliance,
  - 2. a Monitoring and Complaints Summary,
  - 3. a Statement of Compliance Licence Conditions,
  - 4. a Statement of Compliance Load based Fee,
  - 5. a Statement of Compliance Requirement to Prepare Pollution Incident Response Management Plan,
  - 6. a Statement of Compliance Requirement to Publish Pollution Monitoring Data; and
  - 7. a Statement of Compliance Environmental Management Systems and Practices.

At the end of each reporting period, the EPA will provide to the licensee a copy of the form that must be completed and returned to the EPA.

R1.2 An Annual Return must be prepared in respect of each reporting period, except as provided below.

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- R1.3 Where this licence is transferred from the licensee to a new licensee:
  - a) the transferring licensee must prepare an Annual Return for the period commencing on the first day of the reporting period and ending on the date the application for the transfer of the licence to the new licensee is granted; and
  - b) the new licensee must prepare an Annual Return for the period commencing on the date the application for the transfer of the licence is granted and ending on the last day of the reporting period.
- R1.4 Where this licence is surrendered by the licensee or revoked by the EPA or Minister, the licensee must prepare an Annual Return in respect of the period commencing on the first day of the reporting period and ending on:
  - a) in relation to the surrender of a licence the date when notice in writing of approval of the surrender is given; or
  - b) in relation to the revocation of the licence the date from which notice revoking the licence operates.
- R1.5 The Annual Return for the reporting period must be supplied to the EPA via eConnect *EPA* or by registered post not later than 60 days after the end of each reporting period or in the case of a transferring licence not later than 60 days after the date the transfer was granted (the 'due date').
- R1.6 The licensee must retain a copy of the Annual Return supplied to the EPA for a period of at least 4 years after the Annual Return was due to be supplied to the EPA.
- R1.7 Within the Annual Return, the Statements of Compliance must be certified and the Monitoring and Complaints Summary must be signed by:
  - a) the licence holder; or
  - b) by a person approved in writing by the EPA to sign on behalf of the licence holder.
- Note: The term "reporting period" is defined in the dictionary at the end of this licence. Do not complete the Annual Return until after the end of the reporting period.
- Note: An application to transfer a licence must be made in the approved form for this purpose.

#### R2 Notification of environmental harm

- R2.1 Notifications must be made by telephoning the Environment Line service on 131 555.
- R2.2 The licensee must provide written details of the notification to the EPA within 7 days of the date on which the incident occurred.
- Note: The licensee or its employees must notify all relevant authorities of incidents causing or threatening material harm to the environment immediately after the person becomes aware of the incident in accordance with the requirements of Part 5.7 of the Act.

#### R3 Written report

- R3.1 Where an authorised officer of the EPA suspects on reasonable grounds that:
  - a) where this licence applies to premises, an event has occurred at the premises; or
  - b) where this licence applies to vehicles or mobile plant, an event has occurred in connection with the

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carrying out of the activities authorised by this licence,

and the event has caused, is causing or is likely to cause material harm to the environment (whether the harm occurs on or off premises to which the licence applies), the authorised officer may request a written report of the event.

- R3.2 The licensee must make all reasonable inquiries in relation to the event and supply the report to the EPA within such time as may be specified in the request.
- R3.3 The request may require a report which includes any or all of the following information:
  - a) the cause, time and duration of the event;
  - b) the type, volume and concentration of every pollutant discharged as a result of the event;
  - c) the name, address and business hours telephone number of employees or agents of the licensee, or a specified class of them, who witnessed the event;
  - d) the name, address and business hours telephone number of every other person (of whom the licensee is aware) who witnessed the event, unless the licensee has been unable to obtain that information after making reasonable effort;
  - e) action taken by the licensee in relation to the event, including any follow-up contact with any complainants;
  - f) details of any measure taken or proposed to be taken to prevent or mitigate against a recurrence of such an event; and
  - g) any other relevant matters.
- R3.4 The EPA may make a written request for further details in relation to any of the above matters if it is not satisfied with the report provided by the licensee. The licensee must provide such further details to the EPA within the time specified in the request.

