



**Douglas Partners**  
*Geotechnics | Environment | Groundwater*

Report on  
Preliminary Site (Contamination) Investigation

Upper Australian Habitat, Taronga Zoological Park  
Bradleys Head Road, Mosman

Prepared for  
Taronga Conservation Society Australia

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Integrated Practical Solutions



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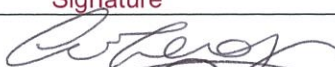

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## **Report on Preliminary Site (Contamination) Investigation Upper Australian Habitat, Taronga Zoological Park Bradleys Head Road, Mosman**

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### **1. Introduction**

This report presents the results of a preliminary site (contamination) investigation (PSI) and preliminary waste classification undertaken for the Upper Australian Habitat area ('the site') at Taronga Zoological Park ('the Zoo') at Bradleys Head Road, Mosman. The investigation was commissioned in an email from Mr Michael Head of the Taronga Conservation Society Australia and was undertaken in accordance with Douglas Partners' (DP) proposal SYD181062 dated 22 October 2018.

The aim of the investigation was to assess the subsurface soil conditions across the Upper Australian Habitat area in order to provide:

- A preliminary assessment of the potential for contamination within the site;
- A preliminary waste classification of the fill present within the site; and
- Recommendations for additional investigations (if required).

The PSI included a limited assessment of site history, sampling from the 17 boreholes drilled within the site as part of the geotechnical investigation, chemical analysis of selected soil samples for the potential contaminants of concern and preparation of this report.

This report has been prepared in conjunction with a geotechnical investigation which is reported separately (DP project ref: 86625.00.R.001).

### **2. Scope of Works**

The scope of works comprised the following:

- A site walkover to observe situations that indicated a potential for contamination and identification of environmental receptors;
- Review of a previous report relevant to the current investigation;
- Review of historical and current aerial photographs;
- Collection of soil samples at regular intervals from the 17 geotechnical investigation boreholes, based on field observations;
- Screening of all samples for volatile organic compounds using a photo-ionisation detector (PID);
- Analysis at a NATA accredited laboratory of 23 selected soil samples for various combinations of the following potential contaminants:
  - Heavy metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc);

- Total recoverable hydrocarbons (TRH) as a screening test for total petroleum hydrocarbons (TPH);
  - Benzene, toluene, ethylbenzene and total xylenes (BTEX);
  - Polycyclic aromatic hydrocarbons (PAH);
  - Phenols;
  - Organochlorine pesticides (OCP);
  - Organophosphorus pesticides (OCP);
  - Polychlorinated biphenyls (PCB);
  - Asbestos; and
  - Toxicity characteristic leaching procedure (TCLP) testing (as required) for PAH on three samples and nickel on two samples.
- Quality control/quality assurance (QA/QC) sampling and analysis comprised the testing of three replicate samples for PAH and heavy metals at an approximate rate of 10% of primary samples. In addition, pH and cation exchange capacity (CEC) were analysed from selected samples to provide site specific ecological investigation levels; and
  - Preparation of this PSI report included a review of previous reports, details of the site walkover and the methodology, results and findings of the intrusive investigation. The report comments on the potential risk of contamination at the site; identifies observed areas of environmental concern (AEC) and associated potential contaminants and provides recommendations for further investigations. A preliminary waste classification has also been included.

### **3. Site Information**

#### **3.1 Site Identification**

The area of the proposed Upper Australian Habitat area (herein referred to as 'the site') is approximately 10,000m<sup>2</sup> and is located within the north eastern part of the Zoo. The site is part of Lot 22 Deposited Plan 843294 on Bradleys Head Road, Mosman in the local government area of Mosman.

The site location is shown on Drawing 1, Appendix A.

#### **3.2 Site Walkover**

A site walkover was conducted by an Environmental Scientist from DP on 26 November 2018 and selected site photographs are included in Appendix C. At the time of the site walkover, the site was occupied by several animal exhibits including koala exhibits (Photograph 1), nocturnal houses, a platypus house (Photograph 2) and a native animal roaming enclosure (Photograph 3). The exhibits include outdoor animal paddocks and indoor enclosures. The main native animal roaming enclosure had two ponds of water located within the enclosure (Photograph 4), whilst the platypus house contained large tanks of water.

The buildings within the investigation area varied in age but were well maintained (Photograph 2). A recently constructed high rope course was located in the south west corner of the site.

Stormwater drains were observed around the enclosures and along the pathways (Photograph 4). Several paved, asphalted and sandy gravel pedestrian pathways intersected the site (Photograph 5).

Maintenance supplies and waste storage areas were observed adjacent to some of the enclosures (Photograph 6). An electrical substation was in the north eastern corner of the site (Photograph 7).

The site slopes to the south. A number of retaining structures are present within the site where it is possible that fill soils have been placed to create level benches.

### **3.3 Proposed Development**

It is understood that the existing animal enclosures and other structures within the site will be demolished and replaced with new enclosures and structures including landscaping modifications. It is anticipated that maximum excavation depths of about 1.5 m will be required for the redevelopment.

### **3.4 Review of Previous Report**

DP has also undertaken a number of previous investigations at the Zoo in the vicinity of two underground storage tanks (USTs) located in the north western corner of the Zoo, (i.e. outside and to the west of the current site) adjacent to the Facilities Building.

The previous investigation in the vicinity of the USTs included the drilling of boreholes and the installation of groundwater wells in the vicinity of the USTs (DP Report on *UST System Leakage and Contamination, Taronga Zoo, Mosman*, dated March 27 2007, reference 44703).

Two underground storage tanks (USTs) were located in the north western corner of the Zoo, (i.e. outside and to the west of the current site) adjacent to the Facilities Building (see Figure 1, Section 4.1). Significant hydrocarbon contamination was identified in the tank pit backfill soils, the groundwater within the tank pit and a seepage sample collected at the time the contamination associated with the USTs was investigated. Free product, several millimetres thick, was identified on the phreatic surface within the tank pit. It was noted during the tank removal works that a stormwater service line crossed the tank pit at the northern end and it was considered possible that this provided a migration pathway for down-gradient seepage. It is noted that the USTs were removed and replaced, and further groundwater monitoring was conducted with the conclusion being that no evidence of petroleum hydrocarbon groundwater contamination was identified in the vicinity of the USTs.

## **4. Regional Topography, Geology and Hydrogeology**

### **4.1 Topography and Surface Water**

The site slopes from an elevation of approximately 70 m AHD in the northern portion to an elevation of approximately 62m AHD in the southern portion of the site as shown in Figure 1.

Based on the local topography it is assumed that the general direction of surface water flow would be towards to the south and east towards Sydney Harbour. However, it is expected that surface water run-off would be intercepted by the storm water drains.



**Figure 1 - Site Topography (2 m Contour Interval)**

## 4.2 Geology

Reference to the Sydney 1:100 000 Geological Series Sheet indicates that the site is underlain by Hawkesbury Sandstone, which consists of medium to coarse grained quartz sandstone with very minor shale and laminitic lenses.

Reference to the NSW Acid Sulfate Soil Risk Map shows that the site is in an area where there is no known occurrence of acid sulfate soils. Furthermore, based on the relatively high elevation of the site, the risk of acid sulfate soils being present at the site is considered to be very low.

## 4.3 Groundwater

A search of the WaterNSW registered groundwater bore database on 7 December 2018 revealed no registered groundwater bores within 500 m of the site.

However, previous groundwater investigations undertaken by DP<sup>1</sup> in the north western corner of the Zoo indicated that minor seepage flow is present in fractured sandstone bedrock at depths varying between 1.4 m below ground level (bgl) and 3.7 m bgl.

Based on the local topography it is assumed that the general direction of groundwater flow would be towards to the south and east towards Sydney Harbour.

## 5. Site History

A limited site history assessment was undertaken including a review of the general historical information on the Zoo available from the internet, a review of historical aerial photographs and a review of NSW EPA online databases. The results of the review are provided in the following sub-sections.

### 5.1 Internet Search

The Zoo was officially opened on October 7th, 1916. New exhibits and facilities were developed over time including:

- The Giraffe House which was completed in 1923;
- The Aquarium in 1927;
- Floral Clock in 1928;
- Tahr Mountain in 1932; and
- Tiger Pits in 1939.

In the 1940s to 1960s several new exhibits were built including those for larger cats, koalas, apes and gorillas. After 1967 several new exhibits were built starting with the Platypus and Nocturnal Houses, waterfowl ponds and walkthrough Rainforest Aviary. A Veterinary Quarantine Centre and an Education Centre were also built during this period. Previous attractions such as elephant rides, miniature trains, monkey circus and merry-go-round gave way to educational facilities such as Friendship Farm and Seal theatre<sup>2</sup>.

### 5.2 Historical Aerial Photographs

Historical aerial photographs from the years 1930, 1943, 1951, 1961, 2002, 2009, 2016 and 2018 were obtained from the NSW Department of Lands Office, NearMap and Google Earth websites. These photographs were reviewed in order to identify the likely past uses and changes to the site.

The findings are summarised in Table 1 below and copies of the aerial photographs are provided in Appendix C.

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<sup>1</sup> Report entitled *UST System Leakage and Contamination, Taronga Zoo, Mosman*, March 27 2007, reference 44703

<sup>2</sup> <https://taronga.org.au/about-us/history/taronga-zoo>



**Table 1: Summary of Historical Aerial Photographs**

Year	Site Features	Surrounding Features
1930	The site appears to form part of the Zoo. There appears to be several buildings/ animal exhibits within the site, including one large one in the south western corner of the site.	The areas to the north of the site are residential while to south, east and west are vegetated headland areas of Sydney Harbour.
1943	There does not appear to be any significant changes to the site.	There is no significant change to the surrounding land use.
1951	There does not appear to be any significant changes to the site.	There is no significant change to the surrounding land use.
1961	There does not appear to be any significant changes to the site.	There is no significant change to the surrounding land use.
2002	The large building in the south western corner of the site has been demolished and the site appears to be vegetated with some potential enclosures.	There is no significant change to the surrounding land use.
2009	The site remains mostly unchanged, with only the potential removal of some vegetation and possible construction being undertaken in the enclosures.	There is no significant change to the surrounding land use.
2016	Most of the site remained well vegetated and unchanged, except for the construction of two buildings in the south eastern of the corner of the site.	There is no significant change to the surrounding land use.
2018	There does not appear to be any significant changes to the site.	There is no significant change to the surrounding land use.

Based on the aerial photograph search the site appears to have been part of the Zoo since at least 1930 and a number of site redevelopments within the Zoo have been undertaken during its lifetime including some works within the site. It is noted that the site is covered with trees in several of the aerial photographs which obscure the ground features. Therefore, it is possible that other changes have taken place that could not be identified in the aerial photographs

### 5.3 Regulatory Notices Search

The EPA publishes records of contaminated sites under section 58 of the *Contaminated Land Management Act 1997* (CLM Act) on a public database accessed via the internet. The notices relate to investigation and/or remediation of sites considered to be significantly contaminated under the definition in the CLM Act. More specifically the notices cover the following:

- Actions taken by the EPA under sections 15, 17, 19, 21, 23, 26 or 28 of the CLM Act;

- Actions taken by the EPA under sections 35 or 36 of the Environmentally Hazardous Chemicals Act 1985; and
- Site audit statements provided to the EPA under section 52 of the CLM Act on sites subject to an in-force remediation order.

A search of the public database on 14 December 2018 indicated that the site was not listed (notified under the *Protection of the Environment Operations Act* 1997 (POEO Act)).

It should be noted that the EPA record of Notices for contaminated land does not provide a record of all contaminated land in NSW.

The NSW EPA also issues environmental protection licenses under section 308 of the POEO Act. The related register contains:

- Environmental protection licenses;
- Applications for new licenses and to transfer or vary existing licenses;
- Environment protection and noise control licenses;
- Convictions in prosecutions under the POEO Act;
- The result of civil proceedings;
- License review information;
- Exemptions from provisions of the POEO Act or Regulations;
- Approvals granted under Clause 9 of the POEO (Control of Burning) Regulation; and
- Approvals granted under Clause 7a of the POEO (Clean Air) Regulation.

A search of the public register on 14 December 2018 indicated that Environment Protection Licence (EPL number: 1677) was issued to the Zoo for sewage treatment.

A copy of the search records is provided in Appendix C.

## **6. Preliminary Conceptual Site Model**

A conceptual site model (CSM) is a representation of site-related information regarding contamination sources, receptors and exposure pathways between those sources and receptors. The CSM provides the framework for identifying how the site became contaminated and how potential receptors may be exposed to contamination either in the present or the future i.e. it enables an assessment of the potential source – pathway – receptor linkages (complete pathways).

### **6.1 Potential Contaminant Sources**

Based on the findings of the investigation, the following potential sources of contamination and associated contaminants of potential concern (COPC) have been identified.



**S1 – Filling and Demolition Waste;** Fill soils associated with site development works and demolition waste associated with previous structures from different stages of development and redevelopment of the Zoo including the possible back filling of ponds within the exhibits.

COPC include metals, total petroleum hydrocarbons (TPH), benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), organochlorine pesticides (OCP), organophosphorus pesticides (OPP), phenols and asbestos.

**S2 – Hazardous Building Materials;** the existing structures on site may include hazardous building materials such as asbestos-containing materials, lead paint and PCB in fluorescent light fittings.

COPC include asbestos, lead and PCB.

**S2 – Animal Exhibits.** A number of animal exhibits are present within the site.

COPC include biological contaminants and putrescible waste. However, the exhibits are regularly cleaned and are well maintain and therefore it is considered that the potential for significant animal waste is not considered likely and therefore not considered further, unless signs of buried waste are identified during intrusive works/excavations.

It is noted that two underground storage tanks are located in the north western part of the Zoo, however, given the distance from the site these are not considered likely to impact the site and therefore and not considered further.

## 6.2 Potential Receptors

The potential receptors to contamination at the site include the following:

### Human Health Receptors:

- R1 – Construction and maintenance workers;
- R2 – Current and future users (employees and visitors to the Zoo); and
- R3 – Adjacent users (residential).

### Environmental Receptors

- R4 – Groundwater;
- R5 – Surface water (Sydney Harbour); and
- R6 – Terrestrial ecology (including zoo animals).

## 6.3 Potential Pathways

The potential pathways for the identified receptors are as follows:

- P1 – Ingestion and dermal contact;

P2 – Inhalation of dust and/or vapours;

P3 – Leaching of contaminants and vertical mitigation into groundwater;

P4 – Surface water run-off;

P5 – Lateral migration of groundwater; and

P6 – Direct contact with terrestrial ecology.

## 6.4 Summary of CSM

A 'source–pathway–receptor' approach has been used to assess the potential risks of harm being caused to human, water or environmental receptors from contamination sources on or in the vicinity of the site, via exposure pathways (complete pathways). The possible pathways between the above sources (S1 and S3) and receptors (R1 to R6) are provided in Table 2 below.

**Table 2: Summary of Potential Complete Pathways**

Source	Transport Pathway	Receptor	Risk Management Action Recommended
<b>S1 – Filling and Demolition Waste</b> (Metals, TPH, BTEX, PAH, OCP, OPP, PCB, phenols and asbestos)	P1 – Ingestion and dermal contact P2 – Inhalation of dust and/or vapours	R1 – Construction and maintenance workers R2 – Current and future users (Workers and visitors to the Zoo);	<p>The potential for contamination from the identified sources is generally considered to be low to moderate.</p> <p>A programme of boreholes and soil analysis was undertaken as part of this investigation</p> <p>Testing of groundwater may be required if significant contamination is recorded.</p> <p>Biological testing may be required if signs of buried animal waste are observed.</p>
	P2 – Inhalation of dust and/or vapours	R3 – Adjacent users (Residential)	
	P3 – Leaching of contaminants and vertical mitigation into groundwater	R4 – Groundwater	
	P4 – Surface water run-off P5 – Lateral migration of groundwater	R5 – Surface water	
	P6 – Direct contact with terrestrial ecology	R6 – Terrestrial ecology (including zoo animals)	
<b>S2 – Hazardous Building Materials</b> (asbestos, lead, SMF and PCB)	P2 – Inhalation of dust and/or vapours	R1 – Construction and maintenance workers R2 – Current and future users (Workers and visitors to the Zoo)	Undertake a hazardous building materials survey and remove hazardous materials prior to demolition of existing structures.

Source	Transport Pathway	Receptor	Risk Management Action Recommended
		R3 – Adjacent users (Residential)	

## 7. Field Work Methods

### 7.1 Data Quality Objectives and Project Quality Procedures

The PSI has been devised broadly in accordance with the seven step data quality objective (DQO) process which is provided in Appendix B, Schedule B2 of National Environment Protection Measure 1999 revised 2013, National Environment Protection Council (NEPC (2013)). The DQO process is outlined as follows:

- Stating the Problem;
- Identifying the Decision;
- Identifying Inputs to the Decision;
- Defining the Boundary of the Assessment;
- Developing a Decision Rule;
- Specifying Acceptable Limits on Decision Errors; and
- Optimising the Design for Obtaining Data.

Referenced sections for the respective DQO listed above are presented in Table D1, Appendix D.

### 7.2 Data Quality Indicators

The performance of the assessment in achieving the DQO was assessed through the application of Data Quality Indicators (DQI), defined as follows:

- Precision:** A quantitative measure of the variability (or reproducibility) of data;
- Accuracy:** A quantitative measure of the closeness of reported data to the “true” value;
- Representativeness:** The confidence (expressed qualitatively) that data are representative of each media present on the site;
- Completeness:** A measure of the amount of useable data from a data collection activity; and
- Comparability:** The confidence (expressed qualitatively) that data can be considered equivalent for each sampling and analytical event.

Further comments on the DQI are presented in Appendix D.

### 7.3 Sampling Locations and Rationale

Based on a site area of approximately 10,000 m<sup>2</sup> and with reference to Table A in the NSW EPA (1995) Sampling Design Guidelines (EPA, 1995) for site characterisation purposes, a minimum of 21 sampling locations are recommended. As the investigation was undertaken concurrently with a geotechnically investigation by DP, environmental samples were taken from the 17 geotechnical boreholes which equates to approximately 80% of the recommended sampling density in EPA (1995). It is noted that due to site access restrictions related to the animal exhibits the boreholes were not arranged on a grid-based pattern although areas of expected filling were targeted.

The borehole locations are shown on Drawing 1, Appendix A.

### 7.4 Soil Sampling Procedure

The boreholes were drilled using a bobcat mounted drilling rig or hand tools depending on site access conditions. The boreholes were drilled to depths of between 0.22 m and 1.6 m bgl, to the depth of fill or prior refusal. Soil samples were collected from each borehole.

All sampling data was recorded on DP's borehole logs with essential information included in the chain-of-custody sheets. The general sampling procedure adopted for the collection of environmental samples is summarised below:

- Collection of soil samples from the auger returns at discrete depth intervals;
- Transfer of samples into laboratory-prepared glass jars, filled to the top to minimise the headspace within the sample jar and capping immediately with a Teflon lined lid to minimise loss of volatiles;
- Labelling of sample containers with individual and unique identification, including project number, sample location and sample depth;
- Replicate soil samples of each of the primary samples were collected in zip-locked bags for field screening for VOCs using a PID calibrated with 100 ppm isobutylene gas; and
- Placement of the glass jars into an ice cooled, insulated and sealed container for transport to the laboratory.

### 7.5 Analytical Rationale

The analytical scheme was designed to obtain an indication of the potential presence and possible distribution of contaminants that may be attributable to past and present activities, and features within the site, as discussed in Section 6.

### 7.6 Field Quality Assurance and Quality Control

The field QC procedures for sampling were undertaken in accordance with Douglas Partners' *Field Procedures Manual*. Field replicates were recovered and analysed for a limited suite of contaminants

by means of intra-laboratory analysis. The results of the field QA programme are presented in Appendix D.

## 8. Site Assessment Criteria

The site assessment criteria (SAC) applied in the current investigation are informed by the CSM which identified human and ecological receptors as potential receptors to contamination on the site (refer to Section 6). Analytical results were assessed (as a Tier 1 assessment) against the SAC comprising the investigation and screening levels of Schedule B1, NEPC (2013). The NEPC (2013) guidelines are endorsed by the NSW EPA under the CLM Act 1997.

The investigation and screening levels are applicable to generic land use settings and include consideration of, where relevant, the soil type and the depth of contamination. The investigation and screening levels are not intended to be used as clean up levels. Rather, they establish concentrations above which further appropriate investigation (e.g. Tier 2 assessment) should be undertaken. They are intentionally conservative and are based on a reasonable worst-case scenario.

The investigation and screening levels applied in the current investigation comprise levels adopted for commercial and industrial land-use.

### 8.1 Soils

#### 8.1.1 Health Investigation and Screening Levels

The Health Investigation Levels (HIL) and Health Screening Levels (HSL) are scientifically-based, generic assessment criteria designed to be used in the first stage (Tier 1) of an assessment of potential human health risk from chronic exposure to contaminants.

HIL are applicable to assessing health risk arising *via* all relevant pathways of exposure for a range of metals and organic substances. The HIL are generic to all soil types and apply generally to a depth of 3 m below the surface for residential land.

HSL are applicable to selected petroleum compounds and fractions to assess the risk to human health via inhalation and direct contact pathways. HSL have been developed for different land uses, soil types and depths to contamination.

The generic HIL and HSL are considered to be appropriate for the assessment of contamination at the site. Given the proposed land use the adopted HIL and HSL are:

- **HIL-D** – commercial and industrial land-use;
- **HSL-D** – commercial and industrial land-use;
- For direct contact with petroleum hydrocarbons for maintenance workers the soil screening levels for direct contact (Table A4) from CRC Care Technical Report No. 10<sup>3</sup> have been adopted; and

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<sup>3</sup> E. Friebe and P. Nadebaum (2011). Health Screening Levels for Petroleum hydrocarbons in soil and groundwater

- For direct contact with petroleum hydrocarbons for general site users the soil screening levels for HSL D (Table A4) from CRC Care Technical Report No. 10 have been adopted.

**Table 3: Inputs to the Derivation of HSLs**

Variable	Input	Rationale
Potential exposure pathway	Soil vapour intrusion (inhalation) / Direct contact *	The CSM has identified both potential exposure pathways.
Soil Type	Sand	Based on the presence of variable types of fill including sand, gravel and clay fill (Section 9) a soil type of sand has been adopted as a conservative measure.
Depth to contamination	0 m to <1 m 0 m to <2 m (intrusive maintenance worker)	Contamination from imported fill and/or industrial processes may impact near surface soils, therefore conservatively the 0 to <1 m depth range has been adopted.

\*Developed by CRC CARE (2011)

The adopted soil HIL and HSL for the potential contaminants of concern are presented in Table 4 and Table E1, Appendix E.

**Table 4: Health Investigation and Screening Levels (HIL and HSL) for proposed land uses in mg/kg unless otherwise indicated**

Contaminants		HIL-D,	HSL-D (Vapour Intrusion in Soil)	HSL-D (Direct Contact) <sup>4</sup>	HSL Maintenance Workers (Direct Contact) <sup>4</sup>
Metals	Arsenic	3,000	-	-	-
	Cadmium	900	-	-	-
	Chromium (VI)	3,600	-	-	-
	Copper	240,000	-	-	-
	Lead	1,500	-	-	-
	Mercury (inorganic)	730	-	-	-
	Nickel	6,000	-	-	-
	Zinc	400,000	-	-	-
PAH	Carcinogenic Benzo(a)pyrene TEQ <sup>1</sup>	40	-	-	-
	Naphthalene	-	NL	11,000	29,000
	Total PAH	4,000	-	-	-

Contaminants		HIL-D,	HSL-D (Vapour Intrusion in Soil)	HSL-D (Direct Contact) <sup>4</sup>	HSL Maintenance Workers (Direct Contact) <sup>4</sup>
TRH	C6 – C10 (less BTEX) [F1]	-	260	-	-
	>C10-C16 (less Naphthalene) [F2]	-	NL	-	-
	C6 – C10	-	-	26,000	82,000
	>C10-C16	-	-	20,000	62,000
	>C16-C34 [F3]	-	-	27,000	85,000
	>C34-C40 [F4]	-	-	38,000	120,000
BTEX	Benzene	-	3	430	1,100
	Toluene	-	NL	99,000	120,000
	Ethylbenzene	-	NL	27,000	85,000
	Xylenes	-	230	81,000	130,000
Phenol	Pentachlorophenol (used as an initial screen)	660	-	-	-
OPP	Chloropyrifos	2,000	-	-	-
OCP	Aldrin + Dieldrin	45	-	-	-
	Chlordane	530	-	-	-
	DDT+DDE+DDD	3,600	-	-	-
	Endosulfan	2,000	-	-	-
	Endrin	100	-	-	-
	Heptachlor	50	-	-	-
	HCB	80	-	-	-
	Methoxychlor	2,500	-	-	-
PCB <sup>2</sup>		7	-	-	-

## Notes:

- 1 sum of carcinogenic PAH
- 2 non dioxin-like PCB only.
- 3 NL Not Limiting
- 4 HSL for Direct Contact CRC CARE Technical Report No. 10

For those analytes which do not have HIL or HSL for soil published in NEPC (2013) the laboratory practical quantitation limits (PQLs) are adopted as an initial screen. Should any concentrations be reported above the reporting limits then further investigation into the development of appropriate screening criteria will be undertaken.



### 8.1.2 Ecological Investigation Levels and Screening Levels

Ecological Investigation Levels (EIL) have been derived for selected metals and organic compounds and are applicable for assessing risk to terrestrial ecosystems (NEPC, 2013). EIL depend on specific soil physiochemical properties and land use scenarios and generally apply to the top 2 m of soil, which corresponds to the root zone and habitation zone of many species. The EIL is determined for a contaminant based on the sum of the ambient background concentration (ABC) and an added contaminant limit (ACL). The ABC of a contaminant is the soil concentration in a specific locality that is the sum of naturally occurring background levels and the contaminants levels that have been introduced from diffuse or non-point sources (e.g. motor vehicle emissions). The ACL is the added concentration (above the ABC) of a contaminant above which further appropriate investigation and evaluation of the impact on ecological values is required.

The EIL is calculated using the following formula:

$$\text{EIL} = \text{ABC} + \text{ACL},$$

The ABC is determined through direct measurement at an appropriate reference site or through the use of methods defined by Olszowy et al *Trace element concentrations in soils from rural and urban areas of Australia*, Contaminated Sites monograph no. 4, South Australian Health Commission, Adelaide, Australia 1995 (Olszowy, 1995) or Hamon et al, *Geochemical indices allow estimation of heavy metal background concentrations in soils*, Global Biogeochemical Cycles, vol. 18, GB1014, (Hamon, 2004). ACL is based on the soil characteristics of pH, CEC and clay content.

EIL (and ACLs where appropriate) have been derived in NEPC (2013) for only a short list of contaminants comprising As, Cu, Cr (III), DDT, naphthalene, Ni, Pb and Zn. An *Interactive (Excel) Calculation Spreadsheet* may be used for calculating site-specific EIL for these contaminants, and has been provided in the ASC NEPM Toolbox available on the SCEW (Standing Council on Environment and Water) website (<http://www.scew.gov.au/node/941>).

The adopted EIL, derived from the *Interactive (Excel) Calculation Spreadsheet* are shown in the following Table 5 and Table E1, Appendix E. The following site specific data and assumptions have been used to determine the EIL:

- A protection level of 60% has been adopted;
- The EIL will apply to the top 2 m of soil;
- EIL for commercial and industrial land will apply;
- Given the likely source of soil contaminants (i.e. historical site use/fill) the contamination is considered as “aged” (>2 years);
- ABCs have been derived using the *Interactive (Excel) Calculation Spreadsheet* using input parameters in Table 5 for the State of NSW, and low traffic volumes; and
- Based on average pH (from site data) and CEC values for soil types collected across the site, the soil profile (in the upper layers) has a mean pH of 7.3 (site data) and CEC of 8.75 cmol/kg.

**Table 5: Ecological Investigation Levels (EIL) in mg/kg**

Analyte		EIL	Comments
Metals	Arsenic	160	Adopted pH of 7.3 and CEC of 8.75 cmol <sub>e</sub> /kg; assumed clay content [1% - conservative based on assumptions in absence of site data]
	Copper	260	
	Nickel	210	
	Chromium III	320	
	Lead	1,800	
	Zinc	640	
PAH	Naphthalene	370	
OCP	DDT	640	

Ecological Screening Levels (ESL) are used to assess the risk of selected petroleum hydrocarbon compounds, BTEX and benzo(a)pyrene to terrestrial ecosystems. ESL apply to the top 2 m of the soil profile as for EIL.

ESL have been derived in NEPC (2013) for petroleum fractions F1 to F4 as well as BTEX and benzo(a)pyrene. Site specific data and assumptions as summarised in Table 6 have been used to determine the ESL. The adopted ESL, from Table 1B(6), Schedule B1 of NEPC (2013) are shown in Table 7 and Table E1, Appendix E.

**Table 6: Inputs to the Derivation of ESL**

Variable	Input	Rationale
Depth of ESL application	Top 2 m of the soil profile	The top 2 m depth below ground level corresponds to the root zone and habitation zone of many species.
Land use	Commercial and Industrial	Proposed development is commercial (zoo)
Soil Texture	Coarse	Variable types of fill including sand, gravel and clay fill being observed (Section 9), the more conservative soil texture has been selected.

**Table 7: Ecological Screening Levels (ESL) in mg/kg**

Analyte		ESL	Comments
TRH	C6 – C10 (less BTEX) [F1]	215*	All ESLs are low reliability apart from those marked with * which are moderate reliability
	>C10-C16 (less Naphthalene) [F2]	170*	
	>C16-C34 [F3]	1,700	
	>C34-C40 [F4]	3,300	
BTEX	Benzene	75	
	Toluene	135	

Analyte		ESL	Comments
	Ethylbenzene	165	
	Xylenes	180	
PAH	Benzo(a)pyrene	1.4	

### 8.1.3 Management Limits – Petroleum Hydrocarbons

In addition to appropriate consideration and application of the HSL and ESL, there are additional considerations which reflect the nature and properties of petroleum hydrocarbons, including:

- Formation of observable light non-aqueous phase liquids (LNAPL);
- Fire and explosion hazards; and
- Effects on buried infrastructure e.g. penetration of, or damage to, in-ground services.

Management Limits to avoid or minimise these potential effects have been adopted in NEPC (2013) as interim Tier 1 guidance. Management Limits have been derived in NEPC (2013) for the same four petroleum fractions as the HSL (F1 to F4). The adopted Management Limits, from Table 1B(7), Schedule B1 of NEPC (2013) are shown in the following Table 8 and Table E1, Appendix E. The following site specific data and assumptions have been used to determine the Management Limits:

- The Management Limits will apply to any depth within the soil profile;
- The Management Limits for commercial and industrial land apply; and
- A “coarse” soil texture has been adopted, based on variable fill soil types observed (Section 9).

**Table 8: Management Limits in mg/kg**

Analyte		Management Limit
TRH	C <sub>6</sub> – C <sub>10</sub> (F1) #	700
	>C <sub>10</sub> -C <sub>16</sub> (F2) #	1,000
	>C <sub>16</sub> -C <sub>34</sub> (F3)	3,500
	>C <sub>34</sub> -C <sub>40</sub> (F4)	10,000

# Separate management limits for BTEX and naphthalene are not available hence these have not been subtracted from the relevant fractions to obtain F1 and F2

Management limits are applied after consideration of relevant ESLs and HSLs

## 8.2 Asbestos in Soil

Bonded asbestos-containing material (ACM) is the most common form of asbestos contamination across Australia, generally arising from:

- Inadequate removal and disposal practices during demolition of buildings containing asbestos products;

- Widespread dumping of asbestos products and asbestos containing fill on vacant land and development sites; and
- Commonly occurring in historical fill containing unsorted demolition materials.

Mining, manufacturing or distribution of asbestos products may result in sites being contaminated by friable asbestos including free fibres. Severe weathering or damage to bonded ACM may also result in the formation of friable asbestos comprising fibrous asbestos (FA) and/or asbestos fines (AF).

Asbestos only poses a risk to human health when asbestos fibres are made airborne and inhaled. If asbestos is bound in a matrix such as cement or resin, it is not readily made airborne except through substantial physical damage. Bonded ACM in sound condition represents a low human health risk, whilst both FA and AF materials have the potential to generate, or be associated with, free asbestos fibres. Consequently, FA and AF must be carefully managed to prevent the release of asbestos fibres into the air.

A detailed asbestos assessment as outlined in NEPC (2013) was not undertaken. As such, asbestos was screened from jar samples taken for general analysis of contaminants. Therefore the presence or absence of asbestos at a limit of reporting of 0.1 g/kg has been adopted for this assessment as an initial screen.

### 8.3 Waste Classification Criteria

The results of the soil analysis were compared to the waste classification criteria in the NSW EPA *Waste Classification Guidelines* 2014 (EPA, 2014).

EPA (2014) contains a six step procedure for determining the type of waste and the waste classification. Part of the procedure, for materials not classified as special waste or pre-classified waste, is a comparison of analytical data initially against contaminant threshold (CT) values specific to a waste category. Alternatively, the data can be assessed against specific contaminant concentration (SCC) thresholds when used in conjunction with toxicity characteristic leaching procedure (TCLP) thresholds.

The CT, SCC, and TCLP values relevant to this preliminary waste classification are shown in Table E2, Appendix E.

The POEO Act defines virgin excavated natural material (VENM) as:

*'natural material (such as clay, gravel, sand, soil or rock fines):*

*(a) that has been excavated or quarried from areas that are not contaminated with manufactured chemicals, or with process residues, as a result of industrial, commercial, mining or agricultural activities and*

*(b) that does not contain any sulfidic ores or soils or any other waste*

As a means of assessing the presence of manufactured chemicals or process residues, the analytical data for samples of natural soils were compared against published background concentrations, as

shown in the attached Table E2, Appendix E. The following publications with background concentration ranges for Australian soils have been referenced in assessing the concentrations of analytes:

- National Environmental Protection Council (NEPC) *National Environmental Protection (Assessment of Site Contamination) Measure* (1999) Schedule B(1) Guidelines on the Investigation Levels for Soil and Groundwater, Background Ranges (NEPC 1999); and
- Australian and New Zealand Environment and Conservation Council/National Health and Medical Research Council (ANZECC/NHMRC): *Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites* (1992), Environmental Soil Quality Guidelines Column A Background (ANZECC A) (ANZECC 1992).

For those analytes which do not have published background concentrations, the laboratory practical quantification limits (PQLs) were adopted.

## 9. Field Work Results

Detailed descriptions of the conditions encountered in each of the boreholes are provided in the borehole logs in Appendix F.

Fill soils and/or topsoil filling was encountered in the boreholes to depths of between 0.22 m and 1.3 m bgl. The fill typically comprised brown, grey, dark grey and dark brown silty sand. Inclusions of roots, sandstone gravel, clay, wood chips, organics, glass fragments and brick fragments were observed in some locations.

The fill soil was underlain by very low and low strength sandstone that was typically light brown and light grey in colour

Groundwater was not encountered in the boreholes. It is noted, however, that groundwater wells have been previously installed at the Zoo and groundwater seepage was encountered in the fractured bedrock at depths of between 1.4 m and 3.7 m bgl. It should be noted that groundwater can vary according to season and rainfall infiltration.

The PID readings in each sample were all below 1 ppm suggesting that the potential for volatile organic contaminants was low.

## 10. Laboratory Results

The results of the laboratory analysis are summarised in Appendix E. Table E1 presents the laboratory results in comparison to the site assessment criteria and Table E2 presents the results in comparison to the waste classification criteria and VENM criteria.

The analytical laboratory, accredited by NATA, is required to conduct in-house QA/QC procedures. These are normally incorporated into every analytical run and include reagent blanks, spike recovery, surrogate recovery and duplicate samples. These results are included in the laboratory certificates. The results of the DP assessment of laboratory QA/QC are in Appendix D.

The chain of custody documentation, sample receipt advice and laboratory certificates of analysis are included in Appendix G.

## 11. Discussion

### 11.1 Site History

The site has operated as the Zoo since 1916. Since the establishment of the Zoo there have been a number of new exhibits and zoo buildings redeveloped and refurbished. The potential for contamination in the site was generally considered to be low, however, the presence of filling across the site (refer to Section 9) may require further assessment.

### 11.2 Soil Results

Selected soil samples were analysed for the potential contaminants of concern comprising metals, TRH, BTEX, PAH, OCP, OPP, PCB, phenols and asbestos. The results of the soil analysis and the SAC are presented in Table E1, Appendix E.

The recorded concentrations of BTEX, OCP, OPP, PCB, phenols and asbestos were below the laboratory PQLs and therefore below the site assessment criteria.

The recorded concentrations of metals, TRH and PAH in a limited number of samples were above the laboratory PQLs but below the site assessment criteria.

It is noted that while no asbestos was reported in the soil samples, the possibility of asbestos being present cannot be entirely ruled out (particularly in imported filling).

In summary, no significant soil contamination was found in the analysed samples and the site should be suitable for the proposed development.

### 11.3 Preliminary *In Situ* Waste Classification

#### 11.3.1 Filling Soils

Table 9 presents the results of the six step procedure outlined in EPA (2014) for determining the type of waste and the waste classification. This process applies to the materials tested and described as filling and which does not therefore meet the definition of VENM.

**Table 9: Six Step Classification Procedure**

Step	Comments	Rationale
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1. Is the waste special waste?	No	No asbestos-containing materials (ACM), clinical or related waste, or waste tyres were observed in the test pits; Asbestos was not detected by the analytical laboratory.
2. Is the waste liquid waste?	No	The filling comprised a soil matrix.
3. Is the waste "pre-classified"?	No	The filling material is not pre-classified with reference to EPA (2014).
4. Does the waste possess hazardous waste characteristics?	No	The waste was not observed to contain or considered at risk to contain explosives, gases, flammable solids, oxidising agents, organic peroxides, toxic substances, corrosive substances, coal tar, batteries, lead paint or dangerous goods containers.
5. Determining a wastes classification using chemical assessment	Conducted	Refer to Table E2 (Appendix E).
6. Is the waste putrescible or non-putrescible?	No	The filling does not contain materials considered to be putrescible <sup>a</sup> .

NOTE: a wastes that are generally not classified as putrescible include; soils, timber, garden trimmings, agricultural, forest and crop materials, and natural fibrous organic and vegetative materials (EPA, 2014).

The analytical data are presented in the attached laboratory certificates and are summarised in Table E2, Appendix E with reference to the waste classification guidelines. As shown in Table E2, Appendix E, majority of the contaminant concentrations for the analysed fill samples were within the contaminant thresholds (CT1s) for General Solid Waste (GSW) with the exception nickel and / or benzo(a)pyrene in four samples. Toxicity characteristic leaching procedure (TCLP) testing was conducted on these samples. The specific contaminant concentration (SCC) and TCLP concentrations for those samples were within the contaminant thresholds, SCC1 and TCLP1, for GSW.

Therefore based on the above considerations the fill as described in Section 9 within the site is preliminarily classified *in situ* as **General Solid Waste (non-putrescible)**.

It is recommended that visual confirmation of the waste classification be conducted during excavation and load out of the material. If signs of significant contamination are observed during excavation such as building rubble (including asbestos), significant anthropogenic materials, odorous or discoloured soils or materials that vary from those described in this report then further *ex situ* waste classification should be undertaken on the impacted materials.

### 11.3.2 Natural Soils

The following Table 10 presents the results of the assessment of natural soils and bedrock at the site with reference to the VENM definition and EPA advice outlined in Section 7.

**Table 10: VENM Classification Procedure**



Item	Comments	Rationale
1. Is the material natural?	Yes	Natural materials logged in the boreholes as light brown and light grey sandstone
2. Is the material impacted by manufactured chemicals or process residues?	No	There were no visual indicators of chemical contamination of the materials in the test pits. Contaminant concentrations were within typical background levels (Table E2, Appendix E).
3. Are the materials acid sulphate soils?	No	A review of the NSW Acid Sulfate Soil Risk Map shows the site in an area of no ASS occurrence.
4. Are there current or previous land uses that have (or may have) contaminated the materials?	No	Previous land uses may have impacted on surface soils overlying the materials. Low chemical concentrations indicate no likely impact on the natural materials.

As shown in the attached Table E2, Appendix E all contaminant concentrations for the analysed natural soil samples were within the typical background concentrations. Based on the outcomes presented in Table 10, the natural soils and bedrock described as light brown and light grey, sandstone, within the site as shown on Drawing 1, are preliminarily classified as **VENM**. If during excavation the natural *in situ* soil is found to contain possible signs of contamination or is cross-contaminated with any non-**VENM** materials the excavated natural soil cannot be classified as **VENM**. In this regard, it is also recommended that care should be taken during the bulk excavation of the **VENM** to prevent cross contamination between the **VENM** and non-**VENM** materials.

The materials classified as **VENM** are pre-classified as General Solid Waste (non-putrescible) under EPA (2014). Furthermore, **VENM** may be applied to land in an off-site location without the requirement of a licence under the POEO Act.

However, due to the preliminary nature of the assessment and limited returns of the underlying sandstone, only two samples had chemical analysis undertaken. It is recommended that following the removal of the overlying fill soils that further assessment of the natural soil/sandstone (at least near the interface between filling and in situ materials) be undertaken (by visual and/or analytical) to confirm if the natural soil will be classified as virgin excavated natural soil (**VENM**) should off-site disposal of the natural soils be required.

### 11.3.3 Conditions

Given the preliminary nature of the assigned waste classification, which was based on limited sampling, it is recommended that the waste classification be confirmed by a qualified environmental consultant *ex situ* prior to and during bulk excavation (if required).

The **VENM** classification is subject to appropriate segregation from non-**VENM** materials. Note that appropriate prior arrangement with the receiving site/relevant authorities should be obtained prior to the disposal of any material off site. The receiving site should check to ensure that the material received is suitable for the proposed use, matches the description provided in this report and contains no cross

contamination. The receiving site should also check any acceptability restrictions specific to the receiving site such as salinity, ecological requirements.

Both the receiving site and the site disposing of the material should satisfy the requirements of the licence before disposal of the material is undertaken. Note that appropriate prior arrangement with the receiving site/relevant authorities should be obtained prior to the disposal of any material off site. The receiving site should check to ensure that the material received matches the description provided in this report and contains no cross contamination. The handling, transport and disposal of the materials should be conducted in accordance with regulatory and statutory requirements

## 12. Conclusion and Recommendations

Based on the findings of the investigation it is considered that the potential contamination within the site is low and localised. The concentrations of the contaminants of concern analysed were within the adopted site assessment criteria and the site is considered suitable for the proposed development.

The fill as described in Section 9 in the site is preliminarily classified *in situ* as General Solid Waste (non-putrescible). It is recommended that visual confirmation of the waste classification be conducted during excavation and load out of the material (if required). Similarly, further assessment of the underlying natural material is recommended if the natural soils/rock requires off-site disposal.

It is recommended that an unexpected finds protocol (UFP) should be prepared which outlines the steps to be undertaken to identify, report and manage any signs of potential environmental concern encountered during earthworks/redevelopment works. These usually comprise notifying workers during the standard site induction of whom to report finds to, and then the protocol for isolating the find, organising investigation and management and notifying appropriate personnel/ organisations.

It is also recommended that a hazardous building materials survey be conducted on the buildings prior to demolition given the age of the structures. In order to comply with the NSW Work Health and Safety (WHS) Regulation (Regulation 450) an asbestos register must be obtained prior to demolition or refurbishment.

## 13. Limitations

Douglas Partners (DP) has prepared this report for this project at the Upper Australian Habitat, Taronga Zoological Park, Mosman in accordance with DP's proposal dated 22 October 2018 and acceptance received from Mr Michael Head, on behalf of Taronga Conservation Society of Australia. The work was carried out under DP's Conditions of Engagement. This report is provided for the exclusive use of Taronga Conservation Society Australia for this project only and for the purposes as described in the report. It should not be used by or relied upon for other projects or purposes on the same or other site or by a third party. Any party so relying upon this report beyond its exclusive use and purpose as stated above, and without the express written consent of DP, does so entirely at its own risk and without recourse to DP for any loss or damage. In preparing this report DP has necessarily relied upon information provided by the client and/or their agents.

The results provided in the report are indicative of the sub-surface conditions on the site only at the specific sampling and/or testing locations, and then only to the depths investigated and at the time the work was carried out. Sub-surface conditions can change abruptly due to variable geological processes and also as a result of human influences. Such changes may occur after DP's field testing has been completed.

DP's advice is based upon the conditions encountered during this investigation. The accuracy of the advice provided by DP in this report may be affected by undetected variations in ground conditions across the site between and beyond the sampling and/or testing locations. The advice may also be limited by budget constraints imposed by others or by site accessibility.

Asbestos has not been detected by observation or by laboratory analysis, either on the surface of the site, or in filling materials at the test locations sampled and analysed. Building demolition materials, such as glass, and, brick fragments were, however, located in previous below-ground filling, and these are considered as indicative of the possible presence of hazardous building materials (HBM), including asbestos.

Although the sampling plan adopted for this investigation is considered appropriate to achieve the stated project objectives, there are necessarily parts of the site that have not been sampled and analysed. This is due to parts of the site being inaccessible and not available for inspection/sampling, as well as vegetation preventing visual inspection and reasonable access. It is therefore considered possible that HBM, including asbestos, may be present in unobserved or untested parts of the site, between and beyond sampling locations, and hence no warranty can be given that asbestos is not present.

This report must be read in conjunction with all of the attached and should be kept in its entirety without separation of individual pages or sections. DP cannot be held responsible for interpretations or conclusions made by others unless they are supported by an expressed statement, interpretation, outcome or conclusion stated in this report.

This report, or sections from this report, should not be used as part of a specification for a project, without review and agreement by DP. This is because this report has been written as advice and opinion rather than instructions for construction. The contents of this report do not constitute formal design components such as are required, by the Health and Safety Legislation and Regulations, to be included in a Safety Report specifying the hazards likely to be encountered during construction and the controls required to mitigate risk. This design process requires risk assessment to be undertaken, with such assessment being dependent upon factors relating to likelihood of occurrence and consequences of damage to property and to life. This, in turn, requires project data and analysis presently beyond the knowledge and project role respectively of DP. DP may be able, however, to assist the client in carrying out a risk assessment of potential hazards contained in the Comments section of this report, as an extension to the current scope of works, if so requested, and provided that suitable additional information is made available to DP. Any such risk assessment would, however, be necessarily restricted to the environmental components set out in this report and to their application by the project designers to project design, construction, maintenance and demolition.

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**Douglas Partners Pty Ltd**

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## Appendix A

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About This Report  
Drawing 1

# About this Report

# Douglas Partners



## Introduction

These notes have been provided to amplify DP's report in regard to classification methods, field procedures and the comments section. Not all are necessarily relevant to all reports.

DP's reports are based on information gained from limited subsurface excavations and sampling, supplemented by knowledge of local geology and experience. For this reason, they must be regarded as interpretive rather than factual documents, limited to some extent by the scope of information on which they rely.

## Copyright

This report is the property of Douglas Partners Pty Ltd. The report may only be used for the purpose for which it was commissioned and in accordance with the Conditions of Engagement for the commission supplied at the time of proposal. Unauthorised use of this report in any form whatsoever is prohibited.

## Borehole and Test Pit Logs

The borehole and test pit logs presented in this report are an engineering and/or geological interpretation of the subsurface conditions, and their reliability will depend to some extent on frequency of sampling and the method of drilling or excavation. Ideally, continuous undisturbed sampling or core drilling will provide the most reliable assessment, but this is not always practicable or possible to justify on economic grounds. In any case the boreholes and test pits represent only a very small sample of the total subsurface profile.

Interpretation of the information and its application to design and construction should therefore take into account the spacing of boreholes or pits, the frequency of sampling, and the possibility of other than 'straight line' variations between the test locations.

## Groundwater

Where groundwater levels are measured in boreholes there are several potential problems, namely:

- In low permeability soils groundwater may enter the hole very slowly or perhaps not at all during the time the hole is left open;

- A localised, perched water table may lead to an erroneous indication of the true water table;
- Water table levels will vary from time to time with seasons or recent weather changes. They may not be the same at the time of construction as are indicated in the report; and
- The use of water or mud as a drilling fluid will mask any groundwater inflow. Water has to be blown out of the hole and drilling mud must first be washed out of the hole if water measurements are to be made.

More reliable measurements can be made by installing standpipes which are read at intervals over several days, or perhaps weeks for low permeability soils. Piezometers, sealed in a particular stratum, may be advisable in low permeability soils or where there may be interference from a perched water table.

## Reports

The report has been prepared by qualified personnel, is based on the information obtained from field and laboratory testing, and has been undertaken to current engineering standards of interpretation and analysis. Where the report has been prepared for a specific design proposal, the information and interpretation may not be relevant if the design proposal is changed. If this happens, DP will be pleased to review the report and the sufficiency of the investigation work.

Every care is taken with the report as it relates to interpretation of subsurface conditions, discussion of geotechnical and environmental aspects, and recommendations or suggestions for design and construction. However, DP cannot always anticipate or assume responsibility for:

- Unexpected variations in ground conditions. The potential for this will depend partly on borehole or pit spacing and sampling frequency;
- Changes in policy or interpretations of policy by statutory authorities; or
- The actions of contractors responding to commercial pressures.

If these occur, DP will be pleased to assist with investigations or advice to resolve the matter.

# *About this Report*

## **Site Anomalies**

In the event that conditions encountered on site during construction appear to vary from those which were expected from the information contained in the report, DP requests that it be immediately notified. Most problems are much more readily resolved when conditions are exposed rather than at some later stage, well after the event.

## **Information for Contractual Purposes**

Where information obtained from this report is provided for tendering purposes, it is recommended that all information, including the written report and discussion, be made available. In circumstances where the discussion or comments section is not relevant to the contractual situation, it may be appropriate to prepare a specially edited document. DP would be pleased to assist in this regard and/or to make additional report copies available for contract purposes at a nominal charge.

## **Site Inspection**

The company will always be pleased to provide engineering inspection services for geotechnical and environmental aspects of work to which this report is related. This could range from a site visit to confirm that conditions exposed are as expected, to full time engineering presence on site.



## Sampling

Sampling is carried out during drilling or test pitting to allow engineering examination (and laboratory testing where required) of the soil or rock.

Disturbed samples taken during drilling provide information on colour, type, inclusions and, depending upon the degree of disturbance, some information on strength and structure.

Undisturbed samples are taken by pushing a thin-walled sample tube into the soil and withdrawing it to obtain a sample of the soil in a relatively undisturbed state. Such samples yield information on structure and strength, and are necessary for laboratory determination of shear strength and compressibility. Undisturbed sampling is generally effective only in cohesive soils.

## Test Pits

Test pits are usually excavated with a backhoe or an excavator, allowing close examination of the in-situ soil if it is safe to enter into the pit. The depth of excavation is limited to about 3 m for a backhoe and up to 6 m for a large excavator. A potential disadvantage of this investigation method is the larger area of disturbance to the site.

## Large Diameter Augers

Boreholes can be drilled using a rotating plate or short spiral auger, generally 300 mm or larger in diameter commonly mounted on a standard piling rig. The cuttings are returned to the surface at intervals (generally not more than 0.5 m) and are disturbed but usually unchanged in moisture content. Identification of soil strata is generally much more reliable than with continuous spiral flight augers, and is usually supplemented by occasional undisturbed tube samples.

## Continuous Spiral Flight Augers

The borehole is advanced using 90-115 mm diameter continuous spiral flight augers which are withdrawn at intervals to allow sampling or in-situ testing. This is a relatively economical means of drilling in clays and sands above the water table. Samples are returned to the surface, or may be collected after withdrawal of the auger flights, but they are disturbed and may be mixed with soils from the sides of the hole. Information from the drilling (as distinct from specific sampling by SPTs or undisturbed samples) is of relatively low

reliability, due to the remoulding, possible mixing or softening of samples by groundwater.

## Non-core Rotary Drilling

The borehole is advanced using a rotary bit, with water or drilling mud being pumped down the drill rods and returned up the annulus, carrying the drill cuttings. Only major changes in stratification can be determined from the cuttings, together with some information from the rate of penetration. Where drilling mud is used this can mask the cuttings and reliable identification is only possible from separate sampling such as SPTs.

## Continuous Core Drilling

A continuous core sample can be obtained using a diamond tipped core barrel, usually with a 50 mm internal diameter. Provided full core recovery is achieved (which is not always possible in weak rocks and granular soils), this technique provides a very reliable method of investigation.

## Standard Penetration Tests

Standard penetration tests (SPT) are used as a means of estimating the density or strength of soils and also of obtaining a relatively undisturbed sample. The test procedure is described in Australian Standard 1289, Methods of Testing Soils for Engineering Purposes - Test 6.3.1.

The test is carried out in a borehole by driving a 50 mm diameter split sample tube under the impact of a 63 kg hammer with a free fall of 760 mm. It is normal for the tube to be driven in three successive 150 mm increments and the 'N' value is taken as the number of blows for the last 300 mm. In dense sands, very hard clays or weak rock, the full 450 mm penetration may not be practicable and the test is discontinued.

The test results are reported in the following form.

- In the case where full penetration is obtained with successive blow counts for each 150 mm of, say, 4, 6 and 7 as:  
4,6,7  
N=13
- In the case where the test is discontinued before the full penetration depth, say after 15 blows for the first 150 mm and 30 blows for the next 40 mm as:  
15, 30/40 mm



# *Sampling Methods*

The results of the SPT tests can be related empirically to the engineering properties of the soils.

## **Dynamic Cone Penetrometer Tests / Perth Sand Penetrometer Tests**

Dynamic penetrometer tests (DCP or PSP) are carried out by driving a steel rod into the ground using a standard weight of hammer falling a specified distance. As the rod penetrates the soil the number of blows required to penetrate each successive 150 mm depth are recorded. Normally there is a depth limitation of 1.2 m, but this may be extended in certain conditions by the use of extension rods. Two types of penetrometer are commonly used.

- Perth sand penetrometer - a 16 mm diameter flat ended rod is driven using a 9 kg hammer dropping 600 mm (AS 1289, Test 6.3.3). This test was developed for testing the density of sands and is mainly used in granular soils and filling.
- Cone penetrometer - a 16 mm diameter rod with a 20 mm diameter cone end is driven using a 9 kg hammer dropping 510 mm (AS 1289, Test 6.3.2). This test was developed initially for pavement subgrade investigations, and correlations of the test results with California Bearing Ratio have been published by various road authorities.



## Description and Classification Methods

The methods of description and classification of soils and rocks used in this report are based on Australian Standard AS 1726-1993, Geotechnical Site Investigations Code. In general, the descriptions include strength or density, colour, structure, soil or rock type and inclusions.

## Soil Types

Soil types are described according to the predominant particle size, qualified by the grading of other particles present:

Type	Particle size (mm)
Boulder	>200
Cobble	63 - 200
Gravel	2.36 - 63
Sand	0.075 - 2.36
Silt	0.002 - 0.075
Clay	<0.002

The sand and gravel sizes can be further subdivided as follows:

Type	Particle size (mm)
Coarse gravel	20 - 63
Medium gravel	6 - 20
Fine gravel	2.36 - 6
Coarse sand	0.6 - 2.36
Medium sand	0.2 - 0.6
Fine sand	0.075 - 0.2

The proportions of secondary constituents of soils are described as:

Term	Proportion	Example
And	Specify	Clay (60%) and Sand (40%)
Adjective	20 - 35%	Sandy Clay
Slightly	12 - 20%	Slightly Sandy Clay
With some	5 - 12%	Clay with some sand
With a trace of	0 - 5%	Clay with a trace of sand

Definitions of grading terms used are:

- Well graded - a good representation of all particle sizes
- Poorly graded - an excess or deficiency of particular sizes within the specified range
- Uniformly graded - an excess of a particular particle size
- Gap graded - a deficiency of a particular particle size with the range

## Cohesive Soils

Cohesive soils, such as clays, are classified on the basis of undrained shear strength. The strength may be measured by laboratory testing, or estimated by field tests or engineering examination. The strength terms are defined as follows:

Description	Abbreviation	Undrained shear strength (kPa)
Very soft	vs	<12
Soft	s	12 - 25
Firm	f	25 - 50
Stiff	st	50 - 100
Very stiff	vst	100 - 200
Hard	h	>200

## Cohesionless Soils

Cohesionless soils, such as clean sands, are classified on the basis of relative density, generally from the results of standard penetration tests (SPT), cone penetration tests (CPT) or dynamic penetrometers (PSP). The relative density terms are given below:

Relative Density	Abbreviation	SPT N value	CPT qc value (MPa)
Very loose	vl	<4	<2
Loose	l	4 - 10	2 - 5
Medium dense	md	10 - 30	5 - 15
Dense	d	30 - 50	15 - 25
Very dense	vd	>50	>25

# *Soil Descriptions*

## **Soil Origin**

It is often difficult to accurately determine the origin of a soil. Soils can generally be classified as:

- Residual soil - derived from in-situ weathering of the underlying rock;
- Transported soils - formed somewhere else and transported by nature to the site; or
- Filling - moved by man.

Transported soils may be further subdivided into:

- Alluvium - river deposits
- Lacustrine - lake deposits
- Aeolian - wind deposits
- Littoral - beach deposits
- Estuarine - tidal river deposits
- Talus - scree or coarse colluvium
- Slopewash or Colluvium - transported downslope by gravity assisted by water. Often includes angular rock fragments and boulders.



### Rock Strength

Rock strength is defined by the Point Load Strength Index ( $Is_{(50)}$ ) and refers to the strength of the rock substance and not the strength of the overall rock mass, which may be considerably weaker due to defects. The test procedure is described by Australian Standard 4133.4.1 - 2007. The terms used to describe rock strength are as follows:

Term	Abbreviation	Point Load Index $Is_{(50)}$ MPa	Approximate Unconfined Compressive Strength MPa*
Extremely low	EL	<0.03	<0.6
Very low	VL	0.03 - 0.1	0.6 - 2
Low	L	0.1 - 0.3	2 - 6
Medium	M	0.3 - 1.0	6 - 20
High	H	1 - 3	20 - 60
Very high	VH	3 - 10	60 - 200
Extremely high	EH	>10	>200

\* Assumes a ratio of 20:1 for UCS to  $Is_{(50)}$ . It should be noted that the UCS to  $Is_{(50)}$  ratio varies significantly for different rock types and specific ratios should be determined for each site.

### Degree of Weathering

The degree of weathering of rock is classified as follows:

Term	Abbreviation	Description
Extremely weathered	EW	Rock substance has soil properties, i.e. it can be remoulded and classified as a soil but the texture of the original rock is still evident.
Highly weathered	HW	Limonite staining or bleaching affects whole of rock substance and other signs of decomposition are evident. Porosity and strength may be altered as a result of iron leaching or deposition. Colour and strength of original fresh rock is not recognisable
Moderately weathered	MW	Staining and discolouration of rock substance has taken place
Slightly weathered	SW	Rock substance is slightly discoloured but shows little or no change of strength from fresh rock
Fresh stained	Fs	Rock substance unaffected by weathering but staining visible along defects
Fresh	Fr	No signs of decomposition or staining

### Degree of Fracturing

The following classification applies to the spacing of natural fractures in diamond drill cores. It includes bedding plane partings, joints and other defects, but excludes drilling breaks.

Term	Description
Fragmented	Fragments of <20 mm
Highly Fractured	Core lengths of 20-40 mm with some fragments
Fractured	Core lengths of 40-200 mm with some shorter and longer sections
Slightly Fractured	Core lengths of 200-1000 mm with some shorter and longer sections
Unbroken	Core lengths mostly > 1000 mm

# Rock Descriptions

## Rock Quality Designation

The quality of the cored rock can be measured using the Rock Quality Designation (RQD) index, defined as:

$$\text{RQD \%} = \frac{\text{cumulative length of 'sound' core sections} \geq 100 \text{ mm long}}{\text{total drilled length of section being assessed}}$$

where 'sound' rock is assessed to be rock of low strength or better. The RQD applies only to natural fractures. If the core is broken by drilling or handling (i.e. drilling breaks) then the broken pieces are fitted back together and are not included in the calculation of RQD.

## Stratification Spacing

For sedimentary rocks the following terms may be used to describe the spacing of bedding partings:

Term	Separation of Stratification Planes
Thinly laminated	< 6 mm
Laminated	6 mm to 20 mm
Very thinly bedded	20 mm to 60 mm
Thinly bedded	60 mm to 0.2 m
Medium bedded	0.2 m to 0.6 m
Thickly bedded	0.6 m to 2 m
Very thickly bedded	> 2 m

# Symbols & Abbreviations

## Douglas Partners



### Introduction

These notes summarise abbreviations commonly used on borehole logs and test pit reports.

### Drilling or Excavation Methods

C	Core drilling
R	Rotary drilling
SFA	Spiral flight augers
NMLC	Diamond core - 52 mm dia
NQ	Diamond core - 47 mm dia
HQ	Diamond core - 63 mm dia
PQ	Diamond core - 81 mm dia

### Water

▷	Water seep
▽	Water level

### Sampling and Testing

A	Auger sample
B	Bulk sample
D	Disturbed sample
E	Environmental sample
U <sub>50</sub>	Undisturbed tube sample (50mm)
W	Water sample
pp	Pocket penetrometer (kPa)
PID	Photo ionisation detector
PL	Point load strength Is(50) MPa
S	Standard Penetration Test
V	Shear vane (kPa)

### Description of Defects in Rock

The abbreviated descriptions of the defects should be in the following order: Depth, Type, Orientation, Coating, Shape, Roughness and Other. Drilling and handling breaks are not usually included on the logs.