#### 6 General Conditions

#### G1 Copy of licence kept at the premises or plant

- G1.1 A copy of this licence must be kept at the premises to which the licence applies.
- G1.2 The licence must be produced to any authorised officer of the EPA who asks to see it.
- G1.3 The licence must be available for inspection by any employee or agent of the licensee working at the premises.

## 7 Pollution Studies and Reduction Programs

#### **U1** Water Management

Water Characterisation

U1.1 The Licensee must engage a suitably qualified professional to characterise the quality of water collected on and discharged from the Premises.

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- U1.2 A water sampling plan for the characterisation must be submitted to the EPA by no later than **31 August 2018**.
- U1.3 The water sampling plan must propose:
  - a) Sampling location(s) including all water storages and discharge points;
  - b) The pollutants to be sampled, including all those potentially present at levels that pose a risk of non-trivial harm to human health or the environment ('pollutants of concern')(this must be informed by a risk assessment of the types of materials stored and processed on the Premises);
  - c) The number of sampling events / sampling frequency (a sufficient number of events must be sampled to capture the full range of operational conditions and water quality, including average or typical through to worst case scenarios).
- Note: Sampling and analysis must be consistent with the *Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (2004)*.
- U1.4 The water sampling plan must be agreed to in writing by the EPA prior to commencement of sampling.
- U1.5 The water characterisation must:
  - a) Compare results to the relevant ANZECC (2000) Guidelines for Fresh and Marine Water Quality trigger values; and
  - b) Specify the analytical limits of reporting used for any data that is being assessed:
    - i. Compare that limit of reporting to the relevant ANZECC (2000) assessment criteria; and
    - ii. Where the limit of reporting does not provide a suitable basis for assessing risk of water pollution, propose alternative options to characterise the risk, including more sensitive laboratory testing or risk mitigation options (the level of reporting should be sensitive enough to detect pollutants at levels related to their environmental risk and ANZECC (2000) toxicant trigger value (where available) while having regard to the best available analytical practical quantification limits using available technology.
- Note: The Licensee may consider alkalinity, hardness and pH as factors that could potentially modify the toxicity and bioavailability of any relevant materials.
- U1.6 The water characterisation, must be submitted to the EPA within **one month of the final sampling event**.

#### **Discharge Impact Assessment**

- U1.7 The Licensee must engage a suitably qualified professional to assess the impacts of discharges from the Premises.
- U1.8 The discharge impact assessment must include, as a minimum:
  - a) Details of expected pollutant concentrations and loads associated with any discharge.
  - b) An assessment of the potential impact and risk of discharges on the receiving environment based on the discharge characterisation, including;
    - i. Reference to the relevant ANZECC (2000) assessment criteria for slightly-to moderately disturbed ecosystems and the NSW Water Quality Objectives (NSW WQOs) for the Nepean River.

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- ii. A comparison of pollutant concentrations at the discharge point and the edge of the mixing zone with ANZECC (2000) trigger values (the comparison should follow the method in ANZECC (2000), including sections 3.4.3 and 8.3.5, and take into account the form and speciation of pollutants, any locally derived trigger values and other relevant matters such as hardness-modified trigger values):
- iii. The acute and chronic toxicity of pollutants at the point of discharge and after initial mixing:
- iv. The fate in the environment of the pollutants contained in the discharge; and
- v. The fate of pollutants that can bio-accumulate or accumulate in the sediment.
- c) The environmental values of the receiving waters and an assessment of the potential impact of any proposed discharge on those values.
- d) A description of the effects and significance of any pollutant loads on the receiving environment, including consideration of potential impacts on downstream receiving waters.
- U1.9 The discharge impact assessment, must be submitted to the EPA within **one month of the final** sampling event.