### Defect Type

B	Bedding plane
Cs	Clay seam
Cv	Cleavage
Cz	Crushed zone
Ds	Decomposed seam
F	Fault
J	Joint
Lam	Lamination
Pt	Parting
Sz	Sheared Zone
V	Vein

### Orientation

The inclination of defects is always measured from the perpendicular to the core axis.

h	horizontal
v	vertical
sh	sub-horizontal
sv	sub-vertical

### Coating or Infilling Term

cln	clean
co	coating
he	healed
inf	infilled
stn	stained
ti	tight
vn	veneer

### Coating Descriptor

ca	calcite
cbs	carbonaceous
cly	clay
fe	iron oxide
mn	manganese
slt	silty

### Shape

cu	curved
ir	irregular
pl	planar
st	stepped
un	undulating

### Roughness

po	polished
ro	rough
sl	slickensided
sm	smooth
vr	very rough

### Other

fg	fragmented
bnd	band
qtz	quartz

# Symbols & Abbreviations

## Graphic Symbols for Soil and Rock

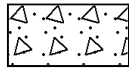
### General



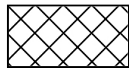
Asphalt



Road base



Concrete



Filling

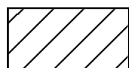
### Soils



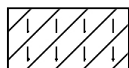
Topsoil



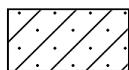
Peat



Clay



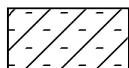
Silty clay



Sandy clay



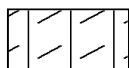
Gravelly clay



Shaly clay



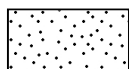
Silt



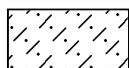
Clayey silt



Sandy silt



Sand



Clayey sand



Silty sand



Gravel



Sandy gravel



Cobbles, boulders



Talus

### Sedimentary Rocks



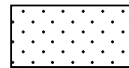
Boulder conglomerate



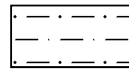
Conglomerate



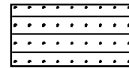
Conglomeratic sandstone



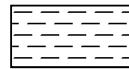
Sandstone



Siltstone



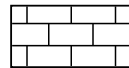
Laminite



Mudstone, claystone, shale

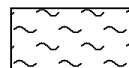


Coal

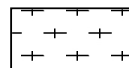


Limestone

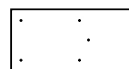
### Metamorphic Rocks



Slate, phyllite, schist

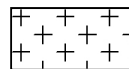


Gneiss

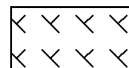


Quartzite

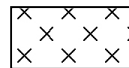
### Igneous Rocks



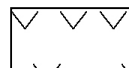
Granite



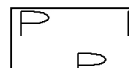
Dolerite, basalt, andesite



Dacite, epidote

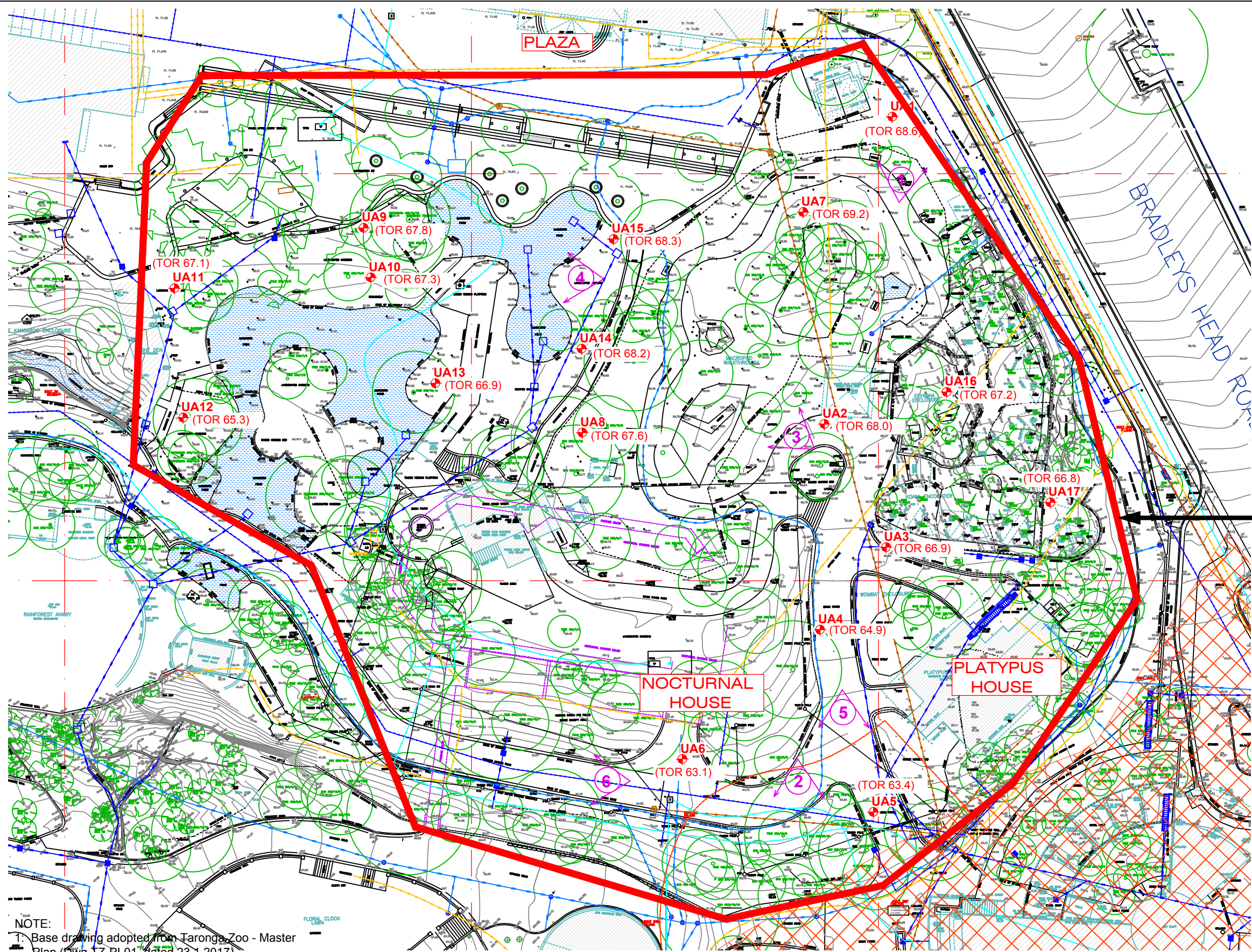


Tuff, breccia



Porphyry





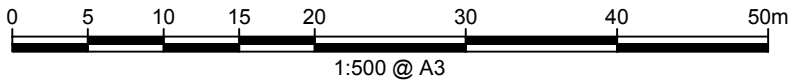
Locality Plan

APPROXIMATE SITE  
BOUNDARY

LEGEND

- ◆ Borehole and DCP test location
- (TOR 66.8) Inferred level of top of rock
- 1 Photo number with direction of view

NOTE:  
1: Base drawing adopted from Taronga Zoo - Master Plan (Dwg TZ-PL01, dated 23.1.2017)  
2: Test locations are approximate only and are shown with reference to existing features.





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## **Appendix B**

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Site Photographs



Photo 1 - Koala exhibits



Photo 2 - Platypus House


	<b>Site Photographs</b> <b>Preliminary Site Investigation</b> <b>Upper Australian Habitat, Taronga Zoo</b>	PROJECT:	86625.01
		PLATE No:	1
		REV:	A
	CLIENT: Taronga Conservation Society Australia		DATE: 7-Dec-18





Photo 3 - Native animal roaming enclosure



Photo 4 - Ponds and stormwater drainage within roaming enclosure



**Site Photographs**

**Preliminary Site Investigation**

**Upper Australian Habitat, Taronga Zoo**

**CLIENT:** Taronga Conservation Society Australia **DATE:** 7-Dec-18

**PROJECT:** 86625.01

**PLATE No:** 2

**REV:** A





Photo 5 - Paved pathways



Photo 6 - Maintenance and waste storage area



**Site Photographs**

**Preliminary Site Investigation**

**Upper Australian Habitat, Taronga Zoo**

**CLIENT:** Taronga Conservation Society Australia **DATE:** 7-Dec-18

**PROJECT:** 86625.01

**PLATE No:** 3

**REV:** A



Photo 7 - Electrical substation

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## Appendix C

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### Site History Information





Our reference: FIL11/ 9135  
Contact Winston Wickremeratne Phone: 02 9995 5424  
Email: [winston.wickremeratne@epa.nsw.gov.au](mailto:winston.wickremeratne@epa.nsw.gov.au)

Mr Steve Bedford

ZOOLOGICAL PARKS BOARD OF NSW  
PO BOX 20  
MOSMAN NSW 2088

12 February 2013

Dear Mr Bedford,

**Desktop Audit of Requirements to Publish Pollution Monitoring Data  
Final Audit Findings – Taronga Zoo  
(Licence No. 1677)**

The Environment Protection Authority (EPA) has completed a desk top assessment of Zoological Parks Board of NSW's compliance with the recent amendments to the Protection of the Environment Operations Act 1997 (POEO Act) that require holders of environment protection licences who undertake monitoring as a result of a licence condition to publish the data on the licensee's website. If the licensee does not have a website, data is to be made publicly available on request.

The intention of these requirements is to improve the community's access to information about the environmental performance of licensed facilities.

The objective of the desk top audits is to assess the level of licensees' compliance with the requirements of section 66(6) of the POEO Act 1997 relating to the publishing of monitoring data.

Findings from the audits will also provide information to inform the review of EPA's *Requirements for publishing pollution monitoring data*. The EPA will consider any issues identified to ensure that the Requirements enable licensees to publish pollution monitoring data in an effective and meaningful manner.

The desk top assessment was undertaken on 13 September 2012 and draft audit findings indicating that the auditor was unable to find monitoring data on the licensees' website <http://www.taronga.org.au/taronga-zoo> was emailed to you on 25 September 2012.

Based on your response to the draft audit findings provided to the EPA, we understand that you have published the pollution monitoring data on your website. A copy of this letter together with the final audit findings will be available on the EPA's Public Register <http://www.environment.nsw.gov.au/prpoeoapp/> for public review.

The EPA will continue to monitor licensees' websites to ensure that information on pollution monitoring data is published in accordance with the requirements of the POEO Act and the *Requirements for publishing pollution monitoring data*.

PO Box A290 Sydney South NSW 1232  
59-61 Goulburn St Sydney NSW 2000  
Tel: (02) 9995 5000 Fax: (02) 9995 5999  
TTY (02) 9211 4723  
ABN 30 841 387 271  
[www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)

If you require further information or clarification on any matters regarding this audit, please contact Winston.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Lynne Neville', written in a cursive style.

**LYNNE NEVILLE**  
**Manager Compliance and Assurance**  
**Environment Protection Authority**

# Environment Protection Licence



Licence - 1677

Licence Details	
Number:	1677
Anniversary Date:	01-May

Licensee
ZOOLOGICAL PARKS BOARD OF NSW
PO BOX 20
MOSMAN NSW 2088

Premises
TARONGA ZOO (INCLUDES AREAS OUTSIDE FENCED COMPOUND)
BRADLEYS HEAD ROAD
MOSMAN NSW 2088

Scheduled Activity
Sewage Treatment

Fee Based Activity	Scale
Sewage treatment processing by small plants	0-20 ML discharged

Region
Metropolitan Infrastructure
Level 13, 10 Valentine Ave
PARRAMATTA NSW 2150
Phone: (02) 9995 5000
Fax: (02) 9995 6900
PO Box 668 PARRAMATTA
NSW 2124

# Environment Protection Licence

Licence - 1677



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Variation of licence conditions	4
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Public register and access to monitoring data	5
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# Environment Protection Licence

Licence - 1677



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# Environment Protection Licence

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Licence - 1677



## 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).

# Environment Protection Licence

Licence - 1677



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:

ZOOLOGICAL PARKS BOARD OF NSW
PO BOX 20
MOSMAN NSW 2088

subject to the conditions which follow.



# Environment Protection Licence

Licence - 1677



## 1 Administrative Conditions

### A1 What the licence authorises and regulates

- A1.1 This licence regulates water pollution resulting from the activity/ies specified below carried out at the premises specified in A2.

<b>Fee Based Activity</b>	<b>Scale</b>
Sewage treatment processing by small plants	0.00-20.00 ML discharged

- A1.2 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.

<b>Scheduled Activity</b>	<b>Fee Based Activity</b>	<b>Scale</b>
Sewage Treatment	Sewage treatment processing by small plants	0 - 20 ML discharged

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

- A2.1 The licence applies to the following premises:

<b>Premises Details</b>
TARONGA ZOO (INCLUDES AREAS OUTSIDE FENCED COMPOUND)
BRADLEYS HEAD ROAD
MOSMAN
NSW 2088
LOT 22 DP 843294

### 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:

- 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
- the licence information form provided by the licensee to the EPA to assist the EPA in connection with the issuing of this licence.

### A3.2 Excludes EMS and EMPs and the Like

# Environment Protection Licence

Licence - 1677



Information supplied to the EPA in the nature of an Environmental Management System or Environmental Management Plans is deemed not to form part of the licence application or any application to vary the licence.

## 2 Discharges to Air and Water and Applications to Land

### P1 Location of monitoring/discharge points and areas

P1.1 The following utilisation areas referred to in the table below are identified in this licence for the purposes of the monitoring and/or the setting of limits for any application of solids or liquids to the utilisation area.

P1.2 The following points referred to in the table are identified in this licence for the purposes of the monitoring and/or the setting of limits for discharges of pollutants to water from the point.

#### *Water and land*

EPA Identification no.	Type of Monitoring Point	Type of Discharge Point	Location Description
1		Outlet of 900 mm diameter UPVC within a concrete culvert surrounding by mortared rock work	located between the western end of Athol Bay beach and the seawater abstraction pier.
2	Water quality monitoring and deemed discharge point - access pit covered by a circular 'gatic' cover located at the foot of a retaining wall on which the term 'POINT 2' is displayed on a sign fixed above the pit.	Water quality monitoring and deemed discharge point - access pit covered by a circular 'gatic' cover located at the foot of a retaining wall on which the term 'POINT 2' is displayed on a sign fixed above the pit.	located within a paved ramp opposite the southern entrance to the Zoo and 15 metres east of where the Bradleys Head to Chowder Bay walk grade separates from Athol Wharf Road footpath.
3		Submarine outlet of 225 mm diameter UPVC pipe in Little Sirius Cove.	Western end of submarine pipeline located on the eastern side of Little Sirius Cove as shown in the 'Little Sirius Cove Bathymetry' inset on survey drawing number 57334 revision A prepared by NSW Public Works on 19 June 2015.
4	Water quality monitoring and deemed discharge point.	Water quality monitoring and deemed discharge point.	Sample collection point (in UPVC pipeline fixed along the southern wall of the water recycling plant filtration and UV sterilisation building overlooking Little Sirius Cove) marked by a sign displaying the expression 'POINT 4'

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5	Volume monitoring	Meter located within water recycling plant filtration and UV sterilisation building marked by a sign displaying the expression "Point 5"
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P1.3 For the avoidance of doubt in regard to the Table to condition P1.2, the results of analysis of any sample taken from :

- (a) point 2 is deemed to be satisfactory for the purpose of determining compliance with licence concentration limits applicable to discharge point 1; and
- (b) point 4 is deemed to be satisfactory for the purpose of determining compliance with licence concentration limits applicable to discharge point 3.

## P1.4 Discharge and monitoring point identification

The licensee must erect and maintain signs to clearly identify the location of monitoring points 2, 4 and 5 referred to in the Table to condition P1.1.

Each sign required by this condition must:

- (a) be displayed in a location readily visible to casual observer and as close as practicable to the point concerned;
- (b) be not less than 150 millimetres square with a white background and green lettering and numerals; and
- (c) display the word 'POINT' in uppercase lettering followed by the point number.

## 3 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 Concentration limits

- L2.1 For each monitoring/discharge point or utilisation area specified in the table\ below (by a point number), the concentration of a pollutant discharged at that point, or applied to that area, must not exceed the concentration limits specified for that pollutant in the table.
- L2.2 Where a pH quality limit is specified in the table, the specified percentage of samples must be within the specified ranges.
- L2.3 To avoid any doubt, this condition does not authorise the pollution of waters by any pollutant other than those specified in the table\.

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## L2.4 Water and/or Land Concentration Limits

### POINT 1,2

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
BOD	milligrams per litre	-	-	-	20
pH	pH				6.5-8.5
TSS	milligrams per litre				50

### POINT 3,4

Pollutant	Units of Measure	50 percentile concentration limit	90 percentile concentration limit	3DGM concentration limit	100 percentile concentration limit
BOD	milligrams per litre				15
Enterococci	colony forming units per 100 millilitres				40
pH	pH				6.5-8.5
TSS	milligrams per litre				20

## L3 Volume and mass limits

L3.1 For each discharge point or utilisation area specified below (by a point number), the volume/mass of:

- a) liquids discharged to water; or;
- b) solids or liquids applied to the area;

must not exceed the volume/mass limit specified for that discharge point or area.

Point	Unit of Measure	Volume/Mass Limit
5	kilolitres per day	2000

# 4 Operating Conditions

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## **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.

## **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.

## **5 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.

M1.4 Notwithstanding condition M1.3, the licensee must record and retain, in accordance with condition M1.2, the reports required to be prepared by conditions R4.1, R5.1 and R5.2.

### **M2 Requirement to monitor concentration of pollutants discharged**

M2.1 For each monitoring/discharge point or utilisation area specified below (by a point number), the licensee must monitor (by sampling and obtaining results by analysis) the concentration of each pollutant specified in Column 1. The licensee must use the sampling method, units of measure, and sample at the frequency, specified opposite in the other columns:

M2.2 Water and/ or Land Monitoring Requirements

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## POINT 2

Pollutant	Units of measure	Frequency	Sampling Method
BOD	milligrams per litre	Special Frequency 1	Grab sample
pH	pH	Special Frequency 1	Grab sample
TSS	milligrams per litre	Special Frequency 1	Grab sample

## POINT 4

Pollutant	Units of measure	Frequency	Sampling Method
BOD	milligrams per litre	Special Frequency 2	Grab sample
Enterococci	colony forming units per 100 millilitres	Special Frequency 2	Grab sample
pH	pH	Special Frequency 2	Grab sample
TSS	milligrams per litre	Special Frequency 2	Grab sample

## POINT 5

Pollutant	Units of measure	Frequency	Sampling Method
Volume	kilolitres per day	Continuous during discharge	Flow meter and continuous logger

### M2.3 Special Monitoring Frequency 1

For the purposes of condition M2.1, 'Special frequency 1' means on each occasion during which there is a discharge at point 2, excepting that where there is more than one discharge during any calendar month only twice during that month (and not more than once during any continuous period of 14 days).

The licensee must take monitoring samples at point 2 at those times that ensure that the samples are representative of pollutant concentrations and pH quality prescribed in the Table to condition L3.1, by co-ordinating sample taking with discharges from the pools and water treatment systems comprising the Great Southern Ocean exhibits, including discharges during -

- (a) filter backwash operations,
- (b) protein fractionator rinse times, and
- (c) pool drop and fill operations.

### M2.4 Special Monitoring Frequency 2

For the purposes of condition M2.1, 'Special frequency 2' means on each occasion during which there is a discharge at point 4, excepting that:

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- (a) where there is more than one discharge during any calendar month only once during that month; and
- (b) not more than once during any continuous period of 14 days.

For the avoidance of doubt, where there has been no discharge at point 4 during a calendar month the licensee is not required to carry out monitoring at point 4 during that month but instead to undertake monitoring as soon as practicable during the next month during which there is a discharge at point 4.

## **M3 Testing methods - concentration limits**

- M3.1 Subject to any express provision to the contrary in this licence, monitoring for the concentration of a pollutant discharged to waters or applied to a utilisation area must be done in accordance with the Approved Methods Publication unless another method has been approved by the EPA in writing before any tests are conducted.

## **M4 Recording of pollution complaints**

- M4.1 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.
- M4.2 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.
- M4.3 The record of a complaint must be kept for at least 4 years after the complaint was made.
- M4.4 The record must be produced to any authorised officer of the EPA who asks to see them.

## **M5 Telephone complaints line**

- M5.1 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.
- M5.2 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.



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M5.3 The preceding two conditions do not apply until 3 months after: the date of the issue of this licence.

## M6 Requirement to monitor volume or mass

M6.1 For each discharge point or utilisation area specified below, the licensee must monitor:

- a) the volume of liquids discharged to water or applied to the area;
  - b) the mass of solids applied to the area;
  - c) the mass of pollutants emitted to the air;
- at the frequency and using the method and units of measure, specified below.

### POINT 5

Frequency	Unit of Measure	Sampling Method
Daily	kilolitres per day	Flow meter and continuous logger

## M6.2 Continuous logger not operating

In the event that the continuous logger referred to in the Table to condition M6.1 is not operating, the licensee must instead manually record the daily volume discharged via licence point 5.

## M7 Other monitoring and recording conditions

### M7.1 Logging maintenance of control equipment

- (1) The licensee must legibly record in a log book or the like:
- (a) the time and date maintenance, repair or replacement of control equipment was undertaken and by whom that maintenance, repair or replacement was undertaken; and
  - (b) details of every failure of control equipment, including -
    - (i) when the equipment failed,
    - (ii) when the equipment was repaired or replaced,
    - (iii) the duration the equipment was inoperative, and
    - (iv) the reasons why the equipment failed or was likely to have failed.
- (2) The licensee must make any record required to be made by this condition available for inspection on request by an authorised officer of the EPA.

'Control equipment' has the same meaning as in the Protection of the Environment Operations Act 1997.

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## M7.2 Logging discharges

- (1) The licensee must legibly record in a log book or the like the time, date and volume of each discharge via the point that is -
  - (a) described as point 2 in the table to condition P1.2, and
  - (b) described as point 4 in the table to condition P1.2.
- (2) The licensee must make any record required to be made by this condition available for inspection on request by an authorised officer of the EPA.
- (3) notwithstanding the requirements of sub-condition (1), where the monitoring equipment is unable to log each discharge, the licensee must -
  - (a) instead record the daily discharge at the points prescribed in sub-condition 1, and
  - (b) as soon as practicable after becoming aware that that monitoring equipment is unable to record each discharge undertake all such action as may be necessary to ensure each discharge is logged.

## 6 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:
- a) a Statement of Compliance; and
  - b) a Monitoring and Complaints Summary.
- 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.
- 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.

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- R1.5 The Annual Return for the reporting period must be supplied to the EPA 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 Statement 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 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

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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.

## **R4 Other reporting conditions**

**R4.1**

### **Analytical reports**

(1) The licensee must prepare a written report detailing the results of analysis of samples required to be taken by a condition of this licence. The reports required by this condition must include –

(a) the time and date each sample was taken (and by whom),

(b) the EPA identification number of the monitoring or discharge point from which the sample was taken,

(c) the licence condition pursuant to which the sample was taken,

(d) the sample preservation measures adopted between the taking of the sample and delivery of the sample to the analytical laboratory,

(e) the approved methods used to undertake each of the analyses,

(f) where symbols or abbreviations are used in analytical reports an explicit statement of the meaning of those symbols and abbreviations, other than an abbreviation used in the EPA's "Approved Methods for the Sampling and Analysis of Water Pollutants in New South Wales", and

(g) a copy of the relevant certificate of analysis from the laboratory that undertook that analysis.

(2) the licensee must make any report required by condition R4.1 (1) available for inspection on request by an authorised officer of the EPA.

(3) For the avoidance of doubt, the licensee is not required to supply the EPA with a copy of any report required by condition R4.1 (1) unless requested to do so by an authorised officer of the EPA or elsewhere in this licence.

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- (4) if an authorised officer of the EPA requests the licensee to supply a copy of any report required by condition R4.1 (1), the licensee must supply a copy of that report to the EPA within 24 hours of receiving such a request.

## 7 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.

### G2 Other general conditions

#### G2.1 Authorised representatives

The licensee must ensure that at least two representatives, duly appointed by the licensee as its authorised representatives, are available for contact by the EPA at all times.

- (1) the licensee must provide the EPA with up to date details of natural persons authorised to represent the licensee in respect of –
- (a) answering general enquiries made by the EPA or its authorised officers,
  - (b) speaking on behalf of the licensee,
  - (c) signing on behalf of the licensee, and
  - (d) acting as the licensee's 'out of hours' contact with authority to direct the licensee's employees, agents and contractors to undertake such action as may be necessary to ensure that all activities on the premises comply with the requirements of environment protection legislation and this licence.
- (2) The details required by condition G2.1 (1) must include –
- (a) the full name of each authorised representative and the scope of their authority to represent the licensee,
  - (b) the role of each authorised representative within the licensee organisation, and

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- (c) the direct landline telephone number, mobile telephone number, fax number, email address and postal address of each authorised representative.

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## Dictionary

### General Dictionary

<b>3DGM [in relation to a concentration limit]</b>	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
<b>Act</b>	Means the Protection of the Environment Operations Act 1997
<b>activity</b>	Means a scheduled or non-scheduled activity within the meaning of the Protection of the Environment Operations Act 1997
<b>actual load</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>AM</b>	Together with a number, means an ambient air monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>AMG</b>	Australian Map Grid
<b>anniversary date</b>	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.
<b>annual return</b>	Is defined in R1.1
<b>Approved Methods Publication</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>assessable pollutants</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>BOD</b>	Means biochemical oxygen demand
<b>CEM</b>	Together with a number, means a continuous emission monitoring method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .
<b>COD</b>	Means chemical oxygen demand
<b>composite sample</b>	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.
<b>cond.</b>	Means conductivity
<b>environment</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>environment protection legislation</b>	Has the same meaning as in the Protection of the Environment Administration Act 1991
<b>EPA</b>	Means Environment Protection Authority of New South Wales.
<b>fee-based activity classification</b>	Means the numbered short descriptions in Schedule 1 of the Protection of the Environment Operations (General) Regulation 2009.
<b>general solid waste (non-putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997

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<b>flow weighted composite sample</b>	Means a sample whose composites are sized in proportion to the flow at each composites time of collection.
<b>general solid waste (putrescible)</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>grab sample</b>	Means a single sample taken at a point at a single time
<b>hazardous waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>licensee</b>	Means the licence holder described at the front of this licence
<b>load calculation protocol</b>	Has the same meaning as in the Protection of the Environment Operations (General) Regulation 2009
<b>local authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>material harm</b>	Has the same meaning as in section 147 Protection of the Environment Operations Act 1997
<b>MBAS</b>	Means methylene blue active substances
<b>Minister</b>	Means the Minister administering the Protection of the Environment Operations Act 1997
<b>mobile plant</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>motor vehicle</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>O&amp;G</b>	Means oil and grease
<b>percentile [in relation to a concentration limit of a sample]</b>	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.
<b>plant</b>	Includes all plant within the meaning of the Protection of the Environment Operations Act 1997 as well as motor vehicles.
<b>pollution of waters [or water pollution]</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>premises</b>	Means the premises described in condition A2.1
<b>public authority</b>	Has the same meaning as in the Protection of the Environment Operations Act 1997
<b>regional office</b>	Means the relevant EPA office referred to in the Contacting the EPA document accompanying this licence
<b>reporting period</b>	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.
<b>restricted solid waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>scheduled activity</b>	Means an activity listed in Schedule 1 of the Protection of the Environment Operations Act 1997
<b>special waste</b>	Has the same meaning as in Part 3 of Schedule 1 of the Protection of the Environment Operations Act 1997
<b>TM</b>	Together with a number, means a test method of that number prescribed by the <i>Approved Methods for the Sampling and Analysis of Air Pollutants in New South Wales</i> .



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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
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 Kieran Horkan

Environment Protection Authority

(By Delegation)

Date of this edition: 26-September-2000

End Notes	
1	Condition A1.3 Not applicable varied by notice issued on <issue date> which came into effect on <effective date>
2	Licence varied by notice 1522383 issued on 09-Jul-2015

# List of NSW Contaminated Sites Notified to EPA as of 9 November 2018

## Background

A strategy to systematically assess, prioritise and respond to notifications under Section 60 of the *Contaminated Land Management Act 1997* (CLM Act) has been developed by the EPA. This strategy acknowledges the EPA's obligations to make information available to the public under *Government Information (Public Access) Act 2009*.

When a site is notified to the EPA, it may be accompanied by detailed site reports where the owner has been proactive in addressing the contamination and its source. However, often there is minimal information on the nature or extent of the contamination.

For some notifications, the information indicates the contamination is securely immobilised within the site, such as under a building or carpark, and is not currently causing any offsite consequences to the community or environment. Such sites would still need to be cleaned up, but this could be done in conjunction with any subsequent building or redevelopment of the land. These sites may not require intervention under the CLM Act, but could be dealt with through the planning and development consent process.

Where indications are that contamination is significant enough to warrant regulation having regard to the matters in section 12 of the CLM Act, the EPA may apply the regulatory provisions of the CLM Act to have the appropriate person (for example, the responsible polluter and/or landowner) investigate and remediate the site.

Where the EPA reasonably suspects that a pollution incident is occurring (or has occurred) at a premise, the EPA, as the appropriate regulatory authority, may choose to regulate the incident and any resulting contamination under the POEO Act by ordering the occupier or the owner to carry out certain actions.

As such, the sites notified to the EPA and presented in the following table are at various stages of the assessment and/or remediation process. Understanding the nature of the underlying contamination, its implications and implementing a remediation program where required, can take a considerable period of time. The tables provide an indication, in relation to each nominated site, as to the management status of that particular site. Further detailed information may be available from the EPA or the responsible landowner.

The following questions and answers may assist those interested in this issue:

## Frequently asked questions

### What is the difference between the "List of NSW Contaminated Sites Notified to the EPA" and the "Contaminated Land: Record of Notices"?

A site will be on the Contaminated Land: Record of Notices only if the EPA has issued a regulatory notice in relation to the site under the *Contaminated Land Management Act 1997*.

The sites appearing on this "List of NSW contaminated sites notified to the EPA" indicate that the notifiers consider that the sites are contaminated and warrant reporting to the EPA. However, the contamination may or may not be significant enough to warrant regulation by the EPA. The EPA needs to review and, if necessary, obtain more information before it can make a determination as to whether the site warrants regulation.

## **Why my site appears on the list?**

Your site appears on the list because of one or more of the following reasons:

- The site owner and/or the person partly or fully responsible for causing the contamination notified to the EPA about the contamination under Section 60 of the *Contaminated Land Management Act 1997*. In other words, the site owner or the “polluter” believes the site is contaminated.
- The EPA has been notified via other means and is satisfied that the site is or was contaminated.

## **Does the list contain all contaminated sites in NSW?**

No. The list only contains contaminated sites that the EPA is aware of, with regard to its regulatory role under the CLM Act. An absence of a site from the list does not necessarily imply the site is not contaminated.

The EPA relies upon responsible parties to notify contaminated sites.

## **How are these notified contaminated sites managed by the EPA?**

There are different ways that the EPA manages these notified contaminated sites. First, an initial assessment is carried out by the EPA. At the completion of the initial assessment, the EPA may take one or more than one of the following management approaches:

- The contamination warrants the EPA’s direct regulatory intervention either under the *Contaminated Land Management Act 1997* or the *Protection of the Environment Operations Act 1997* (POEO Act), or both. Information about current or past regulatory action on this site can be found on EPA website.
- The contamination with respect to the current use or approved use of the site, as defined under the *Contaminated Land Management Act 1997*, is not significant enough that it warrants EPA regulation.
- The contamination does not require EPA regulation and can be managed by a planning approval process.
- The contamination is related to an operational Underground Petroleum Storage System, such as a service station or fuel depot. The contamination may be managed under the POEO Act and the Protection of the Environment Operation (Underground Petroleum Storage Systems) Regulation 2014.
- The contamination is being managed under a specifically tailored program operated by another agency (for example the Department of Industry and Investment’s *Derelict Mines Program*).

## **I am the owner of a site that appears on the list. What should I do?**

First of all, you should ensure the current use of the site is compatible with the site contamination. Secondly, if the site is the subject of EPA regulation, make sure you comply with the regulatory requirements, and you have considered your obligations to notify other parties who may be affected.

If you have any concerns, contact us and we may be able to offer you general advice, or direct you to accredited professionals who can assist with specific issues.

## **I am a prospective buyer of a site that appears on the list. What should I do?**

You should seek advice from the vendor to put the contamination issue into perspective. You may need to seek independent expert advice.

The information provided in the list is meant to be indicative only, and a starting point for your own assessment. Site contamination as a legacy of past site uses is not uncommon, particularly in an urbanised environment. If the contamination on a site is properly remediated or managed, it may not materially impact upon the intended future use of the site. However, each site needs to be considered in context.

## List of NSW Contaminated Sites Notified to the EPA

### Disclaimer

The EPA has taken all reasonable care to ensure that the information in the list of contaminated sites notified to the EPA (the list) is complete and correct. The EPA does not, however, warrant or represent that the list is free from errors or omissions or that it is exhaustive.

The EPA may, without notice, change any or all of the information in the list at any time.

You should obtain independent advice before you make any decision based on the information in the list.

The list is made available on the understanding that the EPA, its servants and agents, to the extent permitted by law, accept no responsibility for any damage, cost, loss or expense incurred by you as a result of:

1. any information in the list; or
2. any error, omission or misrepresentation in the list; or
3. any malfunction or failure to function of the list;
4. without limiting (2) or (3) above, any delay, failure or error in recording, displaying or updating information.

Site Status	Explanation
Under assessment	The contamination is being assessed by the EPA to determine whether regulation is required. The EPA may require further information to complete the assessment. For example, the completion of management actions regulated under the planning process or <i>Protection of the Environment Operations Act 1997</i> . Alternatively, the EPA may require information via a notice issued under s77 of the <i>Contaminated Land Management Act 1997</i> or issue a Preliminary Investigation Order.
Regulation under CLM Act not required	The EPA has completed an assessment of the contamination and decided that regulation under the <i>Contaminated Land Management Act 1997</i> is not required.
Regulation being	The EPA has completed an assessment of the contamination and decided

finalised	that the contamination is significant enough to warrant regulation under the <i>Contaminated Land Management Act 1997</i> . A regulatory approach is being finalised.
Contamination currently regulated under CLM Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation under the <i>Contaminated Land Management Act 1997</i> (CLM Act). Management of the contamination is regulated by the EPA under the CLM Act. Regulatory notices are available on the EPA's <a href="#">Contaminated Land Public Record</a> .
Contamination currently regulated under POEO Act	Contamination is currently regulated under the <i>Protection of the Environment Operations Act 1997</i> (POEO Act). The EPA as <i>the appropriate regulatory authority</i> reasonably suspects that a pollution incident is occurring/ has occurred and that it requires regulation under the POEO Act. The EPA may use environment protection notices, such as clean up notices, to require clean up action to be taken. Such regulatory notices are available on the <a href="#">POEO public register</a> .
Contamination being managed via the planning process (EP&A Act)	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. The contamination of this site is managed by the consent authority under the <i>Environmental Planning and Assessment Act 1979</i> (EP&A Act) planning approval process, with EPA involvement as necessary to ensure significant contamination is adequately addressed. The consent authority is typically a local council or the Department of Planning and Environment.
Contamination formerly regulated under the CLM Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation under the <i>Contaminated Land Management Act 1997</i> (CLM Act). The contamination was addressed under the CLM Act.
Contamination formerly regulated under the POEO Act	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed under the <i>Protection of the Environment Operations Act 1997</i> (POEO Act).
Contamination was addressed via the planning process	The EPA has determined that the contamination is no longer significant enough to warrant regulation. The contamination was addressed by the appropriate consent authority via the planning process under the

(EP&A Act)	<i>Environmental Planning and Assessment Act 1979</i> (EP&A Act).
Ongoing maintenance required to manage residual contamination (CLM Act)	The EPA has determined that ongoing maintenance, under the <i>Contaminated Land Management Act 1997</i> (CLM Act), is required to manage the residual contamination. Regulatory notices under the CLM Act are available on the EPA's <a href="#">Contaminated Land Public Record</a> .

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
ABBOTSFORD	Former Gasworks	83 Wymston PARADE	Gasworks	Contamination formerly regulated under the CLM Act	-33.85288351	151.1265979
ABBOTSFORD	Former Gasworks	82, 83, 84 Wymston Pde, & 37, 39, 43, 45 St Albans STREET	Gasworks	Contamination formerly regulated under the CLM Act	-33.85288316	151.1267729
ABBOTSFORD	Former Gasworks	85 Wymston PARADE	Gasworks	Regulation under CLM Act not required	-33.85265214	151.1266277
ABBOTSFORD	Former Gasworks	80-81 Wymston Pde and 35 and 41 St Albans STREET	Gasworks	Regulation under CLM Act not required	-33.85306653	151.1268142
ABBOTSFORD	Former Gasworks	43 St Albans STREET	Gasworks	Contamination formerly regulated under the CLM Act	-33.85270604	151.126976
ABERDEEN	Former Transport Depot	87-89 St Andrew STREET	Other Industry	Regulation under CLM Act not required	-32.17160931	150.8972859
ALBION PARK	Caltex Albion Park Service Station	1 Calderwood ROAD	Service Station	Regulation under CLM Act not required	-34.57131362	150.7647971
ALBION PARK RAIL	Caltex Service Station	174 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.56134097	150.7953663
ALBION PARK RAIL	Caltex Service Station	31 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.55162786	150.7880626
ALBION PARK RAIL	Former Timber Storage Area	36 Rivulet CRESCENT	Other Industry	Regulation under CLM Act not required	-34.54872597	150.7899351
ALBURY	Mobil Depot, Railway Place Albury	1 Railway PLACE	Other Petroleum	Regulation under CLM Act not required	-36.08526805	146.9236999
ALBURY	Woolworths Petrol	515 Young STREET	Service Station	Regulation under CLM Act not required	-36.08073723	146.92351
ALBURY	Former Caltex Service Station	842 David STREET	Service Station	Regulation under CLM Act not required	-36.06398743	146.9252143
ALBURY	SRA Land, 514 to 526 Young Street	514 to 526 Young STREET	Other Petroleum	Regulation under CLM Act not required	-36.08084123	146.9241682
ALBURY	Former Gasworks and surrounding commercial land	441 Kiewa STREET	Gasworks	Contamination currently regulated under CLM Act	-36.08357983	146.9137004
ALBURY	Coles Express Albury	465 Guinea STREET	Service Station	Regulation under CLM Act not required	-36.07513665	146.9213077
ALBURY	Former Thales Australia site, Albury	161 Fallon STREET	Other Industry	Contamination currently regulated under CLM Act	-36.064966	146.9434831
ALBURY	Former Caltex Service Station	624 Young STREET	Service Station	Contamination formerly regulated under the CLM Act	-36.07555262	146.9256466
ALBURY	Albury Plaza	Cnr Smollett Street and Townsend STREET	Other Industry	Regulation under CLM Act not required	-36.08112933	146.9135719
ALBURY	Mobil Albury Aviation Fuel Depot	Hangar 8 (Albury Airport), Ogden PLACE	Other Petroleum	Regulation under CLM Act not required	-36.07178139	146.9530165
ALBURY	SRA Land	448 and 452 Young STREET	Unclassified	Regulation under CLM Act not required	-36.08438605	146.9235454
ALBURY	Caltex Service Station	Dean Street, Corner Creek STREET	Service Station	Regulation under CLM Act not required	-36.07978937	146.9110825
ALEXANDRIA	Former Mobil Service Station	20 O'Riordan STREET	Service Station	Regulation under CLM Act not required	-33.9075539	151.2014811
ALEXANDRIA	Caltex Alexandria Service Station	133 Wyndham St, cnr McEvoy STREET	Service Station	Regulation under CLM Act not required	-33.90220927	151.2000425
ALEXANDRIA	Former Cadbury Schweppes	49-59 O'Riordan STREET	Other Industry	Contamination formerly regulated under the CLM Act	-33.91406619	151.195067

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
ALEXANDRIA	Formerly Gas N Go Alexandria (fully redeveloped into residential apartment as of September 2016)	10-20 Botany ROAD	Service Station	Under assessment	-33.895363	151.198779
ALEXANDRIA	Mascot Developments	494-504 Gardeners ROAD	Other Industry	Regulation under CLM Act not required	-33.9198218	151.191282
ALEXANDRIA	Alexandria GoGas	562 Botany ROAD	Service Station	Regulation under CLM Act not required	-33.91577222	151.2000753
ALEXANDRIA	Australian Refined Alloys	202-212 Euston ROAD	Metal Industry	Regulation under CLM Act not required	-33.91505136	151.185872
ALEXANDRIA	Alexandra Canal Sediments	Off Huntley STREET	Unclassified	Contamination currently regulated under CLM Act	-33.92204213	151.1770009
ALEXANDRIA	Australia Post	10-24 Ralph STREET	Other Industry	Contamination being managed via the planning process (EP&A Act)	-33.91583041	151.197997
ALEXANDRIA	Perry Park	1B Maddox STREET	Landfill	Regulation under CLM Act not required	-33.90809949	151.1962945
ALEXANDRIA	Alexandria Gardens	146-156 Wyndham St & 146-156 Botany Rd	Unclassified	Regulation under CLM Act not required	-33.89956961	151.1997377
ALEXANDRIA	Sydney Park	Sydney Park, Alexandria ROAD	Landfill	Under assessment	-33.91163421	151.1840827
ALEXANDRIA	Former Industrial Site (now Value Suites)	16 O'Riordan STREET	Other Industry	Regulation under CLM Act not required	-33.9069796	151.201902
ALEXANDRIA	The Gentry Alexandria	31-41 William STREET	Unclassified	Under assessment	-33.91288033	151.1980106
ALSTONVILLE	Caltex Service Station Alstonville	73 Main STREET	Service Station	Regulation under CLM Act not required	-28.84115994	153.4388699
AMBARVALE	Caltex Service Station	37 Woodhouse DRIVE	Service Station	Regulation under CLM Act not required	-34.08438034	150.8019168
ANNANDALE	7-Eleven (former Mobil) Annandale Service Station	198 Parramatta ROAD	Service Station	Regulation under CLM Act not required	-33.88706434	151.1741135
ANNANDALE	Shell Coles Express Service Station	124-126 Johnston STREET	Service Station	Regulation under CLM Act not required	-33.88085651	151.1704805
APPIN	Elladale Creek Aqueduct Upper Canal	Macquariedale ROAD	Unclassified	Regulation under CLM Act not required	-34.18867067	150.7539597
APPIN	West Cliff Colliery	Wedderburn ROAD	Other Petroleum	Regulation under CLM Act not required	-34.21970612	150.8217522
ARDLETHAN	Landmark Fertiliser Storage Facility	18 & 24-26 Arianh STREET	Chemical Industry	Regulation under CLM Act not required	-34.35696645	146.9007084
ARGENTON	NSW Mines Rescue Services - Argenton	533 Lake ROAD	Other Industry	Regulation under CLM Act not required	-32.93807208	151.6269664
ARMIDALE	Former Mobil Depot	132 Niagara STREET	Other Petroleum	Contamination formerly regulated under the CLM Act	-30.51115918	151.6490343
ARMIDALE	Caltex Service Station	146 Miller STREET	Service Station	Regulation under CLM Act not required	-30.51362759	151.6481123
ARMIDALE	RTA land adjoining Martin Street estate	adjoining Martin STREET	Other Industry	Contamination formerly regulated under the CLM Act	-30.5045	151.6433
ARMIDALE	Shell Service Station	93 Marsh STREET	Service Station	Regulation under CLM Act not required	-30.51299824	151.6697557
ARMIDALE	Parklands near the former gasworks	Beardy Street and Allingham STREET	Gasworks	Regulation under CLM Act not required	-30.51013465	151.6652722



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
ARMIDALE	Gasworks and portion of Harris Park	Corner of Beardy Street and Allingham STREET	Gasworks	Contamination currently regulated under CLM Act	-30.51157406	151.6623073
ARMIDALE	Martin Street Estate, Lot 3	Lot 3 Martin STREET	Other Industry	Regulation under CLM Act not required	-30.5066659	151.6453692
ARMIDALE	Martin Street Estate	Martin STREET	Other Industry	Regulation under CLM Act not required	-30.50559024	151.6431854
ARMIDALE	Caltex Armidale Girraween Service Station	6-8 Queen Elizabeth DRIVE	Service Station	Regulation under CLM Act not required	-30.50348872	151.6510748
ARMIDALE	Martin Street , Crown Land	Martin STREET	Other Industry	Contamination formerly regulated under the CLM Act	-30.50414076	151.6429516
ARMIDALE	Former Shell Depot	134 Niagara STREET	Other Petroleum	Regulation under CLM Act not required	-30.51180178	151.6488634
ARMIDALE	Caltex Service Station	144 Marsh STREET	Service Station	Regulation under CLM Act not required	-30.51709925	151.6675802
ARMIDALE	Caltex North Hill Service Station	2-4 Marsh STREET	Service Station	Regulation under CLM Act not required	-30.50320439	151.6727051
ARMIDALE	Mobil Armidale Service Station and Former Depot	10-12 McLennan STREET	Service Station	Regulation under CLM Act not required	-30.51107573	151.648242
ARMIDALE	Caltex Service Station	19/10541 New England HIGHWAY	Service Station	Regulation under CLM Act not required	-30.53210764	151.6160492
ARMIDALE	Armidale Dumaresq Council Grafton Road Depot	15-25 Grafton ROAD	Other Petroleum	Regulation under CLM Act not required	-30.52058076	151.6815261
ARNCLIFFE	7-Eleven Arncliffe	28 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.93428397	151.1525438
ARTARMON	7-Eleven (former Mobil) Artarmon Service Station	477 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.81053826	151.1774248
ASHBY	Ashby Dry Dock	via Clarence STREET	Other Industry	Contamination formerly regulated under the CLM Act	-29.44158377	153.1972304
ASHFIELD	Vehicle Workshop	445-449 Liverpool ROAD	Service Station	Regulation under CLM Act not required	-33.88826829	151.1167477
ASQUITH	BP Service Station	462 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.68982678	151.106156
ATTUNGA	Attunga Limestone Mine (Waste Oil Site)	Garthowen ROAD	Other Industry	Regulation under CLM Act not required	-30.92920627	150.8579435
AUBURN	DIC Australia	323 Chisholm ROAD	Other Industry	Regulation under CLM Act not required	-33.87228962	151.0157032
AUBURN	Former Ajax chemical factory	9 Short STREET	Other Industry	Contamination currently regulated under CLM Act	-33.83671601	151.0292071
AUBURN	Janyon	Manchester ROAD	Other Industry	Regulation under CLM Act not required	-33.84467826	151.020745
AUBURN	Maintrain Facility - Sydney Trains Auburn	Manchester ROAD	Other Industry	Regulation under CLM Act not required	-33.84410947	151.0242502
AUBURN	Department of Corrective Services land adjacent to the former Auburn Landfill	Jamieson STREET	Landfill	Contamination formerly regulated under the CLM Act	-33.82928257	151.0590653
AWABA	Awaba Colliery	Wilton ROAD	Other Industry	Regulation under CLM Act not required	-33.02098186	151.5383612
BALGOWLAH	BP Service Station	Cnr Sydney Road and Maretimo STREET	Service Station	Regulation under CLM Act not required	-33.79546175	151.2559309

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
BALGOWLAH	Part of Manly Council Maintenance Depot	8-10 Roseberry STREET	Other Petroleum	Regulation under CLM Act not required	-33.78928907	151.2679557
BALGOWNIE	Fuel Power Plus	99 Balgownie ROAD	Service Station	Under assessment	-34.38925632	150.8808544
BALLINA	Former Mobil Service Station	37-41 Cherry STREET	Service Station	Regulation under CLM Act not required	-28.87022308	153.5620713
BALLINA	Ballina Shell	273 River STREET	Service Station	Regulation under CLM Act not required	-28.86809272	153.5552789
BALLINA	Woolworths Petrol	Kerr STREET	Service Station	Regulation under CLM Act not required	-28.85824461	153.5605439
BALLINA	Ballina Mays Motors	River STREET	Other Petroleum	Regulation under CLM Act not required	-28.86935402	153.5585931
BALRANALD	Caltex Service Station	Sturt HIGHWAY	Service Station	Regulation under CLM Act not required	-34.66747746	143.5662034
BANKSIA	Woolworths Petrol Service Station Banksia	314 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.94567308	151.1416884
BANKSMEADOW	Orica Botany Groundwater Project	16-20 Beauchamp ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-33.9552673	151.2151954
BANKSMEADOW	Discovery Cove, Former Ampol Rail Terminal	1801 Botany ROAD	Other Petroleum	Regulation being finalised	-33.96162178	151.2184122
BANKSMEADOW	Caltex Terminal	1-3 Penrhyn ROAD	Other Petroleum	Contamination currently regulated under POEO Act	-33.96335328	151.2171062
BANKSMEADOW	Orica Botany (Pre-2003 Regulation)	Port Feeder ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-33.9516159	151.2195804
BANKSMEADOW	Keith Engineering (Sales)	34-36 McPherson STREET	Petroleum Storage	Under assessment	-33.95811039	151.2195225
BANKSMEADOW	Orica Former Chlor Alkali Plant	Botany Industrial	Chemical Industry	Contamination currently regulated under CLM Act	-33.95664283	151.221685
BANKSMEADOW	Former Pipeline	Corish CIRCLE	Other Petroleum	Regulation being finalised	-33.94705787	151.2209919
BANKSMEADOW	Pacific National Rail Siding	1 Beauchamp ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-33.95757712	151.2204974
BANKSMEADOW	Former Mobil Banksmeadow Terminal	Coal Pier ROAD	Other Petroleum	Regulation under CLM Act not required	-33.95405624	151.2142048
BANKSMEADOW	Orica Car Park Waste Encapsulation	Corish CIRCLE	Landfill	Contamination formerly regulated under the POEO Act	-33.94703665	151.22083
BANKSTOWN	7-Eleven Service Station	689 Henry Lawson DRIVE	Service Station	Regulation under CLM Act not required	-33.92749953	150.9804784
BANORA POINT	Caltex Service Station	Corner Leisure Drive and Darlington DRIVE	Service Station	Regulation under CLM Act not required	-28.21390712	153.5417434
BARGO	Tahmoor Colliery	Remembrance DRIVE	Other Industry	Regulation under CLM Act not required	-34.25090795	150.5793631
BARMEDMAN	Caltex - Barmedman	Corner Watson Street and Star STREET	Other Petroleum	Regulation under CLM Act not required	-34.14351302	147.3824934
BARRACK HEIGHTS	Caltex Service Station	332-336 Shellharbour ROAD	Service Station	Regulation under CLM Act not required	-34.56489171	150.8597814
BATEAU BAY	Former landfill	The Entrance ROAD	Landfill	Contamination currently regulated under CLM Act	-33.3938305	151.4699046
BATEAU BAY	Woolworths Service Station Bateau Bay	9 Bay Village ROAD	Service Station	Regulation under CLM Act not required	-33.37316432	151.4737125

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
BATEHAVEN	Caltex Service Station	264 Beach ROAD	Service Station	Regulation under CLM Act not required	-35.73255166	150.1997536
BATEHAVEN	Coles Express Service Station Batehaven	198 Beach ROAD	Service Station	Regulation under CLM Act not required	-35.72671807	150.1944931
BATEMANS BAY	Caltex Service Station	87-89 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-35.71940701	150.1762788
BATHURST	Shell Coles Express Service Station	(Cnr Stewart and Rocket Street) 298 Stewart STREET	Service Station	Regulation under CLM Act not required	-33.41910999	149.5677773
BATHURST	Former Shell Depot Bathurst	56 Bant STREET	Other Petroleum	Regulation under CLM Act not required	-33.43471575	149.5774595
BATHURST	Bathurst Rail Fabrication Centre	34 Alpha STREET	Other Industry	Regulation under CLM Act not required	-33.43037796	149.5821533
BATHURST	Bathurst - Former Caltex Depot	114 Howick STREET	Other Petroleum	Regulation under CLM Act not required	-33.42296963	149.5862574
BATHURST	Caltex Bathurst Service Station	53 Durham STREET	Service Station	Regulation under CLM Act not required	-33.41689545	149.5848527
BATHURST	Former Police Station	Corner of William Street and Durham STREET	Other Petroleum	Contamination formerly regulated under the CLM Act	-33.41592424	149.5842233
BATHURST	Former Mobil Depot	1 Lambert STREET	Other Petroleum	Regulation under CLM Act not required	-33.42875534	149.5806344
BATHURST	Crago Mill site	Piper STREET	Other Industry	Regulation under CLM Act not required	-33.42777602	149.5809428
BATHURST	Former Mobil Depot	Lower Russell STREET	Other Petroleum	Regulation under CLM Act not required	-33.42497876	149.585128
BATHURST	Shell Coles Express Bathurst Service Station	59 Durham STREET	Service Station	Regulation under CLM Act not required	-33.41639415	149.5843243
BATHURST	Former Gasworks	71 Russell STREET	Gasworks	Contamination formerly regulated under the CLM Act	-33.42420302	149.5864517
BATHURST	Devro Cattle Hide Processing Plant	46 Vale ROAD	Other Industry	Regulation under CLM Act not required	-33.43926137	149.5803563
BAULKHAM HILLS	Caltex Baulkham Hills Service Station	117 Seven Hills ROAD	Service Station	Regulation under CLM Act not required	-33.76139872	150.9750767
BAULKHAM HILLS	Caltex Service Station	130 Seven Hills ROAD	Service Station	Regulation under CLM Act not required	-33.76180431	150.9746297
BAULKHAM HILLS	Shell Coles Express Service Station	363 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.7601819	150.9916224
BEACON HILL	Caltex Service Station	176 Warringah ROAD	Service Station	Contamination currently regulated under CLM Act	-33.75381485	151.2602617
BEACON HILL	Former 7 - Eleven Service Station, Beacon Hill	312 Warringah ROAD	Service Station	Regulation under CLM Act not required	-33.7515497	151.2469442
BEACONSFIELD	63-85 Victoria St, Beaconsfield	63-85 Victoria STREET	Other Industry	Regulation under CLM Act not required	-33.9102929	151.2016275
BEGA	Coles Express (former Caltex) Service Station	2-6 Swan (Corner Carp) STREET	Service Station	Regulation under CLM Act not required	-36.67388263	149.838163
BEGA	Former BP Service Station	100 - 102 Gipps STREET	Service Station	Regulation under CLM Act not required	-36.67563094	149.8433291
BEGA	Former Bega Gasworks	19-29 Upper STREET	Gasworks	Under assessment	-36.67710613	149.8480253
BEGA	Caltex Service Station	36-40 Lagoon STREET	Service Station	Regulation under CLM Act not required	-36.66832965	149.8289048

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
BEGA	Lands Adjoining the Former Bega Gasworks	Part of Upper, East, Gordon & Gloucester STREET	Gasworks	Under assessment	-36.67710613	149.8480253
BELMONT	Coles Express Belmont Service Station	502 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.03317155	151.6605194
BELMONT	Former Ampol Service Station	467-469 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.0299728	151.6613301
BELMONT NORTH	Woolworths Service Station Belmont North	399 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.02454211	151.6634893
BELMONT NORTH	Caltex Belmont North Service Station	406 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.02476876	151.6623655
BELMONT NORTH	Belmont Bus Depot	2 Floraville ROAD	Other Petroleum	Regulation under CLM Act not required	-33.02476269	151.6606657
BELMORE	SRA Land	348 Burwood ROAD	Unclassified	Regulation under CLM Act not required	-33.91753611	151.0859487
BELMORE	7-Eleven Service Station	792-794 Canterbury ROAD	Service Station	Regulation under CLM Act not required	-33.92567992	151.0873469
BELROSE	Glenrose Shopping Centre	56-58 Glen STREET	Unclassified	Contamination currently regulated under CLM Act	-33.73917996	151.2101029
BELROSE	Woolworths Petrol	60 Glen STREET	Service Station	Regulation under CLM Act not required	-33.74009002	151.2091045
BELROSE	Caltex Service Station	157 Forest WAY	Service Station	Regulation under CLM Act not required	-33.7347675	151.2212004
BENNETTS GREEN	Former Windale Wastewater Treatment Works	8 Templar PLACE	Other Industry	Under assessment	-33.00317523	151.6936636
BERESFIELD	BP Beresfield Truckstop	2 Kinta Drive, corner John Renshaw DRIVE	Service Station	Regulation under CLM Act not required	-32.81122768	151.6393427
BERESFIELD	Former Koppers Timber Treatment Site	53 Weakleys DRIVE	Other Industry	Regulation under CLM Act not required	-32.79902937	151.6358846
BERKELEY VALE	Former Berkeley Vale Service Station	121-123 Lakedge AVENUE	Service Station	Regulation under CLM Act not required	-33.34899186	151.4423109
BERKSHIRE PARK	Shell Coles Express Berkshire Park	746 - 752 Richmond ROAD	Service Station	Regulation under CLM Act not required	-33.66508654	150.7990243
BEROWRA	Caltex Berowra Service Station	12-14 Berowra Waters ROAD	Service Station	Regulation under CLM Act not required	-33.6233827	151.1505554
BEROWRA	7-Eleven Berowra Service Station	965-969 Pacific (Cnr Waratah Rd) HIGHWAY	Service Station	Regulation under CLM Act not required	-33.62673163	151.1479171
BEROWRA	Shell Coles Express Berowra	955 Pacific (Cnr Yallambee Rd) HIGHWAY	Service Station	Regulation under CLM Act not required	-33.62818015	151.1475736
BEROWRA	42 Berowra Waters Road	42 Berowra Waters ROAD	Unclassified	Regulation under CLM Act not required	-33.6203211	151.1482454
BERRIGAN	Caltex Service Station Berrigan	155-165 Chanter STREET	Service Station	Regulation under CLM Act not required	-35.6557616	145.8015557
BERRY	Berry Service Centre - Shell Branded	88 Queen STREET	Service Station	Regulation under CLM Act not required	-34.77571634	150.6961713
BERRY	Shell Berry - Now Oleum branded	75 Queen STREET	Service Station	Under assessment	-34.77500516	150.695167
BEXLEY	7-Eleven Bexley	474 Forest ROAD	Service Station	Regulation under CLM Act not required	-33.95160096	151.1252355
BEXLEY	7-Eleven (former Mobil) Service Station Bexley	613 Forest ROAD	Service Station	Regulation under CLM Act not required	-33.95539246	151.118447



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
BILLINUDGEL	CSR Readymix	Mogo PLACE	Other Industry	Regulation under CLM Act not required	-28.50210255	153.5278161
BILLINUDGEL	Billinudgel General Store	2A Wilfred STREET	Service Station	Under assessment	-28.504328	153.526994
BLACKMANS FLAT	Mount Piper Extension Development Site	2847 Boulder ROAD	Other Industry	Regulation under CLM Act not required	-33.35619968	150.0279881
BLACKMANS FLAT	Lamberts Gully Mine	Castlereagh HIGHWAY	Other Industry	Regulation under CLM Act not required	-33.36713827	150.0483236
BLACKTOWN	Former Caltex Service Station	131 Richmond ROAD	Service Station	Regulation under CLM Act not required	-33.75866104	150.8962614
BLACKTOWN	Valspar Blacktown	4 Steel STREET	Chemical Industry	Regulation under CLM Act not required	-33.75425018	150.9127714
BLACKTOWN	Land at Reservoir Road	Reservoir ROAD	Unclassified	Regulation under CLM Act not required	-33.79119448	150.8967838
BLACKTOWN	7-Eleven Service Station	60 Walters ROAD	Service Station	Regulation under CLM Act not required	-33.77599783	150.8948926
BLAKEHURST	Woolworths Service Station Blakehurst	390 Princes HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-33.990197	151.11361
BLAKEHURST	The Bay Nursing Home	392-394 Princes HIGHWAY	Service Station	Under assessment	-33.99030465	151.1140293
BLAXLAND	7-Eleven (former Mobil) Service Station	137 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.74627	150.6137669
BOAMBEE	Lindsay Bros transport depot site	542 Pacific HIGHWAY	Other Petroleum	Regulation under CLM Act not required	-30.33106848	153.0802985
BOAMBEE	BP-branded (former Mobil) Boambee Service Station	601 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-30.33544287	153.0817266
BOBS FARM	Bob's Farm	15 Fenningham Island ROAD	Other Industry	Regulation under CLM Act not required	-32.74867207	152.0316217
BOGGABILLA	Former Caltex Service Station	90 Simpson Street, corner Newell HIGHWAY	Service Station	Regulation under CLM Act not required	-28.60654029	150.3571056
BOGGABILLA	Lowes (Former Mobil) Depot	Newell HIGHWAY	Other Petroleum	Regulation under CLM Act not required	-28.61023985	150.3529156
BOMADERRY	Caltex Service Station	341 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.84561952	150.5946978
BOMADERRY	Caltex Service Station	246 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.83833824	150.5958799
BOMADERRY	Former Mobil Emoleum Depot	7 Victa WAY	Other Petroleum	Regulation under CLM Act not required	-34.84454618	150.6139462
BOMADERRY	Former Shell Depot	44 Railway STREET	Other Petroleum	Regulation under CLM Act not required	-34.85193621	150.6117038
BOMADERRY	SRA Land	Lot 2 Meroo	Unclassified	Regulation under CLM Act not required	-34.85314813	150.6099573
BOMADERRY	Bomaderry Works Depot	10 McIntyre WAY	Other Petroleum	Regulation under CLM Act not required	-34.84576748	150.6131411
BOMADERRY	Commercial Land	320 Princes HIGHWAY	Other Industry	Under assessment	-34.84424073	150.5958149
BOMBALA	Caltex Service Station Bombala	159-161 Maybe STREET	Service Station	Regulation under CLM Act not required	-36.91234945	149.2374622
BOMBALA	Former Bright Street Timber Mill	Bright STREET	Other Industry	Regulation under CLM Act not required	-36.91547645	149.2302454