#### **Water Management Plan**

- U1.10 The Licensee must engage a suitably qualified professional to prepare a water management plan.
- U1.11 The water management plan must include; as a minimum, the following components:
  - a) An Investigation of all the practical and reasonable measures that could be taken to avoid or minimise pollution based on the discharge characterisation and impact assessment. Consideration should include but not be limited to:
    - Measures to control or contain pollutants at the source on the Premises, i.e. avoiding the generation of contaminated water, or reducing the volume of contaminated water run-off;
    - ii. Measures to avoid or minimise diffuse discharges from C3, C5, C6, C8, C9 and C12;
    - ii. Sediment and erosion controls:
    - iii. Pollution and control measures relating to storage of fuel of chemicals, possibility of accidental spills and accidental spills and appropriate disposal methods;
    - iv. Contaminated water capture and storage requirements; and/or
    - v. Options for the treatment of unavoidable discharges of contaminated water from the Premises to meet specified water quality requirements.
  - b) Demonstration of how the water management system will be designed and operated to:
    - i. Protect the NSW Water Quality Objectives (WQO's) for receiving waters where they are currently being achieved; or
    - ii. Contribute towards the achievement of WQO's over time where they are not currently being achieved.
  - c) Development of a program of preferred mitigation measures with proposed timeframes for implementation; and
  - d) Justification for rejecting any practical and reasonable measures assessed.
- U1.12 The water management plan must also include an updated site water balance, which reflects any proposed new mitigation measures. The water balance must:
  - a) Use daily time-step modelling (based on a suitable climate dataset and representing the range of weather conditions at the Premises);
  - b) Provide the design storm of the surface water management system;

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- c) Include estimates of the frequency and volume of overflows from water storages on the Premises.
- d) Provide justification for key model assumptions (e.g. run-off coefficients, water reuse rates or protocols for dewatering and restoring capacity of the stormwater storages); and
- e) Identify and where possible address significant model limitations.
- U1.13 The water management plan must be submitted to the EPA within one month of the discharge impact assessment.

Note: Reference to specific locations such as dams, discharge points or catchment areas are as referred to in Figure 1 of the Boral Emu Plains: *Surface Water Characterisation*: Revision B (EPA ref DOC18/299481).

#### U2 Air Quality

- U2.1 By **31 December 2018**, the Licensee must develop, implement and submit to the EPA an air quality management plan of project operations. The air quality management plan must account for all significant sources of air emissions from the Premises, and include site specific best management practice. The air quality management plan must incorporate both proactive and reactive measures, which are auditable to prevent and minimise the emission of air pollutants at the Premises. As a minimum, the air quality management plan must include the following parts:
  - a) Key performance indicator(s);
  - b) Monitoring method(s);
  - c) Location, frequency and duration of monitoring;
  - d) Record keeping;
  - e) Response mechanisms; and
  - f) Compliance reporting.

#### **U3** Noise Management

- U3.1 By **1 March 2019**, the Licensee must provide the EPA with an explicit assessment of feasible and reasonable noise mitigation measures that could be implemented to reduce noise down towards the calculated criteria, in accordance with Section 3.1 of the Noise Policy for Industry 2017.
- U3.2 By **1 March 2019**, the Licensee must provide a report to the EPA that measures noise levels during typical crushing and processing of tunnel spoil and VENM on the Premises to validate the sound power levels, and the levels predicted as receivers, in *Boral Emu Plains Noise and Vibration Impact Assessment* (EPA Reference: DOC18/13986) dated 10 January 2018, to the satisfaction on the EPA.

## 8 Special Conditions

#### E1 Financial Assurance

E1.1 A financial assurance in the form of an unconditional and irrevocable and on demand guarantee from a bank, building society or credit union operating in Australia as "Authorised Deposit-taking Institutions" under the *Banking Act 1959* of the Commonwealth of Australia and supervised by the Australian

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Prudential Regulatory Authority (APRA) must be provided to the EPA prior to the issue of the licence.