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
BOMBALA	Caltex Bombala Service Station	High Street corner Stephen STREET	Service Station	Regulation under CLM Act not required	-36.90447935	149.241292
BOMBALA	Prime Pine site	Sandy LANE	Other Industry	Regulation under CLM Act not required	-36.9315425	149.2110959
BOMEN	Caltex Terminal	34 Lewington STREET	Other Petroleum	Regulation under CLM Act not required	-35.0700202	147.4121955
BONDI	BP-branded Service Station	185 Bondi ROAD	Service Station	Regulation under CLM Act not required	-33.89432208	151.2647671
BONDI	Caltex Service Station Bondi	51 Bondi ROAD	Service Station	Regulation under CLM Act not required	-33.8936307	151.260001
BONDI JUNCTION	Waverley Bus Depot	1-15 Oxford STREET	Other Industry	Regulation under CLM Act not required	-33.89165341	151.2421246
BONNY HILLS	Bonny View Store	923 Ocean DRIVE	Service Station	Regulation under CLM Act not required	-31.59075636	152.8392935
BONNYRIGG	Metro (Formerly United & AP SAVER) Service Station Bonnyrigg	709 Cabramatta Road West ROAD	Service Station	Contamination currently regulated under CLM Act	-33.893058	150.892476
BONNYRIGG HEIGHTS	BP-Branded Service Station Bonnyrigg	451 North Liverpool ROAD	Service Station	Regulation under CLM Act not required	-33.89416327	150.8578378
BOOLAROO	Cardiff West Estate - Pasminco Cockle Creek	Adjacent to PCC Smelter at 13A Main ROAD	Metal Industry	Regulation under CLM Act not required	-32.93950137	151.6349183
BOOLAROO	Cockle Creek and Cockle Bay Sediments	Off Creek Reserve ROAD	Metal Industry	Contamination currently regulated under CLM Act	-32.96079541	151.6141327
BOOLAROO	Pasminco Cockle Creek Smelter	Lake ROAD	Metal Industry	Contamination currently regulated under CLM Act	-32.94434593	151.6307345
BOOLAROO	Incitec Pivot	13 Main STREET	Other Industry	Contamination formerly regulated under the CLM Act	-32.94803538	151.6302187
BOOLAROO	Bunnings Site - Pasminco Cockle Creek	13a Main ROAD	Metal Industry	Contamination formerly regulated under the CLM Act	-32.94364503	151.6252316
BOOLAROO	Part Lot 2 DP1127713 (proposed Lot G) - Pasminco Cockle Creek Smelter site	13a Main ROAD	Metal Industry	Contamination formerly regulated under the CLM Act	-32.94364503	151.6252316
BOOLAROO	Lot 600 DP1228699 (formerly Part Lot 2 DP1127713 & proposed 'Lot D') - Pasminco Cockle Creek Smelter site	Main ROAD	Metal Industry	Contamination currently regulated under CLM Act	-32.94434593	151.6307345
BOOROWA	Former Mobil Depot	14-16 Brial STREET	Other Petroleum	Regulation under CLM Act not required	-34.43673234	148.7300821
BOOROWA	Mobil Service Station	63-69 Marsden STREET	Service Station	Contamination formerly regulated under the CLM Act	-34.44157331	148.7162391
BOTANY	Former Aerosols of Australia	1617 Botany ROAD	Chemical Industry	Regulation under CLM Act not required	-33.9529386	151.2037468
BOTANY	Nuplex Resins	49-61 Stephen ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-33.952588	151.21101
BOTANY	Former Tannery	2 Daniel STREET	Other Industry	Regulation under CLM Act not required	-33.94126194	151.1991087
BOTANY	Botany, Underwood	14a Underwood AVENUE	Unclassified	Contamination being managed via the planning process (EP&A Act)	-33.94508532	151.1947626

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
BOTANY	Roads and Maritime Service	5 - 9 Lord STREET	Other Industry	Regulation under CLM Act not required	-33.94100279	151.1968763
BOTANY	Former Industrial Site	28 Folkestone PARADE	Unclassified	Contamination being managed via the planning process (EP&A Act)	-33.95187539	151.1960537
BOURKE	Caltex Service Station	82-86 Anson STREET	Service Station	Regulation under CLM Act not required	-30.09500388	145.9414388
BOURKE	Former Shell Bourke Depot	94-106 Anson STREET	Service Station	Regulation under CLM Act not required	-30.09548497	145.9436745
BOWENFELS	Bowenfels Field Support Centre	9-13 Coerwull ROAD	Other Petroleum	Regulation under CLM Act not required	-33.47514572	150.1323899
BOWRAL	Shell Coles Express Bowral Service Station	430 Bong Bong STREET	Service Station	Regulation under CLM Act not required	-34.48269596	150.417389
BOWRAL	Former Gasworks	Merrigang STREET	Gasworks	Contamination currently regulated under CLM Act	-34.4783957	150.4255053
BOX HILL	Former Waste Management Facility	25 Terry ROAD	Landfill	Regulation under CLM Act not required	-33.65559259	150.8977986
BOX HILL	Former Poultry Farm	27-33 Boundary ROAD	Other Industry	Regulation under CLM Act not required	-33.64866563	150.8815467
BOX HILL	Former Poultry Farm	19-25 Boundary ROAD	Other Industry	Under assessment	-33.64975248	150.8819725
BRANXTON	Former Service Station Branxton	70 Maitland STREET	Service Station	Under assessment	-32.65647051	151.3516199
BRANXTON	Branxton Wastewater Treatment Works	New England HIGHWAY	Other Industry	Under assessment	-32.66114439	151.3615131
BREWARRINA	Dowell's Fuel	39 Doyle STREET	Service Station	Regulation under CLM Act not required	-29.96152786	146.8612561
BRIGHTON-LE-SANDS	Shell Service Station Brighton Le Sands & adjacent land	2 General Holmes DRIVE	Service Station	Contamination formerly regulated under the CLM Act	-33.9579214	151.1578665
BRIGHTON-LE-SANDS	Cook Park	General Holmes DRIVE	Service Station	Contamination formerly regulated under the CLM Act	-33.9581072	151.1579572
BROADMEADOW	Former Industrial Site	16 Broadmeadow ROAD	Service Station	Regulation under CLM Act not required	-32.91444096	151.7300112
BROADMEADOW	Nineways Broadmeadow Coles Express SS	Corner Brunker Road and Lambton ROAD	Service Station	Regulation under CLM Act not required	-32.92511185	151.7364247
BROKEN HEAD	South Byron Sewage Treatment Works	Broken Head ROAD	Other Industry	Regulation under CLM Act not required	-28.67233626	153.6148974
BROKEN HILL	Former Caltex Depot	3 Kanandah ROAD	Service Station	Regulation under CLM Act not required	-31.98341823	141.4332211
BROKEN HILL	Former Caltex Service Station	167-173 Argent STREET	Service Station	Regulation under CLM Act not required	-31.96066663	141.4624175
BROKEN HILL	Caltex Service Station	535 Argent STREET	Service Station	Regulation under CLM Act not required	-31.95311924	141.4745274
BROKEN HILL	Tasco Petroleum (Former Mobil) Depot	5 Kanandah ROAD	Other Petroleum	Regulation under CLM Act not required	-31.9843986	141.4329127
BROKEN HILL	Former Mobil Aviation Refuelling Facility, Broken Hill Airport	Airport ROAD	Other Petroleum	Regulation under CLM Act not required	-31.99928312	141.4685759
BROKEN HILL	Caltex Service Station	73-87 Oxide STREET	Service Station	Contamination formerly regulated under the CLM Act	-31.95519591	141.4658647
BROKEN HILL	Former Mobil Depot	Corner Of Talc Street and Gossan STREET	Other Petroleum	Regulation under CLM Act not required	-31.96018102	141.4514752

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BROKEN HILL	Former Gasworks	Cornish STREET	Gasworks	Contamination formerly regulated under the CLM Act	-31.96330562	141.4470611
BROOKLYN	Former Oyster Farm	139 Brooklyn (Off Government) ROAD	Unclassified	Regulation under CLM Act not required	-33.54716867	151.2229744
BROOKVALE	Coles Express Service Station Brookvale	198 Harbord ROAD	Service Station	Regulation under CLM Act not required	-33.76332299	151.2794028
BROOKVALE	Woolworths Petrol Brookvale	756 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.76170587	151.2762411
BROOKVALE	Caltex Service Station Brookvale	740-742 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.76146721	151.2745358
BROOKVALE	Harrison Manufacturing	75 Old Pittwater ROAD	Other Industry	Regulation under CLM Act not required	-33.76497282	151.2637961
BROOKVALE	Brookvale Bus Depot	630-636 Pittwater ROAD	Other Petroleum	Regulation under CLM Act not required	-33.76641698	151.2705659
BROOKVALE	AMP Warringah Mall	Cnr Condamine Street, Old Pittwater Rd & Cross STREET	Other Industry	Regulation under CLM Act not required	-33.76729923	151.2657272
BROOKVALE	Littles Dry Cleaning	123 Old Pittwater ROAD	Other Industry	Regulation under CLM Act not required	-33.76759121	151.2625932
BROWNSVILLE	Caltex Service Station	342 Kanahooka ROAD	Service Station	Regulation under CLM Act not required	-34.48591734	150.8064373
BRUNSWICK HEADS	Caltex Service Station	5 Tweed STREET	Service Station	Regulation under CLM Act not required	-28.5381619	153.5487135
BUDGEWOI	Colongra Power Station	Off Scenic DRIVE	Other Industry	Under assessment	-33.21463137	151.5529338
BULAHDELAH	Caltex Service Station	8 Red Gum Road, Corner Mahogany STREET	Service Station	Regulation under CLM Act not required	-32.39837094	152.2106015
BULAHDELAH	Former Caltex Service Station	53-59 Bulahdelah WAY	Service Station	Regulation under CLM Act not required	-32.40721638	152.2110291
BULAHDELAH	BP-branded (former Mobil) Service Station	73-75 Bulahdelah WAY	Service Station	Regulation under CLM Act not required	-32.40971018	152.2105785
BULLABURRA	Former Burmah Bullaburra Service Station	367 - 369 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.72482995	150.4124537
BULLI	Scrap Yard	7 Molloy STREET	Other Industry	Contamination formerly regulated under the CLM Act	-34.33663195	150.9131154
BULLI	Bulli Brickworks	Quilkey PLACE	Other Industry	Regulation under CLM Act not required	-34.33263113	150.9086247
BUNGENDORE	Former Timber Treatment Plant	Corner King Street and Butmaroo STREET	Other Industry	Contamination formerly regulated under the CLM Act	-35.26151273	149.4434907
BURONGA	Caltex Service Station	Sturt Hwy Cnr Silver City HIGHWAY	Service Station	Regulation under CLM Act not required	-34.17056496	142.1813847
BURWOOD	Burwood STA Depot	Cnr Shaftesbury and Parramatta ROADS	Other Industry	Contamination formerly regulated under the CLM Act	-33.86982934	151.1089057
BYRON BAY	Residential Development	Lot 15 Seaview STREET	Unclassified	Regulation under CLM Act not required	-28.65214464	153.6165573
BYRON BAY	Butler Street Reserve Byron Bay	Butler STREET	Landfill	Under assessment	-28.6434329	153.6101099
CABARITA	Dulux (Orica Australia)	Cabarita ROAD	Chemical Industry	Contamination formerly regulated under the CLM Act	-33.84643972	151.1157115
CABARITA	Cabarita Wellcome	33 Phillips STREET	Landfill	Ongoing maintenance required to manage residual contamination	-33.85250251	151.1176366



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CABRAMATTA	Caltex Service Station Cabramatta	168 John STREET	Service Station	Regulation under CLM Act not required	-33.89422314	150.9279279
CALGA	Former service station	101 Peats Ridge ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.37592138	151.2254951
CALLALA BEACH	Callala Beach General Store	(formerly 1 Quay Rd) 114A Quay ROAD	Service Station	Regulation under CLM Act not required	-35.0101817	150.6964322
CAMBRIDGE GARDENS	Caltex Cambridge Park	1 Boomerang PLACE	Service Station	Regulation under CLM Act not required	-33.74068794	150.717174
CAMDEN	Camden High School (former)	John STREET	Gasworks	Regulation under CLM Act not required	-34.05114079	150.6951285
CAMDEN	Caltex Camden Service Station	21 Barsden STREET	Service Station	Regulation under CLM Act not required	-34.05808413	150.6914744
CAMDEN SOUTH	Coles Express Service Station Camden South	273 Old Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-34.08660995	150.6945444
CAMELLIA	Hymix Concrete	14 Grand AVENUE	Metal Industry	Contamination currently regulated under CLM Act	-33.82243454	151.044789
CAMELLIA	Mauri Foods	15 Grand AVENUE	Other Industry	Regulation being finalised	-33.81996985	151.0335725
CAMELLIA	James Hardie Factory (former, eastern portion)	1 Grand AVENUE	Other Industry	Ongoing maintenance required to manage residual contamination	-33.8182384	151.0261019
CAMELLIA	Bitumen Manufacturer	12 Grand AVENUE	Other Industry	Contamination currently regulated under CLM Act	-33.82189695	151.0429251
CAMELLIA	Hambear	14 Thackeray STREET	Metal Industry	Regulation under CLM Act not required	-33.81920482	151.0419394
CAMELLIA	Former Asciano Properties	39 Grand AVENUE	Chemical Industry	Contamination currently regulated under CLM Act	-33.82056014	151.0443331
CAMELLIA	Railway Land	27 Grand AVENUE	Other Industry	Regulation under CLM Act not required	-33.81910822	151.0382483
CAMELLIA	Wrigg	13 Grand AVENUE	Metal Industry	Under assessment	-33.81971361	151.0321525
CAMELLIA	Former Akzo Nobel site	6 Grand AVENUE	Chemical Industry	Contamination currently regulated under CLM Act	-33.82238826	151.0319264
CAMELLIA	Former Shell Clyde Refinery	Durham STREET	Other Industry	Contamination currently regulated under POEO Act	-33.82804924	151.0378966
CAMELLIA	Council Reserve	11B Grand AVENUE	Metal Industry	Regulation under CLM Act not required	-33.81850502	151.0302425
CAMELLIA	Veolia	37 Grand AVENUE	Chemical Industry	Contamination currently regulated under CLM Act	-33.81980027	151.0430689
CAMELLIA	Sydney Water	41 Grand AVENUE	Chemical Industry	Contamination formerly regulated under the CLM Act	-33.8217493	151.0453367
CAMELLIA	Maritime Services Board	33A Grand AVENUE	Metal Industry	Regulation under CLM Act not required	-33.81836086	151.0401249
CAMMERAY	Tunks Park	Brothers AVENUE	Landfill	Contamination formerly regulated under the CLM Act	-33.81734704	151.2113338
CAMMERAY	Coles Express Cammeray	477-483 Miller STREET	Service Station	Regulation under CLM Act not required	-33.82141124	151.2108658
CAMPBELLTOWN	Mobil Service Station	96-98 Queen STREET	Service Station	Regulation under CLM Act not required	-34.06407588	150.8170082
CAMPBELLTOWN	BP Macarthur Service Station	Cnr Blaxland ROAD and Campbelltown ROAD	Service Station	Regulation under CLM Act not required	-34.05312872	150.8234349

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CAMPBELLTOWN	Former vehicle wrecking yard	38 Blaxland ROAD	Other Industry	Regulation under CLM Act not required	-34.06055735	150.8130598
CAMPERDOWN	Former Gee Graphics	27 Church STREET	Other Industry	Regulation under CLM Act not required	-33.88737747	151.1773616
CAMPERDOWN	O'Dea Reserve	Salisbury LANE	Landfill	Contamination formerly regulated under the CLM Act	-33.89072786	151.1736948
CAMPERDOWN	The Spruce	12-14 Marsden STREET	Other Industry	Regulation under CLM Act not required	-33.88720632	151.1784514
CAMPSIE	Budget Petroleum and adjacent property	403 Canterbury Road and 1 Una STREET	Service Station	Contamination currently regulated under CLM Act	-33.91605617	151.1086596
CAMPSIE	Former Sunbeam factory	60 Charlotte STREET	Other Industry	Contamination formerly regulated under the CLM Act	-33.92254225	151.1025796
CANLEY HEIGHTS	Former Caltex Canley Heights	368 Canley Vale ROAD	Service Station	Regulation under CLM Act not required	-33.88271081	150.9154176
CANLEY HEIGHTS	Caltex Canley Heights Service Station	280-286 Canley Vale ROAD	Service Station	Regulation under CLM Act not required	-33.88393501	150.9241656
CANLEY VALE	Coles Express Lansvale	99 Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-33.89295753	150.9606136
CANLEY VALE	Former Mobil Service Station	96 Canley Vale ROAD	Service Station	Regulation under CLM Act not required	-33.88591573	150.9369801
CANOWINDRA	BP-branded Jasbe Service Station	76 Rodd STREET	Service Station	Regulation under CLM Act not required	-33.56131773	148.6682805
CANTERBURY	Metro Petroleum Service Station	13-19 Canterbury ROAD	Service Station	Contamination currently regulated under CLM Act	-33.90783455	151.125207
CARDIFF	7-Eleven Service Station	399 Main ROAD	Service Station	Regulation under CLM Act not required	-32.93391137	151.6562111
CARDIFF	Former Caltex Service Station	367 Main ROAD	Service Station	Regulation under CLM Act not required	-32.93761223	151.6577781
CARDIFF	Maneela Oval	Main ROAD	Other Industry	Regulation under CLM Act not required	-32.93018443	151.6435559
CARDIFF	Former Mobil Depot	7 Ranton STREET	Other Petroleum	Regulation under CLM Act not required	-32.94516764	151.6470387
CARDIFF	BP Service Station (Reliance Petroleum)	Corner Sturt and Main ROADS	Service Station	Regulation under CLM Act not required	-32.93792229	151.6569905
CARDIFF	Woolworths (former Mobil) Cardiff Service Station	43 Macquarie ROAD	Service Station	Regulation under CLM Act not required	-32.94118246	151.6578195
CARINGBAH	Adjacent to Spirent Australia	101-103 Cawarra ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-34.03360747	151.1245577
CARINGBAH	Former Consumer Health Products Manufacturer	32-40 Cawarra ROAD	Other Industry	Regulation under CLM Act not required	-34.03024369	151.1277755
CARINGBAH	Caltex Lilli Pilli Service Station	477-481 Port Hacking ROAD	Service Station	Regulation under CLM Act not required	-34.05243807	151.1216353
CARINGBAH	7-Eleven Service Station	367 The Kingsway	Service Station	Regulation under CLM Act not required	-34.03948677	151.1203268
CARINGBAH	Spirent Australia	105 Cawarra ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-34.03425343	151.1245092
CARINGBAH	BP Caringbah	54 Captain Cook DRIVE	Service Station	Under assessment	-34.032652	151.125487
CARLINGFORD	Caltex Service Station Carlingford	131 Pennant Hills ROAD	Service Station	Regulation under CLM Act not required	-33.78762398	151.0279422

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CARLINGFORD	Caltex Service Station	797 Pennant Hills ROAD	Service Station	Regulation under CLM Act not required	-33.7757819	151.0516532
CARLTON	Shell Coles Express Service Station	277 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.9748579	151.1272732
CARRINGTON	Commercial Metals Company (CMC) Australia Pty Ltd	117-121 Bourke STREET	Other Industry	Regulation under CLM Act not required	-32.9148832	151.7677193
CARRINGTON	Carrington redevelopment site	11 Howden STREET	Other Industry	Regulation under CLM Act not required	-32.91309509	151.7625341
CARRINGTON	Forgacs Dockyard	81 Denison STREET	Other Industry	Regulation under CLM Act not required	-32.9207441	151.764816
CARRINGTON	NAT vacant land	Bourke STREET	Unclassified	Regulation under CLM Act not required	-32.91276029	151.7685894
CARRINGTON	Dyke Point Containment Cell	Dyke ROAD	Other Industry	Regulation under CLM Act not required	-32.91763422	151.7727101
CARRINGTON	Carrington Coal Tar Pavements	Bourke Street to Dyke ROAD	Other Industry	Regulation under CLM Act not required	-32.91441348	151.770271
CARRINGTON	Pasminco Ship Loader	Dyke Berth 2 (off Bourke Street) OTHER	Metal Industry	Regulation under CLM Act not required	-32.9148698	151.7716837
CARSS PARK	Vacant Property	334 Princes HIGHWAY	Other Industry	Regulation under CLM Act not required	-33.98628486	151.1133908
CARWELL	Cement Australia Carwell Creek Quarries	Quarry ROAD	Other Industry	Regulation under CLM Act not required	-32.85413742	149.923172
CASINO	Caltex Service Station and Depot Casino	28 & 32 Dyraaba STREET	Service Station	Regulation under CLM Act not required	-28.85488567	153.044806
CASINO	Caltex Service Station	96 Centre STREET	Service Station	Regulation under CLM Act not required	-28.86539567	153.0450654
CASINO	Former Gasworks	134-136 North STREET	Gasworks	Regulation under CLM Act not required	-28.86080712	153.0526043
CASINO	Woolworths Service Station Casino	130 Canterbury STREET	Service Station	Regulation under CLM Act not required	-28.86231341	153.0464642
CASINO	18 Beith Street, Casino	18 Beith STREET	Unclassified	Regulation under CLM Act not required	-28.84951426	153.0446585
CASINO	Corner Store	30 Barker STREET	Service Station	Regulation under CLM Act not required	-28.86316792	153.0389124
CASINO	Casino Roadhouse	86 Johnston STREET	Service Station	Under assessment	-28.85960698	153.0562429
CASULA	Caltex Casula Service Station	646 Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-33.95641262	150.8934783
CATHERINE HILL BAY	Catherine Hill Bay Coal Handling and Preparation Plant	1A Keene STREET	Other Industry	Regulation under CLM Act not required	-33.16120556	151.6302456
CESSNOCK	Caltex Cessnock Service Station	103-105 Wollombi (Cnr James Street) ROAD	Service Station	Regulation under CLM Act not required	-32.83936243	151.3430078
CESSNOCK	Former Mobil Service Station	102 Wollombi ROAD	Service Station	Regulation under CLM Act not required	-32.83844074	151.3436022
CESSNOCK	Former Service Station	2-4 Allandale ROAD	Service Station	Under assessment	-32.83118911	151.3560677
CHARBON	Charbon Colliery	Charbon ROAD	Other Industry	Regulation under CLM Act not required	-32.92390131	149.9839098
CHARLESTOWN	7-Eleven Charlestown	273 Charlestown ROAD	Service Station	Under assessment	-32.95802555	151.6897931

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
CHARLESTOWN	Caltex Service Station	81 Pacific HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-32.96708479	151.6955919
CHARLESTOWN	Caltex Woolworths (Former BP)	91-93 Pacific HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-32.96633569	151.6959051
CHARLESTOWN	Ausgrid Powell Street Depot	8 Powell STREET	Other Industry	Regulation under CLM Act not required	-32.95912375	151.6944136
CHARMHAVEN	Caltex Charmhaven Service Station	13-15 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.21655768	151.5091452
CHATSWOOD	Former Caltex Chatswood Service Station	607 Pacific HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-33.80396472	151.1795766
CHATSWOOD	Woolworths Chatswood	364-366 Eastern Valley WAY	Service Station	Regulation under CLM Act not required	-33.78667419	151.2010828
CHATSWOOD	Caltex Service Station Chatswood	572 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.80381271	151.1789656
CHATSWOOD	Auto Repairs	2 Devonshire STREET	Service Station	Regulation under CLM Act not required	-33.8015482	151.1859632
CHATSWOOD	Coles Express Service Station Chatswood	877-879 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.79182176	151.1804867
CHATSWOOD WEST	Chatswood Toyota	728 Pacific HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-33.79654247	151.1776136
CHERRYBROOK	Caltex Service Station	67 Shepherds DRIVE	Service Station	Regulation under CLM Act not required	-33.72069183	151.0451415
CHESTER HILL	Former Orica, Chester Hill	127 Orchard ROAD	Chemical Industry	Contamination formerly regulated under the CLM Act	-33.8869823	150.9952873
CHIPPENDALE	Frasers Development	Wellington STREET	Unclassified	Under assessment	-33.88669108	151.2015805
CHIPPING NORTON	Former Solchem (Mobil) Depot Chipping Norton	49-51 Riverside ROAD	Other Petroleum	Regulation under CLM Act not required	-33.91621314	150.9696948
CHIPPING NORTON	Former ACR	85-107 Alfred STREET	Chemical Industry	Contamination currently regulated under CLM Act	-33.92226795	150.9586496
CHISWICK	Former Sydney Wiremills (BHP) site	Blackwall Point ROAD	Other Industry	Regulation under CLM Act not required	-33.85131849	151.1369131
CHITTAWAY BAY	Former Caltex Chittaway Point	100 Chittaway ROAD	Service Station	Regulation under CLM Act not required	-33.32707555	151.4293546
CHULLORA	Chullora Railway Workshops	Worth STREET	Other Industry	Regulation under CLM Act not required	-33.88639388	151.0598201
CLARENCE	Clarence Colliery	Chifley ROAD	Other Industry	Regulation under CLM Act not required	-33.46450217	150.2522729
CLARENDON	Coles Express Clarendon Service Station	244 Hawkesbury Valley WAY	Service Station	Regulation under CLM Act not required	-33.6083729	150.7890956
CLEARFIELD	Former Pamplings Dip Site	Off Clearfield ROAD	Cattle Dip	Regulation under CLM Act not required	-29.16287185	152.882974
CLYBUCCA	BP Service Station	2171 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-30.93913118	152.9417395
CLYDE	7-Eleven Clyde	3 Parramatta (Cnr Harbord Street) ROAD	Service Station	Regulation under CLM Act not required	-33.83494433	151.0222628
COBAR	Former Caltex (Bogas) Service Station Cobar	56-58 Marshall STREET	Service Station	Regulation under CLM Act not required	-31.49793339	145.8346684
COBAR	Mckinnons Gold Mine	Cobar ROAD	Metal Industry	Regulation under CLM Act not required	-31.78179755	145.693



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
COBAR	Caltex Service Station Cobar	99 Marshall (formerly Cnr Barrier Highway and Bathurst Street)	Service Station	Regulation under CLM Act not required	-31.49631924	145.8275727
COBAR	Caltex Service Station	Lot 10 Railway PARADE	Service Station	Regulation under CLM Act not required	-31.49350124	145.8442372
COFFS HARBOUR	BP Service Station	134-136 Pacific HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-30.29187037	153.1182106
COFFS HARBOUR	Dan Murphy's Coffs Harbour	10 Elbow STREET	Service Station	Regulation under CLM Act not required	-30.29439262	153.115069
COFFS HARBOUR	Mobil Service Station	314-316 Harbour DRIVE	Service Station	Contamination formerly regulated under the CLM Act	-30.3056983	153.131966
COFFS HARBOUR	Mobil Coffs Harbour Airport	Aviation DRIVE	Other Petroleum	Contamination formerly regulated under the CLM Act	-30.313385	153.1175018
COFFS HARBOUR	Woolworths Petrol	Park Beach Plaza, Arthur STREET	Service Station	Regulation under CLM Act not required	-30.28101154	153.132027
COFFS HARBOUR	Caltex Service Station	157 Orlando STREET	Service Station	Regulation under CLM Act not required	-30.28975334	153.1306354
COFFS HARBOUR	Coffs Harbour Slipway	38 Marina DRIVE	Other Industry	Under assessment	-30.30325637	153.1441437
COFFS HARBOUR	Aussitel Backpackers Hostel	312 Harbour DRIVE	Service Station	Contamination formerly regulated under the CLM Act	-30.3057	153.132
COLEAMBALLY	Former Mobil Coleambally Depot	19 Bencubbin AVENUE	Other Petroleum	Regulation under CLM Act not required	-34.80279552	145.8945239
COLLARENEBRI	Former Shell Depot	Corner Narran Street and Queen STREET	Other Petroleum	Regulation under CLM Act not required	-29.54114772	148.5789365
COLONGRA	Endeavour Colliery	Scenic DRIVE	Other Industry	Regulation under CLM Act not required	-33.21297737	151.5416882
COLYTON	Ampol Service Station	88 Great Western HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-33.7754	150.7954
CONCORD	Caltex Service Station	89 Parramatta ROAD	Service Station	Regulation under CLM Act not required	-33.86785624	151.0993769
CONCORD WEST	Caltex Service Station	369-375 Concord ROAD	Service Station	Regulation under CLM Act not required	-33.84113835	151.0888843
CONDOBOLIN	BP-Branded Service Station	38 Denison Street, corner Molong STREET	Service Station	Regulation under CLM Act not required	-33.08520378	147.1524976
CONDOBOLIN	Former Mobil Depot	6 Burnett STREET	Other Petroleum	Contamination currently regulated under CLM Act	-33.08010515	147.1642972
CONDOBOLIN	Former Ampol Depot	Cnr Parkes Road and Goobang STREET	Service Station	Regulation under CLM Act not required	-33.08034753	147.1642436
CONDOBOLIN	Former Caltex Depot	Parkes ROAD	Service Station	Regulation under CLM Act not required	-33.08255593	147.1585922
CONDOBOLIN	Mobil Condobolin Depot Railway Siding	Railway Siding behind 6 Burnett STREET	Other Petroleum	Regulation under CLM Act not required	-33.08058612	147.164225
CONSTITUTION HILL	Sydney Water Land	Caloola ROAD	Unclassified	Regulation under CLM Act not required	-33.79776636	150.9697715
COOGEE	Caltex Coogee Service Station	146-148 Coogee Bay (Cnr Mount St) ROAD	Service Station	Regulation under CLM Act not required	-33.91989232	151.2517454
COOKS HILL	Former Council Depot Cooks Hill	152 Bruce Street and 115 Corlette STREET	Other Industry	Regulation under CLM Act not required	-32.93525537	151.7641074
COOLAC	Coolac Service Station	Corner Hume Highway and Coleman STREET	Service Station	Regulation under CLM Act not required	-34.95435052	148.1595525

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
COOLAH	BP Depot (Reliance Petroleum)	72 (formerly 17-23) Cunningham STREET	Other Petroleum	Regulation under CLM Act not required	-31.82275896	149.7243171
COOLONGOLOOK	Caltex Service Station	Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-32.21648325	152.322813
COOMA	Caltex Cooma Service Station	44 Sharp (Cnr Baron St) STREET	Service Station	Regulation under CLM Act not required	-36.23323489	149.1304134
COOMA	Former Mobil Cooma Depot	2 Commissioner STREET	Other Petroleum	Regulation under CLM Act not required	-36.23267537	149.1346338
COOMA	Former Caltex Cooma Depot	2 Short STREET	Service Station	Regulation under CLM Act not required	-36.2338672	149.1348862
COOMA	Lowes Petroleum Cooma Depot and Service Station (Former BP Reliance Petroleum)	2-4 Sharp STREET	Other Petroleum	Regulation under CLM Act not required	-36.22862603	149.1356483
COOMA	Woolworths Caltex Cooma Service Station	Bombala Street Cnr Massie STREET	Service Station	Regulation under CLM Act not required	-36.23364626	149.1267469
COOMA	Former Shell Depot	48-50 Bradley STREET	Other Petroleum	Regulation under CLM Act not required	-36.23448955	149.1347987
COOMA	Former Shell Service Station	48-52 Sharp STREET	Service Station	Contamination formerly regulated under the CLM Act	-36.23350402	149.1299514
COONABARABRAN	Former Mobil Depot	49 Cowper STREET	Other Petroleum	Regulation under CLM Act not required	-31.27096226	149.2818461
COONABARABRAN	Shell Coles Express Service Station	2-6 John STREET	Service Station	Regulation under CLM Act not required	-31.27706775	149.27836
COONABARABRAN	Former Shell Coonabarabran CVRO	Corner Cowper St and Dawson St (formerly 51 Cowper) STREET	Other Petroleum	Regulation under CLM Act not required	-31.27003745	149.281788
COONABARABRAN	Caltex Service Station	Cnr Dawson & Drummond STREET	Service Station	Regulation under CLM Act not required	-31.26994941	149.28183
COONABARABRAN	Caltex Service Station	85-87 John STREET	Service Station	Regulation under CLM Act not required	-31.27231215	149.2771297
COONAMBLE	Former Shell Coonamble Depot	Corner Aberford Street and Quambone ROAD	Other Petroleum	Regulation under CLM Act not required	-30.95349182	148.3793432
COONAMBLE	Caltex Service Station	Quambone ROAD	Service Station	Regulation under CLM Act not required	-30.95410067	148.3792167
COORANBONG	Former Poultry Farm	64 - 98 Alton ROAD	Unclassified	Regulation under CLM Act not required	-33.06860138	151.4512156
COORANBONG	Avondale Auto Centre	677 Freemans DRIVE	Service Station	Under assessment	-33.06968809	151.4636293
COOTAMUNDRA	Former BP Depot	1-5 Murray STREET	Other Petroleum	Regulation under CLM Act not required	-34.62915841	148.0306962
COOTAMUNDRA	Caltex Service Station	26-34 Hovell STREET	Service Station	Regulation under CLM Act not required	-34.63624703	148.0347479
COOTAMUNDRA	Former Caltex Depot	219 Sutton STREET	Other Petroleum	Regulation under CLM Act not required	-34.65126548	148.0145283
COOTAMUNDRA	Former Ampol Service Station	72 Parker STREET	Service Station	Regulation under CLM Act not required	-34.63471008	148.0296112
COOTAMUNDRA	Cootamundra Gasworks	140-146 Hovell STREET	Gasworks	Contamination currently regulated under CLM Act	-34.64572841	148.0255049
COOTAMUNDRA	Former Amoco Depot	68-72 Hovell STREET	Other Petroleum	Contamination currently regulated under CLM Act	-34.63871124	148.0321134

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COOTAMUNDRA	Former Ampol Cootamundra Rail Siding	Back Brawlin	Other Petroleum	Under assessment	-34.65326425	148.0143068
CORAMBA	Martin Street	End of Martin Street and adjacent car park OTHER	Service Station	Ongoing maintenance required to manage residual contamination	-30.22125208	153.0156997
COROWA	Corowa Shire Council Works Depot	24 Poseidon ROAD	Other Petroleum	Regulation under CLM Act not required	-35.98807923	146.3652266
COROWA	Former Ampol Corowa	10 Bow STREET	Service Station	Regulation under CLM Act not required	-35.99364786	146.3901259
COROWA	Cignall Corowa	280 Hume STREET	Petroleum Storage	Under assessment	-36.00996015	146.3760437
CORRIMAL	Woolworths Petrol - Corrimal	275-277 Princes HIGHWAY	Service Station	Under assessment	-34.37527426	150.8962637
CORRIMAL	7-Eleven Corrimal	138-146 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.36986923	150.8978271
COWRA	Landmark Fertiliser Storage Facility	Corner Young Road & Waratah STREET	Chemical Industry	Regulation under CLM Act not required	-33.84321832	148.6722578
COWRA	Lowes Petroleum (former BP Cowra Depot)	12 Campbell STREET	Other Petroleum	Regulation under CLM Act not required	-33.83803706	148.6977873
COWRA	Former Gasworks	30 Brougham STREET	Gasworks	Contamination currently regulated under CLM Act	-33.8389659	148.6963482
COWRA	Shell Depot	34 Brougham STREET	Other Petroleum	Contamination formerly regulated under the CLM Act	-33.83932421	148.6976295
CRANGAN BAY	Big T Road House.	555 and 565 Pacific HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-33.17326538	151.6083864
CREMORNE	Shell Coles Express Service Station	225 Military ROAD	Service Station	Regulation under CLM Act not required	-33.83063306	151.226223
CRESTWOOD	Former Caltex Depot Queanbeyan	36 Kendall (Cnr Stephens Rd) AVENUE	Other Petroleum	Regulation under CLM Act not required	-35.34615546	149.207807
CRESTWOOD	Former BP Queanbeyan	64 Uriarra ROAD	Service Station	Regulation under CLM Act not required	-35.34646177	149.2246263
CRONULLA	Breen Holdings	Bate Bay ROAD	Other Industry	Regulation under CLM Act not required	-34.03861737	151.1614114
CROWS NEST	Caltex Service Station	111-121 Falcon STREET	Service Station	Regulation under CLM Act not required	-33.82868236	151.2060317
CROYDON	Caltex Service Station	404-410 Liverpool ROAD	Service Station	Regulation under CLM Act not required	-33.88853994	151.115879
CROYDON	BP Ashfield	584 Parramatta ROAD	Service Station	Regulation under CLM Act not required	-33.87399409	151.1267296
CROYDON PARK	Mobil Service Station	334 Georges River ROAD	Service Station	Regulation under CLM Act not required	-33.89771626	151.0999194
CULCAIRN	Caltex Service Station	2883 Olympic HIGHWAY	Service Station	Regulation under CLM Act not required	-35.67441635	147.0356845
CULLEN BULLEN	Baal Bone Colliery	Castlereagh HIGHWAY	Other Industry	Regulation under CLM Act not required	-33.27193875	150.0587194
CUNDELTOWN	Caltex Service Station (1 Manning River Drive)	Old Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-31.89329598	152.5068225
CURL CURL	John Fisher Park	Corner Harbord and Abbott ROADS	Landfill	Regulation under CLM Act not required	-33.76352692	151.2798462
DACEYVILLE	Astrolabe Park	Cook AVENUE	Landfill	Regulation being finalised	-33.92963704	151.221773



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DAPTO	RailCorp Dapto	(Rear of property) 12-14 Hamilton STREET	Other Industry	Regulation under CLM Act not required	-34.50045405	150.787353
DARLINGHURST	Proposed Retail Unit	139-155 Palmer STREET	Unclassified	Regulation under CLM Act not required	-33.87504688	151.2168106
DARLINGHURST	Cross City Tunnel	Riley Street and William STREET	Service Station	Contamination was addressed via the planning process (EP&A Act)	-33.87424636	151.2158305
DARLINGHURST	18-28 Neild Avenue, Darlinghurst	18-28 Neild AVENUE	Landfill	Regulation under CLM Act not required	-33.87876581	151.2276546
DEE WHY	United Dee Why	1 The Strand STREET	Service Station	Under assessment	-33.75569207	151.2959451
DEE WHY	Caltex Service Station	793-797 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.74566596	151.2920719
DEE WHY	Dee Why Town Centre	Pittwater ROAD	Other Industry	Regulation under CLM Act not required	-33.753169	151.2875805
DEE WHY	Roche Products Dee Why Facility	Inman ROAD	Other Industry	Contamination currently regulated under CLM Act	-33.73834964	151.2876392
DENHAM COURT	Service Station and Caravan Park Denham Court	505 Campbelltown ROAD	Service Station	Under assessment	-33.98208395	150.8459471
DENILIKUIN	Shell Coles Express Service Station	336 Victoria STREET	Service Station	Contamination formerly regulated under the CLM Act	-35.52373613	144.9807345
DENILIKUIN	Former Deniliquin Gasworks	365 and 369 George and 380 and 386 Charlotte STREET	Gasworks	Under assessment	-35.52663248	144.9634981
DENILIKUIN	Landmark Fertiliser Storage Facility	99-101 Davidson STREET	Chemical Industry	Regulation under CLM Act not required	-35.52534735	144.975142
DENILIKUIN	Former Deniliquin Caltex Depot	116-118 Hardinge (Cnr Wood St) STREET	Service Station	Regulation under CLM Act not required	-35.53196985	144.9544597
DENILIKUIN	BP Depot (Reliance Petroleum)	125 - 127 Hardinge STREET	Service Station	Regulation under CLM Act not required	-35.53222124	144.9517397
DENILIKUIN	Former Shell Depot	143-147 Napier STREET	Other Petroleum	Regulation under CLM Act not required	-35.5342355	144.953169
DENMAN	Former Industrial Site	10 Fontana WAY	Metal Industry	Regulation under CLM Act not required	-32.37945456	150.6868239
DENMAN	Former Industrial Site	9 Fontana WAY	Metal Industry	Regulation under CLM Act not required	-32.37911159	150.6869866
DORA CREEK	Former Service Station	4 Doree PLACE	Service Station	Under assessment	-33.08452746	151.502415
DOYALSON	Part Lot 3 DP 259306	Off David STREET	Other Industry	Regulation under CLM Act not required	-33.20436131	151.5232558
DOYALSON	Munmorah Colliery	Scenic DRIVE	Other Industry	Regulation under CLM Act not required	-33.21297737	151.5416882
DOYALSON	Munmorah Power Station	(Central Coast Highway) Scenic DRIVE	Unclassified	Regulation under CLM Act not required	-33.20678347	151.540795
DOYALSON	Mannering Colliery (formerly Wyee)	Rutleys ROAD	Other Industry	Regulation under CLM Act not required	-33.17179576	151.5419248
DOYALSON NORTH	Caltex Service Station	235 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.18501024	151.5526114
DOYALSON NORTH	Shell Coles Express Service Station	260-270 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.18636608	151.5482399
DRUMMOYNE	Coles Express Service Station Drummoyne (Eastbound)	36-46 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.85576628	151.1593519

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DRUMMOYNE	Former Dry Cleaners	225 Victoria ROAD	Chemical Industry	Regulation under CLM Act not required	-33.8507152	151.1537113
DRUMMOYNE	Coles Express Service Station Drummoynes South (Westbound)	39-45 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.85606575	151.1589061
DRUMMOYNE	Caltex Service Station	191-195 Lyons ROAD	Service Station	Regulation under CLM Act not required	-33.85699216	151.1460356
DUBBO	BP Reliance Petroleum Service Station (Former Mobil Depot)	107 Erskine STREET	Other Petroleum	Regulation under CLM Act not required	-32.24441287	148.6111704
DUBBO	Dubbo Police Station	143 Brisbane STREET	Other Petroleum	Regulation under CLM Act not required	-32.24652288	148.6034702
DUBBO	Shell Coles Express Service Station	131-133 Cobra STREET	Service Station	Regulation under CLM Act not required	-32.25511317	148.6126147
DUBBO	Shell Coles Express Service Station	45-49 Whylandra STREET	Service Station	Regulation under CLM Act not required	-32.2474598	148.5932769
DUBBO	Former Mobil depot	40-44 Morgan STREET	Other Petroleum	Regulation under CLM Act not required	-32.23912277	148.6182711
DUBBO	Caltex Service Station, Dubbo	60 Windsor PARADE	Service Station	Regulation under CLM Act not required	-32.25459322	148.6318
DUBBO	BP-Branded Service Station Dubbo West	51-63 Whylandra STREET	Service Station	Regulation under CLM Act not required	-32.24827657	148.5927084
DUBBO	Lowes Petroleum (BP-Branded) Depot, Dubbo	105 Erskine STREET	Service Station	Regulation under CLM Act not required	-32.24423247	148.6101676
DUBBO	Inland Petroleum (Former Shell) Depot	109 Erskine STREET	Other Petroleum	Regulation under CLM Act not required	-32.24470512	148.6124108
DUBBO	Former Caltex Depot	Phillip (corner Fitzroy) STREET	Service Station	Regulation under CLM Act not required	-32.24534863	148.6150144
DUBBO	Caltex Service Station	119 Bourke STREET	Service Station	Regulation under CLM Act not required	-32.24336464	148.6091931
DUBBO	Former Ambulance Station	165 Brisbane STREET	Other Petroleum	Contamination formerly regulated under the CLM Act	-32.24850755	148.6031749
DUBBO	United (former Volume Plus) Service Station	219-223 Cobra STREET	Service Station	Regulation under CLM Act not required	-32.2565155	148.6228586
DUBBO	Caltex Service Station, Dubbo	Cnr Brisbane Street and Cobra STREET	Service Station	Contamination currently regulated under CLM Act	-32.25322183	148.603164
DULWICH HILL	Former Tyre Recapping	115-117 Constitution ROAD	Other Industry	Regulation under CLM Act not required	-33.90300876	151.1387724
DULWICH HILL	Denison Road Playground	194 Denison ROAD	Landfill	Regulation under CLM Act not required	-33.90121956	151.1404637
DUNEDOO	Former Shell Depot Dunedoo	Cnr Bolaro and Redbank STREET	Other Petroleum	Regulation under CLM Act not required	-32.01565761	149.3922418
DUNGOG	Lot 54 Common Rd	54 Common ROAD	Unclassified	Regulation under CLM Act not required	-32.39490989	151.739821
DUNGOG	Former HWC Maintenance Depot for Civil Engineering Works	86 Abelard STREET	Other Industry	Under assessment	-32.40429396	151.7514073
DUNMORE	Equestrian Centre	71 Fig Hill LANE	Unclassified	Regulation under CLM Act not required	-34.62313393	150.8421544
DURAL	Caltex Dural Service Station	917-923 Old Northern ROAD	Service Station	Regulation under CLM Act not required	-33.68312075	151.0287519
DURAL	BP Dural Service Station	580 Old Northern ROAD	Service Station	Regulation under CLM Act not required	-33.69569985	151.0283357

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
DURAL	Caltex Service Station	530 Old Northern ROAD	Service Station	Regulation under CLM Act not required	-33.69348472	151.0202716
DURAL	Woolworths Service Station	532 Old Northern ROAD	Service Station	Regulation under CLM Act not required	-33.69348472	151.0202716
EAGLE VALE	BP Service Station	Corner Eagle Vale Drive and Gould ROAD	Service Station	Regulation under CLM Act not required	-34.03128043	150.816363
EARLWOOD	RTA Land	3 Jackson PLACE	Unclassified	Contamination currently regulated under CLM Act	-33.9272087	151.1432854
EARLWOOD	Wolli Creek Aqueduct	Unwin STREET	Unclassified	Regulation under CLM Act not required	-33.92788788	151.1480807
EAST BALLINA	Caltex East Ballina Service Station	34 Links AVENUE	Service Station	Regulation under CLM Act not required	-28.85009113	153.5829246
EAST GOSFORD	Presbyterian Aged Care Facility	8-18 Enid CRESCENT	Landfill	Regulation under CLM Act not required	-33.4376675	151.3577947
EAST GOSFORD	Mobil Service Station	44 Victoria STREET	Service Station	Contamination formerly regulated under the CLM Act	-33.43804781	151.353303
EAST GOSFORD	Hylton Moore Park	Althrop STREET	Landfill	Under assessment	-33.43521607	151.3600229
EAST MAITLAND	United (Former Mobil) Service Station East Maitland	164 (also known as 250) Newcastle STREET	Service Station	Regulation under CLM Act not required	-32.75248998	151.5869338
EAST MAITLAND	Former Gasworks Site	Corner Melbourne Street and Brisbane STREET	Gasworks	Regulation under CLM Act not required	-32.74939199	151.5788783
EAST MAITLAND	Caltex East Maitland Service Station	Newcastle Road, Corner William STREET	Service Station	Regulation under CLM Act not required	-32.74883712	151.5829296
EAST TAMWORTH	Caltex Service Station	350-362 Armidale ROAD	Service Station	Regulation under CLM Act not required	-31.11401974	150.9613327
EASTERN CREEK	Caltex Service Station	M4 (Eastbound) MOTORWAY	Service Station	Regulation under CLM Act not required	-33.801607	150.8857989
EASTERN CREEK	Caltex Service Station M4 Motorway Westbound	M4 (Westbound) MOTORWAY	Service Station	Regulation under CLM Act not required	-33.80255701	150.8829211
EASTERN CREEK	Fulton Hogan Industries (formerly Pioneer Road Services)	Honeycomb DRIVE	Other Industry	Regulation under CLM Act not required	-33.80231274	150.8288299
EASTLAKES	Former Shell Rosebery service station and adjacent land	275-279 Gardeners ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.92470279	151.2100722
EASTLAKES	Eastlakes Reserve	Evans AVENUE	Service Station	Contamination formerly regulated under the CLM Act	-33.92497291	151.2102725
EASTLAKES	Budget Petroleum Eastlakes	102 Maloney STREET	Service Station	Contamination formerly regulated under the CLM Act	-33.93096702	151.2056606
EASTLAKES	Budget Petroleum Eastlakes	102 Maloney STREET	Service Station	Contamination formerly regulated under the CLM Act	-33.93120382	151.2054267
EASTLAKES	73 Gardeners Road	73 Gardeners ROAD	Unclassified	Regulation under CLM Act not required	-33.92541594	151.2182856
EASTWOOD	Former Mobil Service Station Eastwood	3-5 Trelawney (Cnr Rutledge St) STREET	Service Station	Regulation under CLM Act not required	-33.79273381	151.079584
EDEN	Caltex Service Station	159 Imlay STREET	Service Station	Regulation under CLM Act not required	-37.06324099	149.9044022
EDEN	Former Caltex Eden Depot	80-82 Imlay STREET	Service Station	Contamination currently regulated under CLM Act	-37.0570984	149.9038538
EDENSOR PARK	Caltex Bonnyrigg Service Station, Edensor Park	549 Elizabeth DRIVE	Service Station	Regulation under CLM Act not required	-33.88840816	150.8822609

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
EDENSOR PARK	7-Eleven (former Mobil) Service Station	615-621 Cowpasture Road (Cnr Elizabeth) DRIVE	Service Station	Regulation under CLM Act not required	-33.88326139	150.865591
EDGECLIFF	BP-branded (former Coles Express) Service Station	73-85A New South Head ROAD	Service Station	Regulation under CLM Act not required	-33.8769602	151.2311617
EDGEWORTH	Caltex Service Station	662 Main ROAD	Service Station	Regulation under CLM Act not required	-32.92566329	151.6278888
EDGEWORTH	Woolworths Edgeworth	738-742 Main ROAD	Service Station	Under assessment	-32.92455492	151.6202897
EMERALD BEACH	Shell Coles Express Woolgoolga Service Station	1850 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-30.16450856	153.1826673
EMERTON	7-Eleven Emerton	135-137 Popondetta ROAD	Service Station	Regulation under CLM Act not required	-33.74463908	150.8102251
EMU HEIGHTS	7-Eleven Service Station	126 Old Bathurst ROAD	Service Station	Regulation under CLM Act not required	-33.74299098	150.6547098
EMU HEIGHTS	Woolworths Service Station	132 Old Bathurst ROAD	Service Station	Regulation under CLM Act not required	-33.7429739	150.6559655
EMU PLAINS	Woolworths Service Station	283 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.75371349	150.6530165
ENGADINE	Former Caltex Service Station	995 Old Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.06413459	151.0155734
ENGADINE	BP Service Station	1234 Princes HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-34.07735416	151.01121
ENGADINE	BP Branded Service Station	963 Old Princes HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-34.06428454	151.0167121
EPPING	7-Eleven (former Mobil) Service Station	246 Beecroft ROAD	Service Station	Regulation under CLM Act not required	-33.77073552	151.080581
ERINA	Coles Express Service Station Erina	211 The Entrance ROAD	Service Station	Regulation under CLM Act not required	-33.43547804	151.3850522
ERINA	7-Eleven Erina	214 The Entrance ROAD	Service Station	Regulation under CLM Act not required	-33.43494257	151.3879511
ERINA	7-Eleven Service Station	96 The Entrance ROAD	Service Station	Regulation under CLM Act not required	-33.43786868	151.3729331
ERINA	Former Frozen Food Distribution Depot	1 Aston ROAD	Other Petroleum	Contamination currently regulated under CLM Act	-33.434878	151.3845431
ERINA	Caltex Service Station	155 The Entrance ROAD	Service Station	Regulation under CLM Act not required	-33.43824871	151.3801096
ERMINGTON	Blue Star Ermington	700 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.808595	151.066004
ERMINGTON	Caltex Service Station	562 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.81392814	151.0547543
ERSKINE PARK	Western Sydney Service Centre	25-55 Templar ROAD	Landfill	Under assessment	-33.81897822	150.7937394
ERSKINEVILLE	Redevelopment Site (Former Industrial Park) Erskineville	36/1A Coulson STREET	Other Industry	Regulation under CLM Act not required	-33.90325501	151.1855668
ERSKINEVILLE	Department of Housing	52 John STREET	Other Industry	Regulation under CLM Act not required	-33.8982925	151.1840284
ERSKINEVILLE	RailCorp land	Coulson STREET	Other Industry	Regulation under CLM Act not required	-33.90279502	151.1846827
ERSKINEVILLE	Lot 4/1A Coulson Street	Coulson STREET	Other Industry	Under assessment	-33.90316549	151.1867963



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ERSKINEVILLE	Area B - Public Domain / The Roadway	1A Coulson STREET	Other Petroleum	Regulation under CLM Act not required	-33.90479634	151.1871194
EUABALONG WEST	BP Euabalong West Depot (Reliance Petroleum)	12 Illewong STREET	Other Petroleum	Regulation under CLM Act not required	-33.05720426	146.3946386
EVANS HEAD	Evans Head Aerodrome	Memorial Airport DRIVE	Other Industry	Regulation under CLM Act not required	-29.10389976	153.4216791
EVANS HEAD	Bundjalung National Park	The Gap ROAD	Unclassified	Regulation under CLM Act not required	-29.24433977	153.3626472
EVANS HEAD	Evans Head Residential subdivision	Bounded by Currajong, Woodburn, Carrabeen Streets and	Unclassified	Regulation under CLM Act not required	-29.1080969	153.4243577
EVELEIGH	Macdonaldtown Triangle	Burren STREET	Gasworks	Contamination being managed via the planning process (EP&A Act)	-33.89803492	151.186059
EVELEIGH	Australian Technology Park	Henderson ROAD	Other Industry	Regulation under CLM Act not required	-33.89634136	151.1944915
FAIRFIELD	Endeavour Energy Fairfield Zone Substation	22 Hedges STREET	Other Industry	Regulation under CLM Act not required	-33.86133019	150.9555899
FAIRFIELD EAST	Speedway-Branded Service Station Fairfield	251 The Horsley DRIVE	Service Station	Regulation under CLM Act not required	-33.8711661	150.9630077
FAIRFIELD HEIGHTS	7-Eleven Fairfield Heights	234 Hamilton (Cnr The Boulevard) ROAD	Service Station	Regulation under CLM Act not required	-33.87208474	150.9373134
FAIRY MEADOW	Woolworths Petrol Service Station	47 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.39399705	150.8925369
FAIRY MEADOW	Caltex Fuel Depot and adjoining land	46 Montague STREET	Service Station	Contamination formerly regulated under the CLM Act	-34.40050499	150.8953125
FAIRY MEADOW	Deynal (Seeman)	51-59 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.39437085	150.8924666
FARLEY	Farley Wastewater Treatment Works	Owlpen LANE	Other Industry	Regulation under CLM Act not required	-32.74431314	151.5194217
FASSIFERN	Newstan Colliery	Fassifern ROAD	Other Industry	Regulation under CLM Act not required	-32.97942521	151.5660046
FASSIFERN	Former Arsenic Smelter	Fassifern ROAD	Other Industry	Regulation under CLM Act not required	-32.99649819	151.5618283
FEDERAL	Federal General Store	3-6 Federal DRIVE	Service Station	Contamination formerly regulated under the CLM Act	-28.65190728	153.4552976
FERN BAY	Former service station	37 Fullerton (1006 Nelson Bay Road) STREET	Service Station	Regulation under CLM Act not required	-32.87245004	151.7939904
FIVE DOCK	7-Eleven Five Dock Service Station	231-235 Great North ROAD	Service Station	Regulation under CLM Act not required	-33.86488376	151.130002
FIVE DOCK	Caltex Five Dock Service Station	47 Ramsay Road, corner Fairlight STREET	Service Station	Regulation under CLM Act not required	-33.87002804	151.1301835
FORBES	BP (Former Mobil) Depot Forbes	3-15 Union STREET	Other Petroleum	Regulation under CLM Act not required	-33.37751977	148.0101422
FORBES	Former Gasworks	24-26 Union STREET	Gasworks	Contamination currently regulated under CLM Act	-33.37752036	148.0090064
FORBES	Woolworths (Former Save on Fuel) Service Station	26 Dowling STREET	Service Station	Regulation under CLM Act not required	-33.38148764	148.0109845
FORBES	BP Service Station Forbes	29 Dowling STREET	Other Petroleum	Regulation under CLM Act not required	-33.38121776	148.0100351
FORBES	Former Shell Depot	Stephen STREET	Other Petroleum	Regulation under CLM Act not required	-33.37704755	148.0103001

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FORBES	Caltex Service Station Forbes	Parkes ROAD	Service Station	Regulation under CLM Act not required	-33.36333714	148.0223727
FORESTVILLE	BP Service Station	632 Warringah ROAD	Service Station	Contamination currently regulated under CLM Act	-33.75997969	151.2142944
FORESTVILLE	Shell Service Station	667 Warringah ROAD	Service Station	Contamination currently regulated under CLM Act	-33.76035336	151.2184929
FORRESTER'S BEACH	Caltex Service Station	The Entrance Rd Cnr Bellevue ROAD	Service Station	Regulation under CLM Act not required	-33.40057818	151.4687631
FORSTER	Caltex Service Station	16-18 Lake STREET	Service Station	Regulation under CLM Act not required	-32.18306967	152.5162492
FORSTER	Shell (Kneebone's) Service Station	2-6 The Lakes WAY	Service Station	Regulation under CLM Act not required	-32.1946108	152.5145662
FORSTER	Enhance (Former Mobil) Service Station	86-88 Macintosh STREET	Service Station	Regulation under CLM Act not required	-32.19079468	152.5154847
FREDERICKTON	Former Service station	2-4 Great North ROAD	Service Station	Regulation under CLM Act not required	-31.03513998	152.8794105
FRENCHS FOREST	Former BP Service Station	Russell AVENUE	Service Station	Regulation under CLM Act not required	-33.75018093	151.2245005
FRENCHS FOREST	Former 7-Eleven / Mobil Beacon Hill Service Station, Frenchs Forest	312 Warringah ROAD	Service Station	Regulation under CLM Act not required	-33.75129647	151.2469656
FRESHWATER	Prime (former Mobil) Service Station Freshwater	117 Harbord ROAD	Service Station	Regulation under CLM Act not required	-33.77286748	151.2794354
GEORGETOWN	Former Caltex Service Station	4 Georgetown ROAD	Service Station	Regulation under CLM Act not required	-32.91121105	151.7319693
GERRINGONG	Gerringong Cooperative	18 Belinda STREET	Other Petroleum	Regulation under CLM Act not required	-34.74518835	150.8181054
GILGANDRA	United (Former Mobil) Service Station	13 Castlereagh STREET	Service Station	Regulation under CLM Act not required	-31.71715641	148.6581574
GILGANDRA	Former Mobil Depot	2 Federation STREET	Other Petroleum	Regulation under CLM Act not required	-31.70937362	148.6522102
GILGANDRA	Former Mobil Depot	20 Federation STREET	Other Petroleum	Regulation under CLM Act not required	-31.70771744	148.6514198
GILGANDRA	Caltex Service Station Gilgandra	6425 Newell HIGHWAY	Service Station	Regulation under CLM Act not required	-31.72545524	148.65281
GILLENBAH	Caltex (Former Mobil) Narrandera Service Station	16321 - 16335 Newell HIGHWAY	Service Station	Regulation under CLM Act not required	-34.76124219	146.5398604
GIRRAWEE	Industrial Galvanizers site	20-22 Amax AVENUE	Metal Industry	Contamination currently regulated under POEO Act	-33.80500693	150.9396743
GIRRAWEE	Caltex Pendle Hill Service Station Girrawee	602 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.80827518	150.9421511
GLADESVILLE	Caltex Service Station	287-295 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.8285374	151.1268639
GLADESVILLE	Road Reserve	Pittwater ROAD	Other Industry	Regulation under CLM Act not required	-33.81603924	151.1355085
GLADESVILLE	Caltex Service Station	116 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.83575319	151.1277863
GLADESVILLE	Glade View Business Park	436-484 Victoria ROAD	Other Industry	Under assessment	-33.82382382	151.1223941
GLEBE	The Hill and Jubilee Embankment	12 Maxwell ROAD	Other Industry	Regulation under CLM Act not required	-33.87573032	151.1776027