- E1.2 The financial assurance must be in favour of the Environment Protection Authority in the amount of five hundred thousand dollars (\$500 000). The financial assurance is required to secure or guarantee funding for works or programmes required by or under this licence. The financial assurance must contain a term that provides that any monies claimed can be paid to the EPA or, at the written direction of the EPA, to any other person. The licensee must provide to the EPA, along with the original counterpart guarantees, confirmation in writing that the financial institution providing the guarantees is subject to supervision by APRA.
- E1.3 The financial assurance must be maintained during the operation of the facility and thereafter until such time as the EPA is satisfied the premises is environmentally secure.
- E1.4 The EPA may require an increase in the amount of the financial assurance at any time as a result of reassessment of the total likely costs and expenses of rehabilitation of the premises.
- E1.5 The EPA may claim on a financial assurance under s303 of the POEO Act if a licensee fails to carry out any work or program required to comply with the conditions of this licence.
- E1.6 The financial assurance must be replenished by the full amount claimed or realised if the EPA has claimed on or realised the financial assurance or any part of it to undertake a work or program required to be carried out by the licence which has not been undertaken by the licence holder.
- E1.7 An adjustment to the financial assurance must be calculated, each licence review period in line with the consumer price index for the number of years since the financial assurance was last paid. The financial assurance must be replenished to the full amount plus CPI adjustments each licence review period.
- E1.8 An adjustment to the financial assurance must be calculated, each licence review period in line with the consumer price index for the number of years since the financial assurance was last paid. The financial assurance must be replenished to the full amount plus CPI adjustments each licence review period.

#### **E2** Environmental Obligations of Licensee (Works and Programs)

- E2.1 While the licensee's premises are being used for the purpose to which the licence relates, the licensee must:
  - a) Clean up any spill, leak or other discharge if any waste(s) or other material(s) as soon as practicable after it becomes known to the licensee or to one the licensee's employees or agents.
  - b) In the event(s) that any liquid or non-liquid waste(s) is unlawfully deposited on the premises, such waste(s) must be removed and lawfully disposed of as soon as practicable or in accordance with any direction given by the EPA.
  - c) Provide all monitoring data as required by the conditions of this licence or as directed by the EPA.
- E2.2 In the event of an earthquake, storm, fire, flood or any other event where it is reasonable to suspect that a pollution incident has occurred, is occurring or is likely to occur, the licensee must:
  - a) Make all efforts to contain all fire water on the premises;
  - b) Make all efforts to control air pollution from the premises;
  - c) Make all efforts to contain any discharge, spill or run-off from the premises;

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- d) Make all efforts to prevent flood water entering the premises;
- e) Remediate and rehabilitate any exposed areas of soil and/or waste;
- f) Lawfully dispose of all liquid and solid waste(s) stored on the premises that is not already securely disposed of;
- g) At the request of the EPA, monitor groundwater beneath the premises and its potential to migrate from the premises;
- h) At the request of the EPA, monitor surface water leaving the premises; and
- i) Ensure the premises is secure.
- E2.3 After the licensee's premises cease to be used for the purposes to which the licence relates or in the event that the licensee ceases to carry out the activity that is the subject of this licence, that licensee must:
  - a) Remove and lawfully dispose of all liquid and non-liquid waste stored on the licensee's premises; and
  - b) Rehabilitate the premises, including conducting an assessment of the site and if required remediation of any site contamination.

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## Dictionary

#### **General Dictionary**

Gorioral Brodorial	,
3DGM [in relation to a concentration limit]	Means the three day geometric mean, which is calculated by multiplying the results of the analysis of three samples collected on consecutive days and then taking the cubed root of that amount. Where one or more of the samples is zero or below the detection limit for the analysis, then 1 or the detection limit respectively should be used in place of those samples
Act	Means the Protection of the Environment Operations Act 1997
activity	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
actual load	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
AM	Together with a number, means an ambient air monitoring method of that number prescribed by the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.
AMG	Australian Map Grid
anniversary date	The anniversary date is the anniversary each year of the date of issue of the licence. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary of the date of issue or last renewal of the licence following the commencement of the Act.
annual return	Is defined in R1.1
Approved Methods Publication	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
assessable pollutants	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
BOD	Means biochemical oxygen demand
СЕМ	Together with a number, means a continuous emission monitoring method of that number prescribed by the Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales.
COD	Means chemical oxygen demand
composite sample	Unless otherwise specifically approved in writing by the EPA, a sample consisting of 24 individual samples collected at hourly intervals and each having an equivalent volume.
cond.	Means conductivity
environment	Has the same meaning as in the Protection of the Environment Operations Act 1997
environment protection legislation	Has the same meaning as in the Protection of the Environment Administration Act 1991
EPA	Means Environment Protection Authority of New South Wales.
fee-based activity classification	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.

Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act

general solid waste (non-putrescible)

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flow weighted composite sample

Means a sample whose composites are sized in proportion to the flow at each composites time of collection

general solid waste (putrescible)

Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environmen t Operations Act

1997

**grab sample** Means a single sample taken at a point at a single time

hazardous waste Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act

1997

licensee Means the licence holder described at the front of this licence

load calculation protocol

Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009

local authority Has the same meaning as in the Protection of the Environment Operations Act 1997

material harm Has the same meaning as in section 147 Protection of the Environment Operations Act 1997

MBAS Means methylene blue active substances

Minister Means the Minister administering the Protection of the Environment Operations Act 1997

mobile plant Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act

1997

motor vehicle Has the same meaning as in the Protection of the Environment Operations Act 1997

O&G Means oil and grease

percentile [in relation to a concentration limit of a sample]

plant

Means that percentage [eg.50%] of the number of samples taken that must meet the concentration limit specified in the licence for that pollutant over a specified period of time. In this licence, the specified period of time is the Reporting Period unless otherwise stated in this licence.

Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as

motor vehicles.

pollution of waters [or water pollution]

Has the same meaning as in the Protection of the Environment Operations Act 1997

**premises** Means the premises described in condition A2.1

public authority Has the same meaning as in the Protection of the Environment Operations Act 1997

regional office Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence

reporting period For the purposes of this licence, the reporting period means the period of 12 months after the issue of the

licence, and each subsequent period of 12 months. In the case of a licence continued in force by the Protection of the Environment Operations Act 1997, the date of issue of the licence is the first anniversary

of the date of issue or last renewal of the licence following the commencement of the Act.

restricted solid waste

Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act

1997

scheduled activity

Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997

special waste Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act

1997

TM Together with a number, means a test method of that number prescribed by the Approved Methods for the

Sampling and Analysis of Air Pollutants in New South Wales.

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TSP Means total suspended particles

TSS Means total suspended solids

Type 1 substance

Means the elements antimony, arsenic, cadmium, lead or mercury or any compound containing one or more of those elements.

more of those elements

Type 2 substance Means the elements beryllium, chromium, cobalt, manganese, nickel, selenium, tin or vanadium or any

compound containing one or more of those elements

utilisation area Means any area shown as a utilisation area on a map submitted with the application for this licence

waste Has the same meaning as in the Protection of the Environment Operations Act 1997

waste type Means liquid, restricted solid waste, general solid waste (putrescible), general solid waste (non -

putrescible), special waste or hazardous waste

Mr Bernie Weir

**Environment Protection Authority** 

(By Delegation)

Date of this edition: 10-August-2000

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#### **End Notes**

- 1 Licence varied by change to Contact details, issued on 02-Apr-2001, which came into effect on 02-Apr-2001.
- 2 Licence varied by notice 1008736, issued on 31-Jan-2002, which came into effect on 25-Feb-2002
- 3 Licence varied by notice 1035438, issued on 07-Apr-2004, which came into effect on 20-Apr-2004.
- 4 Licence varied by notice 1037716, issued on 04-Jun-2004, which came into effect on 16-Jun-2004.
- 5 Licence varied by notice 1079377, issued on 25-Oct-2007, which came into effect on 25-Oct-2007.
- 6 Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
- 7 Licence varied by notice 1525717 issued on 27-Nov-2014
- 8 Licence varied by notice 1561438 issued on 08-Aug-2018
- 9 Licence varied by notice 1571109 issued on 11-Dec-2018