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GLEN INNES	Ambulance Station	106 Bourke STREET	Unclassified	Regulation under CLM Act not required	-29.73805854	151.7313138
GLEN INNES	Telstra Depot Glen Innes	126 Lambeth STREET	Unclassified	Regulation under CLM Act not required	-29.73565341	151.7278271
GLEN INNES	Caltex Glen Innes Service Station	Meade Street, corner Church STREET	Service Station	Regulation under CLM Act not required	-29.73699014	151.7379335
GLEN INNES	Former Shell Depot	Lambeth STREET	Other Petroleum	Regulation under CLM Act not required	-29.7376309	151.7276309
GLEN INNES	Former Caltex Depot, Glen Innes	Lot 1 DP785636 Lambeth STREET	Other Petroleum	Regulation under CLM Act not required	-29.73525485	151.7279167
GLEN INNES	Council-owned Laneway	Lot 2 Lang STREET	Gasworks	Regulation under CLM Act not required	-29.74385432	151.7323049
GLEN INNES	Caltex Service Station	Cnr Taylor Street & Church STREET	Service Station	Regulation under CLM Act not required	-29.73289036	151.739653
GLEN INNES	Caltex Glen Innes Paddock	9979 New England HIGHWAY	Service Station	Regulation under CLM Act not required	-29.75608853	151.7344106
GLENBROOK	Caltex Service Station Glenbrook	78 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.76545234	150.6215447
GLENDALE	Coles Express Glendale	593 Main ROAD	Service Station	Regulation under CLM Act not required	-32.92709242	151.637946
GLENDALE	Settlement Pond	65 Glendale DRIVE	Unclassified	Under assessment	-32.93411399	151.6483695
GLENDALE	Former Service Station	334-342 Lake ROAD	Unclassified	Regulation under CLM Act not required	-32.92775076	151.6433463
GLENDALE	Woolworths Service Station	Stockland DRIVE	Service Station	Regulation under CLM Act not required	-32.93250548	151.6404097
GLENDENNING	7-Eleven Plumpton Service Station Glendenning	1 Dublin Street, corner Richmond ROAD	Service Station	Regulation under CLM Act not required	-33.73988232	150.8603323
GLENORIE	Caltex Glenorie Service Station	912 Old Northern ROAD	Service Station	Regulation under CLM Act not required	-33.60550946	151.0126731
GLENTHORNE	Caltex Taree Service Station	Manning River DRIVE	Service Station	Regulation under CLM Act not required	-31.94415251	152.4703511
GLOUCESTER	Caltex Service Station	141 Church STREET	Service Station	Regulation under CLM Act not required	-32.01222514	151.9579521
GOOLMANGAR	Goolmangar General Store	851 Nimbin ROAD	Service Station	Regulation under CLM Act not required	-28.74694441	153.225401
GOONELLABAH	Invercauld Road Cattle Dip	161 Invercauld ROAD	Cattle Dip	Contamination currently regulated under CLM Act	-28.8308417	153.3098878
GOSFORD	United (former Mobil) Depot	Corner Merinee Road and Bowen CRESCENT	Other Petroleum	Regulation under CLM Act not required	-33.41523225	151.3257069
GOULBURN	Former Goulburn Gasworks	1 Blackshaw ROAD	Gasworks	Contamination currently regulated under CLM Act	-34.75237525	149.725507
GOULBURN	Goulburn Tannery	13 Gibson STREET	Other Industry	Regulation under CLM Act not required	-34.73756525	149.72059
GOULBURN	Caltex Depot	13 Sloane STREET	Other Petroleum	Regulation under CLM Act not required	-34.77423152	149.7088626
GOULBURN	Mobil Depot	23 Braidwood ROAD	Other Petroleum	Regulation under CLM Act not required	-34.76217302	149.7170897
GOULBURN	Caltex Service Station	72-74 Clinton STREET	Service Station	Regulation under CLM Act not required	-34.75728157	149.7135824



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GOULBURN	Caltex Service Station	68 Goldsmith STREET	Service Station	Regulation under CLM Act not required	-34.75054432	149.7192098
GOULBURN	Former Shell Autoport Service Station	Corner Bruce Street and Lagoon STREET	Service Station	Regulation under CLM Act not required	-34.74807885	149.7266246
GOULBURN	Coles Express Service Station	90 Cowper (Corner Clinton Street) STREET	Service Station	Regulation under CLM Act not required	-34.75566648	149.7107831
GOULBURN	Mobil Service Station	129 Lagoon STREET	Service Station	Contamination formerly regulated under the CLM Act	-34.74618793	149.7330484
GOULBURN	Caltex Service Station	315 Auburn, corner Bradley STREET	Service Station	Regulation under CLM Act not required	-34.74942293	149.7232692
GOULBURN	Former Mobil Service Station Goulburn	422-426 Auburn STREET	Service Station	Regulation under CLM Act not required	-34.74869879	149.7229392
GRAFTON	Former General Store and Service Station Grafton	161 Turf STREET	Service Station	Regulation under CLM Act not required	-29.67412811	152.9336609
GRAFTON	Lowes Petroleum (BP-Branded) Depot, Grafton	13 Orara STREET	Other Petroleum	Regulation under CLM Act not required	-29.67016421	152.918161
GRAFTON	Former Shell Depot	2 Milton STREET	Other Petroleum	Regulation under CLM Act not required	-29.67723019	152.9205374
GRAFTON	Grafton Works Depot	26-28 Bruce STREET	Other Petroleum	Regulation under CLM Act not required	-29.67975507	152.9249357
GRAFTON	Former BP Service Station (Reliance Petroleum)	202 Queen STREET	Service Station	Regulation under CLM Act not required	-29.67645469	152.9423977
GRAFTON	Woolworths Petrol	75 - 77 Fitzroy Street Cnr of Duke STREET	Service Station	Regulation under CLM Act not required	-29.69221713	152.9343562
GRAFTON	Caltex Service Station	Corner Villiers St and Fitzroy STREET	Service Station	Regulation under CLM Act not required	-29.69296308	152.9366431
GRAFTON	BP Service Station (Reliance Petroleum)	14 Villiers (Cnr Fitzroy) STREET	Service Station	Regulation under CLM Act not required	-29.69345456	152.9373123
GRAFTON	Former Mobil Depot Grafton	2-16 Bruce STREET	Other Petroleum	Regulation under CLM Act not required	-29.68093591	152.9231289
GRAFTON	Caltex Service Station	179 Prince STREET	Service Station	Regulation under CLM Act not required	-29.68600117	152.9371093
GRANVILLE	Caltex Service Station	144 Parramatta ROAD	Service Station	Regulation under CLM Act not required	-33.83039605	151.0109216
GRANVILLE	Australand	15-17 Berry STREET	Other Industry	Contamination being managed via the planning process (EP&A Act)	-33.83600073	151.0211988
GRANVILLE	Woolworths Service Station Granville	158 Clyde STREET	Service Station	Regulation under CLM Act not required	-33.84623338	151.0124885
GRANVILLE	Commercial Property	28 Factory STREET	Other Industry	Ongoing maintenance required to manage residual contamination	-33.84173556	151.0165687
GRANVILLE	Old Granville Depot	23 Elizabeth STREET	Unclassified	Regulation under CLM Act not required	-33.83765925	151.008528
GRANVILLE	7-Eleven Service Station	154-160 Parramatta ROAD	Service Station	Regulation under CLM Act not required	-33.83022685	151.0101322
GRANVILLE	A'Becketts Creek	Albert STREET	Unclassified	Under assessment	-33.82735397	151.0113643
GREENACRE	Former Plating Works	12 Claremont STREET	Unclassified	Regulation under CLM Act not required	-33.89992254	151.0386128
GREENACRE	7-Eleven (former Mobil) Service Station	301-305 Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-33.90524488	151.0419971

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GREENACRE	Caltex Service Station	87 - 91 Roberts ROAD	Service Station	Regulation under CLM Act not required	-33.90461089	151.0648581
GREENWICH	Gore Creek Reserve - Drainage Line	St Vincents ROAD	Other Industry	Regulation under CLM Act not required	-33.82888693	151.1819101
GRENFELL	Former SRA Fuel Depot	Grafton STREET	Other Petroleum	Regulation under CLM Act not required	-33.89351237	148.1560188
GRENFELL	Grenfell Gasworks	Corner Gooloogong Road & Bourke STREET	Gasworks	Regulation under CLM Act not required	-33.89006016	148.1615443
GRETA	Coles Express Greta	122 New England HIGHWAY	Service Station	Regulation under CLM Act not required	-32.67656357	151.3872818
GRETA	redevelopment site	112-114 High STREET	Other Industry	Regulation under CLM Act not required	-32.67706709	151.3876682
GRETA	Former landfill	Hollingshed ROAD	Landfill	Regulation under CLM Act not required	-32.66705287	151.3923474
GREYSTANES	Metro Branded (former Mobil) Service Station	73 Ettalong ROAD	Service Station	Regulation under CLM Act not required	-33.81822648	150.9513946
GRIFFITH	Liberty Depot (former Shell CVRO) Griffith	6-10 Mackay AVENUE	Other Petroleum	Regulation under CLM Act not required	-34.2910045	146.063824
GRIFFITH	Former Murrumbidgee Irrigation Depot	55-77 Banna AVENUE	Other Industry	Regulation under CLM Act not required	-34.28858242	146.0567509
GRIFFITH	Mobil Depot - Griffith Airport	Off Remembrance DRIVE	Other Petroleum	Regulation under CLM Act not required	-34.25618872	146.0620449
GRIFFITH	Former Ampol Depot	32-34 Mackay AVENUE	Other Petroleum	Regulation under CLM Act not required	-34.2933331	146.0679503
GRIFFITH	Caltex Service Station and Depot	2-4 Mackay AVENUE	Service Station	Regulation under CLM Act not required	-34.2908766	146.0630815
GRIFFITH	Former Landmark Fertiliser Storage Facility	2-8 Jensen ROAD	Chemical Industry	Regulation under CLM Act not required	-34.29365599	146.0536413
GRIFFITH	Belford Petroleum (former Mobil) Depot	30 Banna AVENUE	Service Station	Regulation under CLM Act not required	-34.29042827	146.0595497
GRIFFITH	Former BP Service Station (Reliance Petroleum)	81 Banna AVENUE	Service Station	Regulation under CLM Act not required	-34.28851251	146.0540815
GUILDFORD	7-Eleven Service Station Guildford West	176 Fowler ROAD	Service Station	Regulation under CLM Act not required	-33.85149493	150.9722491
GUILDFORD	Enhance Service Station Guildford	2 Rawson ROAD	Service Station	Regulation under CLM Act not required	-33.86366193	151.0088768
GULGONG	Lowes Petroleum (former BP) Depot Gulgong	6 Railway STREET	Other Petroleum	Regulation under CLM Act not required	-32.35950625	149.5461499
GULGONG	The Oval Site	Queen STREET	Unclassified	Regulation under CLM Act not required	-32.36169815	149.531075
GULMARRAD	BP Service Station Maclean	3976 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-29.48537407	153.2004311
GUMLY GUMLY	Caltex Service Station	3723 Sturt HIGHWAY	Service Station	Regulation under CLM Act not required	-35.13590309	147.4424551
GUMLY GUMLY	Brick Kiln Reserve	Eunony Bridge ROAD	Landfill	Regulation under CLM Act not required	-35.12098411	147.4196309
GUNDAGAI	Former Mobil Depot	98 Mount STREET	Other Petroleum	Regulation under CLM Act not required	-35.08206783	148.096221
GUNNEDAH	Caltex Service Station	21 Abbott STREET	Service Station	Regulation under CLM Act not required	-30.98021001	150.2561856

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GUNNEDAH	Former Shell Depot Gunnedah	85-89 Barber STREET	Other Petroleum	Regulation under CLM Act not required	-30.97949284	150.2507401
GUNNEDAH	Mobil Gunnedah Depot	16-24 Wentworth STREET	Other Petroleum	Regulation under CLM Act not required	-30.98428725	150.260609
GUNNEDAH	BP Depot Gunnedah	103-105 Kamilaroi HIGHWAY	Service Station	Under assessment	-30.96665001	150.2326526
GUNNEDAH	BP Service Station	Corner Conadilly Street & Henry STREET	Service Station	Contamination formerly regulated under the CLM Act	-30.98116266	150.2583066
GUNNEDAH	Mobil Service Station	341 Conadilly STREET	Service Station	Contamination formerly regulated under the CLM Act	-30.9807394	150.2578428
GUNNEDAH	Property NSW Site	35-37 Abbott STREET	Other Petroleum	Regulation under CLM Act not required	-30.9789841	150.25737
GUNNEDAH	Former Telstra Line Depot	81 Barber STREET	Other Petroleum	Regulation under CLM Act not required	-30.97933809	150.2503121
GUNNEDAH	Adjacent to Service Station	Intersection of Henry Street and Conadilly STREET	Service Station	Contamination formerly regulated under the CLM Act	-30.98072588	150.2582802
GUNNEDAH	Former Caltex Depot	61 Railway AVENUE	Other Petroleum	Contamination formerly regulated under the CLM Act	-30.97953242	150.2494457
GUNNING	Gunning Motors	56 Yass STREET	Service Station	Regulation under CLM Act not required	-34.78159326	149.2684791
GUYRA	Guyra Fourways Service Centre	87-89 Bradley STREET	Service Station	Regulation under CLM Act not required	-30.24580085	151.6701156
GUYRA	Caltex-branded Service Station	4352 New England HIGHWAY	Service Station	Regulation under CLM Act not required	-30.20601937	151.6757291
GUYRA	StateRail land leased to Incitec	Starr ROAD	Other Industry	Regulation under CLM Act not required	-30.23157011	151.6707135
GWANDALAN	Metro Petroleum Gwandalan (Formerly Gwandalan Auto Care)	47 Orana ROAD	Service Station	Regulation under CLM Act not required	-33.13632941	151.5813396
GWANDALAN	Former Gwandalan Landfill	Kanangra DRIVE	Landfill	Regulation under CLM Act not required	-33.17497722	151.5917107
GYMEA	7-Eleven (former Mobil) Gynea Service Station	110 Gynea Bay ROAD	Service Station	Regulation under CLM Act not required	-34.03745848	151.0848547
GYMEA	Coles Express Kirrawee	470 Princes (Cnr The Boulevard) HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-34.02735302	151.0845079
GYMEA	Former Shell Service Station Gynea	Gynea Bay ROAD	Service Station	Regulation under CLM Act not required	-34.04129676	151.0841328
HABERFIELD	7-Eleven Haberfield	25-35 Parramatta ROAD	Service Station	Contamination currently regulated under CLM Act	-33.887956	151.142868
HALEKULANI	Former Halekulani Landfill	Macleay DRIVE	Landfill	Regulation under CLM Act not required	-33.21446301	151.5527625
HAMILTON	SRA Land	10 Maitland ROAD	Unclassified	Regulation under CLM Act not required	-32.91994358	151.7512417
HAMILTON	Taxi Services	116 Tudor STREET	Service Station	Contamination formerly regulated under the CLM Act	-32.92351606	151.7454742
HAMILTON	Caltex Hamilton	59-63 Tudor STREET	Service Station	Regulation under CLM Act not required	-32.92498593	151.7509313
HAMILTON	Newcastle Toyota	65 Tudor STREET	Other Petroleum	Regulation under CLM Act not required	-32.925171	151.7504048

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
HAMILTON	Hamilton Bus Depot	Cnr Denison Street and Gordon AVENUE	Other Petroleum	Regulation under CLM Act not required	-32.92542648	151.7512512
HAMILTON NORTH	Shell Newcastle Terminal	5 Chatham STREET	Other Petroleum	Contamination currently regulated under CLM Act	-32.91630469	151.7408712
HAMILTON NORTH	Black and Decker	56 Clyde STREET	Metal Industry	Contamination currently regulated under CLM Act	-32.91080413	151.7358236
HAMILTON NORTH	Hamilton Gasworks	1 Chatham ROAD	Gasworks	Contamination currently regulated under CLM Act	-32.91362741	151.7406241
HAMILTON NORTH	ELMA	54 Clyde STREET	Other Industry	Contamination currently regulated under CLM Act	-32.91145768	151.7367691
HARBORD	Former Dry Cleaners	121 Wyndora AVENUE	Other Industry	Regulation under CLM Act not required	-33.77425321	151.2821553
HARDEN	SRA Site	31 Aurvill ROAD	Unclassified	Regulation under CLM Act not required	-34.54998656	148.3689577
HARDEN	SRA Site	51 Whitton LANE	Unclassified	Contamination formerly regulated under the CLM Act	-34.55396035	148.3713349
HARDEN	South West Fuel Harden	294 Albury STREET	Service Station	Under assessment	-34.550176	148.351276
HARRIS PARK	Dalley Street Reserve	2A Dalley STREET	Other Industry	Regulation under CLM Act not required	-33.82749118	151.0097545
HARTLEY VALE	Former Shale Oil Refinery	Lot 52 Hartley Vale ROAD	Unclassified	Contamination currently regulated under CLM Act	-33.52925119	150.24216
HASTINGS POINT	Coles Express Hastings Point	99 Tweed Coast ROAD	Service Station	Regulation under CLM Act not required	-28.36914103	153.5725676
HAY	SRA Land	429, 431, 435, 437 & 439 Murray STREET	Other Industry	Regulation under CLM Act not required	-34.49965611	144.840976
HAY	SRA Land	443 Murray STREET	Other Industry	Contamination formerly regulated under the CLM Act	-34.49966753	144.8410778
HAY	Former Shell Hay Depot	391 Murray STREET	Other Petroleum	Regulation under CLM Act not required	-34.50028195	144.8463999
HAY	Former Mobil Depot Hay	397-399 Murray STREET	Other Petroleum	Regulation under CLM Act not required	-34.50019184	144.8456578
HAY SOUTH	Caltex Service Station	429-431 Moama STREET	Service Station	Regulation under CLM Act not required	-34.52001427	144.8380121
HAZELBROOK	Caltex Service Station Hazelbrook	198 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.72106175	150.4520976
HEATHCOTE	Caltex Service Station	1344 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.08841066	151.0072048
HEATHCOTE	Caltex Service Station	1403 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.09059834	151.003752
HEATHCOTE	Shell Coles Express Service Station	1355 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.08780042	151.0069741
HEATHERBRAE	Bogas (Former Caltex) Service Station	3 Speedy Lock LANE	Service Station	Regulation under CLM Act not required	-32.78057822	151.7372135
HEATHERBRAE	Shell Coles Express Motto Farm Service Station	2137 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-32.79835449	151.7176284
HEXHAM	QR National - Hexham Precinct	179 & 3/67 Maitland ROAD	Other Industry	Regulation under CLM Act not required	-32.83474038	151.6821895
HEXHAM	Caltex Diesel Stop	360 Maitland ROAD	Service Station	Regulation under CLM Act not required	-32.82844873	151.6851063



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HEXHAM	Cummins Newcastle Facility Hexham	21 Galleghan STREET	Other Industry	Regulation under CLM Act not required	-32.83186739	151.686709
HEXHAM	BP Service Station (Reliance Petroleum)	Corner Pacific Highway and Old Maitland ROAD	Service Station	Regulation under CLM Act not required	-32.82756403	151.6846929
HEXHAM	Forgacs Site	Sparke STREET	Chemical Industry	Contamination currently regulated under CLM Act	-32.85464558	151.6988053
HEXHAM	Caltex-Bogas Warehouse	239 Old Maitland ROAD	Service Station	Regulation under CLM Act not required	-32.82899942	151.6861849
HEXHAM	Industrial Galvanizers	312 Pacific HIGHWAY	Metal Industry	Contamination currently regulated under POEO Act	-32.83457186	151.6884941
HILLSTON	Former BP Depot Hillston	141-143 Cowper STREET	Other Petroleum	Regulation under CLM Act not required	-33.48823546	145.5381623
HOLBROOK	Caltex Truckstop	Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-35.71332625	147.3207237
HOME BUSH	Ausgrid Mason Park Substation	1 Underwood ROAD	Other Industry	Regulation under CLM Act not required	-33.85674677	151.0747044
HOME BUSH BAY	SUEZ Waste Recycling Centre (WRC) and Cleanaway Liquid Waste Treatment Plant (LWTP)	Corner Pondage Link and Hill ROAD	Landfill	Regulation under CLM Act not required	-33.84359299	151.0593656
HOME BUSH WEST	Caltex Service Station Homebush West	334-336 Parramatta ROAD	Service Station	Regulation under CLM Act not required	-33.8581543	151.0681261
HOME BUSH WEST	Former Ford Landfill	22 Mandemar AVENUE	Landfill	Under assessment	-33.86180526	151.0635664
HORNSBY	Midas Car Care Centre Hornsby	2A Linda STREET	Unclassified	Regulation under CLM Act not required	-33.70052215	151.1004786
HORNSBY	Coles Express Hornsby	194- 206 Pacific HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-33.7071993	151.0991452
HORNSBY	Hornsby Train Maintenance Centre	1B Stephen STREET	Other Industry	Regulation under CLM Act not required	-33.69342449	151.1035295
HOXTON PARK	Endeavour Energy Hoxton Park	490 Hoxton Park ROAD	Other Industry	Regulation under CLM Act not required	-33.92766437	150.8689069
HUNTERS HILL	Coles Express Hunters Hill	4 Ryde ROAD	Service Station	Regulation under CLM Act not required	-33.8317985	151.141655
HUNTERS HILL	Foreshore Land	Rear of 7, 9 & 11 Nelson PARADE	Unclassified	Contamination currently regulated under CLM Act	-33.84248362	151.1649249
HUNTERS HILL	7, 9 and 11 Nelson Parade Hunters Hill	7, 9 and 11 Nelson PARADE	Other Industry	Regulation under CLM Act not required	-33.84218911	151.164968
HURLSTONE PARK	Former Telstra Depot	82 Canterbury ROAD	Service Station	Regulation under CLM Act not required	-33.90803171	151.1258121
HURLSTONE PARK	Former Speedway Petroleum Service Station	610 - 618 New Canterbury ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.90541228	151.1322009
HURLSTONE PARK	7-Eleven Hurlstone Park	670 New Canterbury ROAD	Service Station	Regulation under CLM Act not required	-33.90510388	151.1299825
HURSTVILLE GROVE	Moore Reserve	Morshead DRIVE	Landfill	Contamination currently regulated under CLM Act	-33.97920603	151.0873578
INVERELL	Former Shell Depot	25 Edward	Other Petroleum	Regulation under CLM Act not required	-29.76151684	151.1182033
INVERELL	Former Service Station	20 Oliver STREET	Service Station	Regulation under CLM Act not required	-29.77229743	151.1152692

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INVERELL	Former Caltex Depot Inverell	4 Edward STREET	Service Station	Regulation under CLM Act not required	-29.76123104	151.1147983
INVERELL	Former Mobil Inverell Depot	29-33 Edward	Other Petroleum	Regulation under CLM Act not required	-29.76135322	151.1171412
INVERELL	Caltex Service Station	55-59 Ring STREET	Service Station	Regulation under CLM Act not required	-29.76204512	151.1141737
INVERELL	Former Mobil Service Station	Corner Otho Street and Henderson STREET	Service Station	Regulation under CLM Act not required	-29.7786926	151.1149921
INVERELL	Former Caltex Service Station	141 Otho STREET	Service Station	Regulation under CLM Act not required	-29.77819403	151.1145699
ISLINGTON	Caltex Service Station	240 Maitland ROAD	Service Station	Regulation under CLM Act not required	-32.91138644	151.7457701
ISLINGTON	Shell Pipeline Easement (vacant land)	24 Fern STREET	Other Petroleum	Regulation under CLM Act not required	-32.91706254	151.7473809
JAMISONTOWN	BP Service Station Jamisontown	124 - 128 Mulgoa ROAD	Service Station	Regulation under CLM Act not required	-33.76978323	150.6764977
JAMISONTOWN	Former Caltex Jamisontown	229-231 Mulgoa ROAD	Service Station	Regulation under CLM Act not required	-33.76661447	150.6784735
JAMISONTOWN	7-Eleven Service Station	92 Mulgoa ROAD	Service Station	Contamination currently regulated under CLM Act	-33.7667231	150.6796488
JANNALI	Former Mobil Service Station	121 Georges River ROAD	Service Station	Regulation under CLM Act not required	-34.01614613	151.0681921
JANNALI	Former IGA	541 Box ROAD	Other Industry	Under assessment	-34.01602134	151.0660384
JENNINGS	Jennings Former Arsenic Poison Factory	Duke Street, Manor Street, and Ballandean STREET	Chemical Industry	Contamination currently regulated under CLM Act	-28.92833023	151.9301552
JESMOND	Caltex Service Station	27 Bluegum ROAD	Service Station	Regulation under CLM Act not required	-32.9029287	151.691164
JINDABYNE	BP Service Station (Reliance Petroleum)	8 Kosciuszko ROAD	Service Station	Regulation under CLM Act not required	-36.41478692	148.6178882
JINDABYNE	Caltex Service Station	50 Kosciuszko ROAD	Service Station	Regulation under CLM Act not required	-36.41395847	148.6225113
JUNEE	Subdivision Proposal	5858 Gundagai ROAD	Unclassified	Regulation under CLM Act not required	-34.87783587	147.6067578
KANAHOOKA	Former Smelter Site	Kanahooka ROAD	Metal Industry	Under assessment	-34.49406369	150.8227583
KANDOS	Cement Australia Kandos Cement Works	1 Jamison STREET	Other Industry	Regulation under CLM Act not required	-32.86399912	149.9779259
KANWAL	Kanwal General Store and Fuel Supplies and Adjacent Land	68 and 70 Craigie AVENUE	Service Station	Under assessment	-33.263595	151.481247
KARIONG	Coles Express Kariong	6 Central Coast HIGHWAY	Service Station	Regulation under CLM Act not required	-33.43443192	151.2963401
KARIONG	Caltex Service Station	Lot 2 Langford DRIVE	Service Station	Regulation under CLM Act not required	-33.43934827	151.2935447
KARUAH	BP Roadhouse Karuah	403 Tarean ROAD	Service Station	Regulation under CLM Act not required	-32.65371781	151.9629963
KATOOMBA	Aldi Stores	201 Katoomba STREET	Service Station	Regulation under CLM Act not required	-33.71756625	150.3101649

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KATOOMBA	Former Katoomba/Leura Gasworks	Megalong STREET	Gasworks	Contamination currently regulated under CLM Act	-33.71318559	150.3187284
KELLYVILLE	Caltex Service Station	3-5 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.71436125	150.9602175
KELLYVILLE	BP Service Station Kellyville	19-23 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.71280997	150.9590756
KELSO	Caltex Service Station Kelso	19 Sydney ROAD	Service Station	Regulation under CLM Act not required	-33.41904247	149.6023985
KELSO	BP Service Station (Reliance Petroleum)	63 Sydney ROAD	Service Station	Regulation under CLM Act not required	-33.41925328	149.6076677
KEMBLA GRANGE	ShawCor Australia	66 West Dapto ROAD	Other Petroleum	Regulation under CLM Act not required	-34.46875328	150.8106326
KEMBLAWARRA	Griffins Bay, Lake Illawarra	Shellharbour ROAD	Landfill	Regulation under CLM Act not required	-34.49653984	150.8943776
KEMPS CREEK	Caltex-branded Service Station	1163 Mamre ROAD	Service Station	Regulation under CLM Act not required	-33.86972102	150.7966074
KEMPSEY	Kempsey Showground	19 Sea STREET	Unclassified	Contamination being managed via the planning process (EP&A Act)	-31.07334836	152.8308795
KEMPSEY	Former Shell Depot	43-51 Gladstone STREET	Other Petroleum	Regulation under CLM Act not required	-31.07500944	152.8346699
KEMPSEY	Former Mobil depot	14 Hopetoun STREET	Other Petroleum	Regulation under CLM Act not required	-31.07603107	152.8350132
KEMPSEY	Shell Coles Express Service Station Kempsey	165 Smith STREET	Service Station	Regulation under CLM Act not required	-31.07036743	152.8461571
KEMPSEY	Mobil Depot	154 Belgrave STREET	Service Station	Regulation under CLM Act not required	-31.07965043	152.8326303
KEMPSEY	Liberty (Former Mobil) Service Station	108-112 Smith STREET	Service Station	Regulation under CLM Act not required	-31.07492508	152.8431945
KENSINGTON	7-Eleven Kensington	135 Anzac PARADE	Service Station	Regulation under CLM Act not required	-33.91035885	151.2228537
KENSINGTON	Former Ampol Service Station	76-82 Anzac PARADE	Service Station	Regulation under CLM Act not required	-33.9059246	151.2242891
KENSINGTON	Footpath adjacent to 10-20 Anzac Parade	10-20 Anzac PARADE	Service Station	Regulation under CLM Act not required	-33.9032124	151.2237836
KENSINGTON	Caltex Service Station	211-213 Anzac PARADE	Service Station	Regulation under CLM Act not required	-33.91460752	151.2251266
KENTHURST	Vacant Land	259 McCylmonts ROAD	Unclassified	Regulation under CLM Act not required	-33.61283529	150.9425303
KHANCOBAN	Khancoban Tip	Alpine WAY	Landfill	Regulation under CLM Act not required	-36.21994191	148.1542718
KIAMA	Former Gasworks	105 to 109 and 113 Shoalhaven	Gasworks	Regulation under CLM Act not required	-34.67416881	150.8504143
KIAMA HEIGHTS	Former Mobil Service Station Kiama	7-9 South Kiama DRIVE	Service Station	Regulation under CLM Act not required	-34.69553931	150.8437977
KILLARA	7-Eleven Service Station (Former Mobil)	496 Pacific HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-33.77146554	151.1606903
KILLARA	Former Caltex Service Station	692B-694 Pacific HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-33.76306802	151.1550109
KILLARA	Killara Garage	544 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.76974164	151.1599696



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KILLARA	Former BP Service Station Lindfield	478 Pacific HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-33.7719298	151.1613874
KILLARA	Land Adjacent to Former Service Station Site	684-684a, 690, 692 and 696 Pacific HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-33.76312226	151.1549237
KINGS PARK	Multi-Fill	14 Garling ROAD	Unclassified	Regulation being finalised	-33.74478046	150.9111964
KINGS PARK	Former Dow Corning Factory	21 Tattersall ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-33.75012653	150.9138477
KINGSFORD	Caltex Service Station	603-611 Anzac PARADE	Service Station	Regulation under CLM Act not required	-33.93435787	151.2371198
KINGSFORD	Coles Express Service Station Kingsford	58 Gardeners ROAD	Service Station	Regulation under CLM Act not required	-33.9250054	151.2257601
KINGSGROVE	Shell Coles Express Service Station	137 Kingsgrove ROAD	Service Station	Regulation under CLM Act not required	-33.93276948	151.099026
KINGSGROVE	Caltex Kingsgrove	351-357 Stoney Creek ROAD	Service Station	Regulation under CLM Act not required	-33.95132175	151.0926872
KINGSGROVE	State Transit Authority Depot	17-23 Richland STREET	Other Petroleum	Regulation under CLM Act not required	-33.93646086	151.0973617
KIRRAWEE	Ingal Civil Products	127-141 Bath ROAD	Metal Industry	Regulation under CLM Act not required	-34.03029516	151.0754469
KIRRAWEE	7-Eleven (former Mobil) Service Station	542-546 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.03238179	151.0758071
KIRRAWEE	Caltex-branded Kirrawee Service Station	(1-3 Waratah Street) 487 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.02915971	151.0808279
KOGARAH	Scarborough Park South	Production AVENUE	Landfill	Regulation being finalised	-33.97922253	151.140276
KOGARAH	Caltex Service Station	29 President AVENUE	Service Station	Regulation under CLM Act not required	-33.96516866	151.141145
KOGARAH	7-Eleven Service Station	736 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.96406472	151.1376011
KOGARAH	Woolworths Petrol Service Station	69 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.96330397	151.1371182
KOOLKHAN	Former Koolkhan Power Station	Summerland WAY	Other Industry	Regulation under CLM Act not required	-29.61688704	152.9300645
KOORAGANG	NPC, berths 2 and 3	Heron ROAD	Metal Industry	Regulation being finalised	-32.89260063	151.7742527
KOORAGANG	Kooragang Island Waste Facility	NULL	Metal Industry	Contamination currently regulated under POEO Act	-32.88250732	151.7466125
KOORAGANG	Orica Kooragang Island	15 Greenleaf ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-32.89654619	151.7771372
KOORAGANG	Former Boral Timber Export Facility	16 Heron ROAD	Other Industry	Regulation under CLM Act not required	-32.89710295	151.7739966
KOORAGANG	Cleanaway Technical Services	19 Egret STREET	Unclassified	Regulation under CLM Act not required	-32.8634857	151.7414904
KOORAGANG	Industrial Facility	39 Heron ROAD	Chemical Industry	Under assessment	-32.89106439	151.7784064
KOORAGANG	Vacant Land	Raven Street and Cormorant ROAD	Unclassified	Regulation under CLM Act not required	-32.88410199	151.7701334
KOORAGANG	Linx Logistics	240 Cormorant ROAD	Other Industry	Regulation under CLM Act not required	-32.87480951	151.7757352

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KOORINGAL	Former Shell Wagga Depot	11-15 Lake Albert ROAD	Other Petroleum	Regulation under CLM Act not required	-35.12273113	147.3786005
KOORINGAL	Caltex Service Station	265-267 Lake Albert ROAD	Service Station	Regulation under CLM Act not required	-35.14078443	147.3755442
KOORINGAL	Caltex-branded (former Mobil) Service Station	24 Lake Albert ROAD	Service Station	Regulation under CLM Act not required	-35.12239591	147.3769936
KOSCIUSZKO	Smiggin Holes Snow Clearing Shed	Link ROAD	Landfill	Regulation under CLM Act not required	-36.39098211	148.4304981
KOSCIUSZKO	Khancoban Spoil Dump	Alpine WAY	Landfill	Regulation under CLM Act not required	-36.21982803	148.1527401
KOSCIUSZKO	Sawpit Creek landfill	13km from Jindabyne, off Kosciuszko ROAD	Landfill	Regulation under CLM Act not required	-36.34858097	148.5673374
KURMOND	BP Service Station	501 Bells Line of road ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.55096662	150.6911676
KURNELL	Former Phillips Imperial Chemicals site	260 Captain Cook DRIVE	Chemical Industry	Regulation under CLM Act not required	-34.02493837	151.1952149
KURNELL	Caltex Refinery	2 Solander STREET	Other Petroleum	Contamination currently regulated under POEO Act	-34.0175214	151.2159572
KURNELL	Abbott Australasia	Captain Cook DRIVE	Chemical Industry	Contamination formerly regulated under the CLM Act	-34.02339937	151.19921
KURNELL	Former Caltex Kurnell Service Station	Corner Captain Cook Drive and Solander STREET	Service Station	Regulation under CLM Act not required	-34.01269846	151.2094347
KURRI KURRI	Caltex Service Station	279-281 Lang STREET	Service Station	Contamination currently regulated under CLM Act	-32.82047175	151.477646
KURRI KURRI	Kurri Kurri Smelter	Hart ROAD	Metal Industry	Regulation under CLM Act not required	-32.7873063	151.4828827
KYOGLE	Caltex Service Station	22-24 Summerland WAY	Service Station	Regulation under CLM Act not required	-28.61806766	153.003862
LAKE HAVEN	Caltex Service Station	Goobarabah Ave Cnr Gorokan DRIVE	Service Station	Regulation under CLM Act not required	-33.24337276	151.5065335
LAKEMBA	Former Lakemba Police Station	59 Quigg STREET	Unclassified	Regulation under CLM Act not required	-33.92199239	151.079412
LAKEMBA	Caltex Service Station - Corner Punchbowl Rd and Wangee Rd	81 Wangee ROAD	Service Station	Regulation under CLM Act not required	-33.91153044	151.073306
LAKEMBA	Caltex Service Station	961-967 Canterbury ROAD	Service Station	Regulation under CLM Act not required	-33.92671102	151.0814905
LAMBTON	Caltex Service Station	422 Newcastle ROAD	Service Station	Regulation under CLM Act not required	-32.9095592	151.7109684
LANE COVE	7-Eleven Service Station	203 Burns Bay ROAD	Service Station	Regulation under CLM Act not required	-33.81458334	151.1543844
LANE COVE	BP-branded Jasbe Service Station	62-70 Epping ROAD	Service Station	Regulation under CLM Act not required	-33.81108427	151.1641531
LANE COVE	Pacific Power	Sirius ROAD	Landfill	Ongoing maintenance required to manage residual contamination	-33.80701776	151.1449658
LANE COVE	Coles Express Service Station Burns Bay	254 Burns Bay ROAD	Service Station	Regulation under CLM Act not required	-33.81719214	151.1518774
LANE COVE NORTH	Former Caltex Service Station	428-432 Mowbray ROAD	Service Station	Regulation under CLM Act not required	-33.80804563	151.1721538
LANE COVE NORTH	BP Artarmon Service Station, Lane Cove North	432 Pacific HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-33.8112038	151.175547

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LANE COVE WEST	Caltex Lane Cove West	235-245 Burns Bay ROAD	Service Station	Regulation under CLM Act not required	-33.81719214	151.1518774
LANE COVE WEST	Ventemans Reach Bushland	Off Mars ROAD	Unclassified	Under assessment	-33.80615015	151.1451474
LANSVALE	Mobil Service Station	161 Hume HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-33.89442261	150.9571507
LANSVALE	Mobil Service Station	44 Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-33.89172416	150.9656537
LAURIETON	Camden Haven Tyre and Brake Centre (Former Caltex Service Station)	461 Ocean DRIVE	Service Station	Regulation under CLM Act not required	-31.64367775	152.7977735
LAVENDER BAY	SRA Land	French STREET	Unclassified	Regulation under CLM Act not required	-33.84560621	151.2030148
LAVINGTON	Former Caltex Service Station	373-375 Wagga ROAD	Service Station	Regulation under CLM Act not required	-36.04797551	146.9385325
LAVINGTON	Caltex Service Station	436 Wagga (corner Dick Road) ROAD	Service Station	Regulation under CLM Act not required	-36.04500034	146.9444932
LAVINGTON	Former ERS liquid waste treatment and storage facility	819 Knights ROAD	Other Industry	Regulation under CLM Act not required	-36.06763885	146.942143
LEETON	Former Mobil Depot	108 Calrose STREET	Other Petroleum	Regulation under CLM Act not required	-34.55813326	146.3921296
LEETON	Caltex Service Station	1 Belah STREET	Service Station	Regulation under CLM Act not required	-34.55421752	146.3998431
LEETON	Yenda Producers (formerly Incitec) Leeton	1 - 2 Canal STREET	Other Petroleum	Regulation under CLM Act not required	-34.55184684	146.3862573
LEETON	Former Fuel Depot, Leeton	1-3 Short St STREET	Other Petroleum	Regulation under CLM Act not required	-34.55253237	146.3864507
LEICHHARDT	SRA Land	10-11 Balmain ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-33.87774852	151.1590952
LEICHHARDT	Former Kolotex site	22 George STREET	Other Industry	Contamination currently regulated under CLM Act	-33.888	151.148
LEICHHARDT	Former Labelcraft Site	30-40 George STREET	Chemical Industry	Contamination currently regulated under CLM Act	-33.887795	151.148486
LEICHHARDT	Leichhardt Bus Depot Area E	240 Balmain Road, corner City West LINK	Other Industry	Regulation under CLM Act not required	-33.87589727	151.1598073
LEICHHARDT	RailCorp Leichhardt	7 Darley ROAD	Other Industry	Regulation under CLM Act not required	-33.87520846	151.1539012
LENNOX HEAD	Former Caltex Lennox Head	Byron STREET	Service Station	Regulation under CLM Act not required	-28.79189328	153.5883225
LENNOX HEAD	Spoors Dip	13 Fig Tree Hill DRIVE	Cattle Dip	Contamination formerly regulated under the CLM Act	-28.78258175	153.5752527
LEPPINGTON	Coles Express Leppington	1443 Camden Valley WAY	Service Station	Regulation under CLM Act not required	-33.96631609	150.8154793
LEUMEAH	Caltex Service Station	6 Rudd ROAD	Service Station	Regulation under CLM Act not required	-34.05398325	150.8299209
LEURA	Former Leura Garage	126-128 Leura MALL	Service Station	Regulation under CLM Act not required	-33.7125311	150.3315386
LIDDELL	Liddell Power Station	New England HIGHWAY	Other Industry	Regulation under CLM Act not required	-32.37393962	150.9756283

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
LIDSDALE	Angus Place Colliery	Wolgan ROAD	Other Industry	Regulation under CLM Act not required	-33.35274573	150.0996773
LIDSDALE	Kerosene Vale Colliery	Wolgan ROAD	Other Industry	Regulation under CLM Act not required	-33.38145755	150.0940097
LIGHTNING RIDGE	Former Ambulance Station	18 - 42 Pandora STREET	Other Industry	Regulation under CLM Act not required	-29.43133877	147.9812981
LIGHTNING RIDGE	Caltex Service Station	Onyx Street, corner Morilla STREET	Service Station	Regulation under CLM Act not required	-29.42922885	147.9747954
LILLIAN ROCK	Former 'Peters Dip' Cattle Tick Dip Site	427 Lillian Rock ROAD	Cattle Dip	Regulation under CLM Act not required	-28.5314327	153.1556392
LINDFIELD	7-Eleven (former Mobil) Service Station	238 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.7788603	151.1689594
LISAROW	OneSteel Recycling	902A Pacific HIGHWAY	Metal Industry	Regulation under CLM Act not required	-33.38420179	151.3655856
LISMORE	Caltex Lismore Service Station	136 Woodlark STREET	Service Station	Regulation under CLM Act not required	-28.80807597	153.2807591
LISMORE	Shell Coles Express Service Station	100 Dawson STREET	Service Station	Regulation under CLM Act not required	-28.81140865	153.2800472
LISMORE	Former Shell Depot	116 Wilson STREET	Other Petroleum	Regulation under CLM Act not required	-28.81070081	153.2621577
LISMORE	Caltex Service Station	73-75 Dawson STREET	Service Station	Regulation under CLM Act not required	-28.80894415	153.2809619
LISMORE	Lismore Gasworks	Cnr John Street & Keen STREET	Gasworks	Ongoing maintenance required to manage residual contamination	-28.81764489	153.2710196
LISMORE	SRA Land	Norco LANE	Unclassified	Regulation under CLM Act not required	-28.810742	153.2702306
LISMORE HEIGHTS	Coles Express Lismore Heights	426 Ballina ROAD	Service Station	Contamination currently regulated under CLM Act	-28.81068067	153.3053065
LITHGOW	Former Shell CVRO and Depot	77 Bridge Street and 6 Gas Works LANE	Other Petroleum	Regulation under CLM Act not required	-33.47995091	150.162216
LITHGOW	Lithgow Thales	4 Martini PARADE	Metal Industry	Contamination formerly regulated under the CLM Act	-33.49012248	150.1415389
LITHGOW	Former Mobil Depot	353 Main STREET	Other Petroleum	Regulation under CLM Act not required	-33.48235166	150.1383012
LITHGOW	Former Gasworks	Mort STREET	Gasworks	Regulation under CLM Act not required	-33.47995167	150.1635401
LITHGOW	Jasbe BP-branded Service Station (Former Reliance Petroleum)	1106 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.48426647	150.134992
LITHGOW	Caltex Lithgow (Quota Park)	Adjacent to 1131 Great Western HIGHWAY	Unclassified	Regulation under CLM Act not required	-33.47927554	150.1366238
LIVERPOOL	AC McGrath (Wholesale) Pty Ltd	20 Shepherd Street and 6A & 6B Atkinson STREET	Other Industry	Regulation under CLM Act not required	-33.9320192	150.9236862
LIVERPOOL	Former Car Park	4 - 6 Rose STREET	Unclassified	Regulation under CLM Act not required	-33.93258955	150.9157936
LIVERPOOL	Woolworths Service Station	59-67 Orange Grove ROAD	Service Station	Regulation under CLM Act not required	-33.90711248	150.9178855
LOFTUS	BP Freedom Fuel Service Station Loftus	127 Loftus AVENUE	Service Station	Regulation under CLM Act not required	-34.04570765	151.0508004



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
LONG JETTY	Long Jetty Servo	326 The Entrance ROAD	Service Station	Under assessment	-33.35897356	151.4847709
LONG JETTY	Caltex Service Station	431 The Entrance ROAD	Service Station	Regulation under CLM Act not required	-33.36022468	151.4826553
LONG JETTY	Westside Petroleum Service Station	290-294 The Entrance ROAD	Service Station	Under assessment	-33.35688982	151.4862246
LONG JETTY	7-Eleven (former Mobil) Service Station	184-186 The Entrance ROAD	Service Station	Regulation under CLM Act not required	-33.35089363	151.4924904
LONGUEVILLE	Caltex Service Station	5-7 Northwood ROAD	Service Station	Regulation under CLM Act not required	-33.82452775	151.1725758
LUCAS HEIGHTS	Harringtons Quarry	access from Little Forest ROAD	Landfill	Contamination currently regulated under CLM Act	-34.03555347	150.9751826
LUCAS HEIGHTS	IWC landfill	Little Forest ROAD	Landfill	Contamination currently regulated under CLM Act	-34.03214889	150.9753474
LUDDENHAM	Caltex Service Station	3019-3035 The Northern ROAD	Service Station	Regulation under CLM Act not required	-33.87536093	150.6888872
MACKSVILLE	Caltex Service Station	Pacific (22-24 Cooper Street) HIGHWAY	Service Station	Regulation under CLM Act not required	-30.70977455	152.9198448
MACLEAN	MacLean Outdoors	255 River STREET	Service Station	Regulation under CLM Act not required	-29.45782683	153.1970725
MACQUARIE FIELDS	Caltex Service Station	68 Harold STREET	Service Station	Regulation under CLM Act not required	-33.98557276	150.8933681
MACQUARIE PARK	Caltex North Ryde Service Station	41-43 Epping ROAD	Service Station	Regulation under CLM Act not required	-33.79138236	151.1312248
MACQUARIE PARK	1-7 Waterloo Road, Macquarie Park	1-7 Waterloo ROAD	Other Petroleum	Regulation under CLM Act not required	-33.78806877	151.1332148
MACQUARIE PARK	Porters Creek Depot - Proposed Operations Centre Site	160 Wicks ROAD	Landfill	Regulation under CLM Act not required	-33.78498	151.136515
MACQUARIE PARK	De Burghs Cycleway - Lane Cove National Park	Riverside DRIVE	Other Petroleum	Regulation under CLM Act not required	-33.77802854	151.1367529
MAITLAND	Maitland Gasworks	Charles STREET	Gasworks	Contamination currently regulated under CLM Act	-32.73603658	151.5578926
MAITLAND	Hannan and High Street	Hannan Street and High STREET	Service Station	Regulation under CLM Act not required	-32.72731682	151.5515673
MAITLAND	Coles Express Service Station	235 High STREET	Service Station	Regulation under CLM Act not required	-32.73923807	151.5620399
MALABAR	ANZAC Rifle Range former landfill	Franklin STREET	Landfill	Regulation being finalised	-33.95792671	151.2566373
MANDALONG	Mandalong Mine	Mandalong ROAD	Other Industry	Regulation under CLM Act not required	-33.11725583	151.4616452
MANGROVE MOUNTAIN	Poultry Litter Containment Pit site	258 Waratah ROAD	Unclassified	Regulation under CLM Act not required	-33.28917277	151.167235
MANILLA	Tamworth Regional Council Works Depot - Manilla	73 River STREET	Other Petroleum	Regulation under CLM Act not required	-30.746085	150.725363
MANLY	Caltex Service Station	86 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.79306889	151.2858638
MANLY	Former Little Manly Point Gasworks	End of Stuart STREET	Gasworks	Regulation under CLM Act not required	-33.80842005	151.2877784
MANLY	St Patrick's Estate	151 Darley ROAD	Unclassified	Regulation under CLM Act not required	-33.8044568	151.2938595

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MANLY	Little Manly Point	Stuart STREET	Gasworks	Contamination formerly regulated under the CLM Act	-33.80814626	151.2876245
MANLY VALE	Caltex Service Station Manly Vale	236-238 Condamine STREET	Service Station	Regulation under CLM Act not required	-33.78508231	151.2674386
MANLY VALE	Former Landfill Addiscombe Road	Addiscombe ROAD	Landfill	Contamination currently regulated under CLM Act	-33.78307439	151.2747846
MANNERING PARK	Parkview General Store (a former service station)	2 Vales ROAD	Service Station	Regulation under CLM Act not required	-33.14753814	151.5387832
MANNERING PARK	Mannering Park Mini Mart	70 Vales ROAD	Service Station	Regulation under CLM Act not required	-33.15236501	151.5371767
MARAYONG	7-Eleven (former Mobil Blacktown West) Service Station Marayong	173 Richmond ROAD	Service Station	Regulation under CLM Act not required	-33.75472796	150.8913605
MARAYONG	Woolworths Petrol Service Station Marayong	Corner Vardys Road and Turbo ROAD	Service Station	Regulation under CLM Act not required	-33.7452356	150.9041601
MARDI	Former Mardi Landfill	70-90 McPherson ROAD	Landfill	Regulation under CLM Act not required	-33.29273289	151.4100941
MARKS POINT	Former Mobil Service Station (now 7-Eleven)	770-772 Pacific HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-33.05646268	151.6533795
MARKS POINT	Former Mobil Aviation Depot Belmont Airport	864 Pacific HIGHWAY	Other Petroleum	Regulation under CLM Act not required	-33.06657244	151.6497674
MAROUBRA	Coles Express Pagewood Service Station, Maroubra	299 Bunnerong PARADE	Service Station	Regulation under CLM Act not required	-33.94071282	151.2285063
MARRANGAROO	United (Former Mobil) Service Station Marrangaroo	394-398 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.45253322	150.1181023
MARRICKVILLE	Former Mobil Service Station	384 Illawarra ROAD	Service Station	Regulation under CLM Act not required	-33.91534969	151.1506717
MARRICKVILLE	TRW Steering and Suspension	22-28 Carrington ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-33.92012667	151.1566181
MARRICKVILLE	Woolworths Petrol Service Station Marrickville	490 Illawarra ROAD	Service Station	Regulation under CLM Act not required	-33.91845177	151.1459951
MARRICKVILLE	RailCorp	361 Victoria ROAD	Other Industry	Regulation under CLM Act not required	-33.91404835	151.1557132
MARRICKVILLE	Mackey Park	Cnr Richardsons Crescent and Carrington ROAD	Landfill	Regulation under CLM Act not required	-33.9220263	151.1547903
MARRICKVILLE	Cooks River Aqueduct	Thornley STREET	Unclassified	Contamination formerly regulated under the CLM Act	-33.92204604	151.1480332
MARRICKVILLE	2 Carrington Road	2 Carrington ROAD	Unclassified	Regulation under CLM Act not required	-33.91596071	151.1597199
MARRICKVILLE	Former Dry Cleaners and Loading Dock (adjacent Lot 1 DP612551)	Smidmore STREET	Other Industry	Contamination currently regulated under CLM Act	-33.90707592	151.171701
MARSDEN PARK	226 Grange Avenue	226 Grange AVENUE	Unclassified	Regulation under CLM Act not required	-33.70259609	150.83825
MARSFIELD	Coles Express Service Station Marsfield	189 Epping ROAD	Service Station	Regulation under CLM Act not required	-33.77519246	151.1053691
MARULAN	BP Express Marulan (Northbound)	(Northbound) Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-34.7188332	149.9949547
MARULAN	BP Service Station	(Southbound) Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-34.71932066	150.0014827



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MARYVILLE	7-Eleven (former Mobil) Service Station	184-188 Hannell STREET	Service Station	Contamination currently regulated under CLM Act	-32.91336028	151.7579315
MASCOT	Former Zinc Smelter and Paint Manufacturing Facility	163 O'Riordan STREET	Metal Industry	Regulation under CLM Act not required	-33.92526513	151.1892582
MASCOT	Caltex Service Station	125 O'Riordan STREET	Service Station	Regulation under CLM Act not required	-33.92309169	151.1911539
MASCOT	Mascot Pioneer Plating	25-29 Ricketty STREET	Metal Industry	Contamination currently regulated under CLM Act	-33.92075288	151.1824801
MASCOT	Heritage Business Centre	5-9 Ricketty STREET	Unclassified	Regulation under CLM Act not required	-33.92029202	151.1816656
MASCOT	Telstra Exchange	904-922 Botany ROAD	Other Industry	Regulation under CLM Act not required	-33.9293166	151.1942777
MASCOT	Former Shell Service Station Mascot	746 Botany ROAD	Service Station	Contamination currently regulated under CLM Act	-33.92352295	151.1955852
MASCOT	Ing Industrial Fund (unoccupied Land and General Parking)	19-33 Kent ROAD	Landfill	Regulation under CLM Act not required	-33.922765	151.185262
MASCOT	Former Mascot Galvanising	336-348 King STREET	Metal Industry	Contamination currently regulated under CLM Act	-33.92902126	151.185874
MASCOT	Sokol Corporation	50-56 Robey STREET	Other Industry	Regulation under CLM Act not required	-33.93162265	151.1904955
MASCOT	Linear Park	Lot 2, 3, 4 & 5 in DP 85917	Landfill	Regulation under CLM Act not required	-33.92278693	151.1904751
MATRAVILLE	Port Botany Bus Depot	7 Bumborah Point ROAD	Other Petroleum	Regulation under CLM Act not required	-33.96880413	151.2255889
MATRAVILLE	Former Golden Fleece Terminal No2	151 Beauchamp ROAD	Other Petroleum	Contamination formerly regulated under the CLM Act	-33.95719404	151.2259884
MATRAVILLE	Former Rieco Incinerator	Kain AVENUE	Other Industry	Contamination being managed via the planning process (EP&A Act)	-33.95980534	151.2423679
MATRAVILLE	7-Eleven Service Station Matraville	515 Bunnerong ROAD	Service Station	Regulation being finalised	-33.95943536	151.2317598
MATRAVILLE	Former Golden Fleece Terminal No1	133 -149 Beauchamp ROAD	Other Petroleum	Contamination formerly regulated under the CLM Act	-33.95776666	151.2248518
MATRAVILLE	Vacant Lot	3 Wilkes AVENUE	Other Industry	Regulation under CLM Act not required	-33.96006406	151.2431087
MAYFIELD	7-Eleven (Former Mobil) Service Station	412-416 Maitland ROAD	Service Station	Regulation under CLM Act not required	-32.89292005	151.7300948
MAYFIELD	Shell Coles Express Service Station	63-69 Maud STREET	Service Station	Regulation under CLM Act not required	-32.89358962	151.7221298
MAYFIELD	BHP Closure Site (Hunter River Sediments)	Bed Sediments of the Hunter adjacent to Lot 221 DP1013964 RIVER	Metal Industry	Contamination formerly regulated under the CLM Act	-32.89203741	151.7646702
MAYFIELD	Australian Tube Mills Newcastle Site	Industrial DRIVE	Metal Industry	Regulation under CLM Act not required	-32.88835767	151.7450751
MAYFIELD	BHP Steel River	The Buffer Zone' extending directly adjacent to the Hunter River; near the Tourle Street Bridge STREET	Metal Industry	Contamination currently regulated under CLM Act	-32.8773556	151.7252427
MAYFIELD	BHPB Supply site	Lot 223 South and West - Industrial DRIVE	Metal Industry	Contamination currently regulated under CLM Act	-32.88583041	151.7388423

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
MAYFIELD	Waratah Steel Mill	23 Frith STREET	Metal Industry	Regulation under CLM Act not required	-32.89426592	151.7257429
MAYFIELD	OneSteel (BHP)	Industrial DRIVE	Metal Industry	Contamination currently regulated under CLM Act	-32.88366987	151.7449491
MAYFIELD NORTH	Newcastle Wire Mill	141 Ingall STREET	Metal Industry	Regulation under CLM Act not required	-32.89008485	151.752949
MAYFIELD WEST	Stevenson Park landfill	2/559 Maitland ROAD	Landfill	Regulation under CLM Act not required	-32.88472556	151.7224791
MAYFIELD WEST	Koppers Coal Tar	East of Woodstock Street and Tourle STREET	Other Industry	Contamination currently regulated under CLM Act	-32.88591801	151.7361906
MAYFIELD WEST	Tourle Street Bridge Project	Tourle STREET	Landfill	Regulation under CLM Act not required	-32.88075518	151.7330073
MCDUGALLS HILL	Caltex Service Station	4949 New England HIGHWAY	Service Station	Regulation under CLM Act not required	-32.54484714	151.1490757
MEADOWBANK	Former Council Works Depot	2 Parsonage STREET	Unclassified	Regulation under CLM Act not required	-33.82191421	151.0951974
MENAI	7-Eleven (Former Mobil) Service Station Menai	289 Menai ROAD	Service Station	Regulation under CLM Act not required	-34.01579095	151.0131737
MENAI	Caltex Service Station Menai	1 Carter Road ROAD	Service Station	Regulation under CLM Act not required	-34.01654043	151.0124133
MEREWETHER	Merewether Childcare Centre	2/23 Caldwell STREET	Unclassified	Regulation under CLM Act not required	-32.94249653	151.7504279
MERIMBULA	Caltex Service Station	19-25 Merimbula DRIVE	Service Station	Regulation under CLM Act not required	-36.88757881	149.9089159
MERIMBULA	Former Mobil Service Station	27 Market STREET	Service Station	Regulation under CLM Act not required	-36.88941693	149.9103485
MERRYLANDS	Society of St Vincent de Paul	11-19 Centenary ROAD	Other Petroleum	Regulation under CLM Act not required	-33.83083025	150.9698915
MERRYLANDS	Caltex Service Station	229 Woodville ROAD	Service Station	Regulation under CLM Act not required	-33.84547463	150.9983413
MERRYLANDS	Caltex Service Station Merrylands	148 Woodville ROAD	Service Station	Regulation under CLM Act not required	-33.83818499	150.9997199
MERRYLANDS	Stockland Merrylands Court	249-259 Merrylands ROAD	Service Station	Regulation under CLM Act not required	-33.83560037	150.9869735
MERRYLANDS	7-Eleven Merrylands Service Station	295-297 Merrylands (Cnr Windsor Rd) ROAD	Service Station	Regulation under CLM Act not required	-33.83533205	150.9851801
MERRYLANDS	Former Stockfeed Manufacturing Site	1-7 & 9-11 Neil STREET	Other Petroleum	Regulation under CLM Act not required	-33.83390257	150.9947449
MERRYLANDS WEST	Former Mobil Service Station	3 Centenary ROAD	Service Station	Regulation under CLM Act not required	-33.83214226	150.9698958
MILLER	Caltex Service Station	86 Cartwright AVENUE	Service Station	Regulation under CLM Act not required	-33.91878146	150.8827514
MILLERS FOREST	Chichester Trunk Gravity Main	water pipeline	Other Industry	Contamination currently regulated under POEO Act	-32.772877	151.6826841
MILLERS POINT	Former AGL Gasworks	30 - 34 Hickson ROAD	Gasworks	Regulation under CLM Act not required	-33.86179594	151.2031726
MILLERS POINT	Moore's Wharf UPSS	4 Towns PLACE	Other Petroleum	Regulation under CLM Act not required	-33.85581123	151.2024759
MILLERS POINT	Former AGL Gasworks	38 Hickson and road reserve ROAD	Gasworks	Contamination being managed via the planning process (EP&A Act)	-33.86280104	151.2032452

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MILLERS POINT	Former AGL Gasworks	Berths 5, 6 and 7 (already demolished) and part Hickson ROAD	Gasworks	Contamination currently regulated under CLM Act	-33.86053571	151.2015022
MILLERS POINT	Former AGL Gasworks	Road reserve fronting 30-38 Hickson ROAD	Gasworks	Contamination currently regulated under CLM Act	-33.86241531	151.2024634
MILLERS POINT	Former AGL Gasworks 36 Hickson Road	36 Hickson ROAD	Gasworks	Contamination formerly regulated under the CLM Act	-33.86243824	151.2032514
MILPERRA	Heatcraft Australia Pty Ltd	286 Horsley ROAD	Other Industry	Regulation under CLM Act not required	-33.94031556	150.9958606
MILPERRA	United Group Rail Pty Limited	373 Horsley ROAD	Landfill	Regulation under CLM Act not required	-33.93286283	150.9934071
MILPERRA	Caltex Service Station	264 Milperra ROAD	Service Station	Regulation under CLM Act not required	-33.93018101	150.9910964
MILPERRA	Former Landfill	479 Henry Lawson DRIVE	Landfill	Regulation under CLM Act not required	-33.933935	150.977546
MILTON	Former Sanitary Depot	Slaughterhouse ROAD	Other Industry	Regulation under CLM Act not required	-35.33819825	150.4471917
MILTON	Caltex Milton Service Station and Depot	331 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-35.33154474	150.4492852
MINCHINBURY	7-Eleven (former Mobil) Service Station	815 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.78812909	150.8495992
MINCHINBURY	BP Service Station	1055 Great Western Highway corner Archbold ROAD	Service Station	Regulation under CLM Act not required	-33.78211857	150.8244185
MINTO	Land adjacent to Former Shell depot	Airds Road and Essex STREET	Other Petroleum	Regulation under CLM Act not required	-34.02140447	150.8415134
MINTO	Shell Coles Express Service Station	73 Pembroke STREET	Service Station	Regulation under CLM Act not required	-34.02316454	150.8503118
MINTO	Former Endeavour Energy Depot	Pembroke ROAD	Other Petroleum	Regulation under CLM Act not required	-34.0408973	150.8451837
MINTO	Logistics Hub - Culverston Road, Minto	Culverston ROAD	Other Petroleum	Regulation under CLM Act not required	-34.0421711	150.833825
MIRANDA	Woolworth's Service Station	455 Kingsway OTHER	Service Station	Contamination currently regulated under CLM Act	-34.03492814	151.1124681
MITTAGONG	Enhance (former Coles Express) Service Station	224 Old Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-34.44746118	150.4326183
MITTAGONG	Lots 1 and 2 Alfred St.	Alfred STREET	Other Petroleum	Contamination formerly regulated under the CLM Act	-34.44738105	150.4565159
MITTAGONG	Caltex Mittagong Service Station	65 Bowral ROAD	Service Station	Regulation under CLM Act not required	-34.45245915	150.4381291
MOAMA	Caltex Moama Service Station	73 Meninya (Cnr Regent St) STREET	Service Station	Regulation under CLM Act not required	-36.10815134	144.752849
MOLONG	Cabonne BP Service Station	2 Gidley STREET	Service Station	Contamination currently regulated under CLM Act	-33.09026307	148.8695809
MOLONG	Former Gasworks	Hill STREET	Gasworks	Contamination currently regulated under CLM Act	-33.09074595	148.8703262
MONA VALE	Mona Vale Bus Depot	58 Darley STREET	Other Petroleum	Contamination currently regulated under CLM Act	-33.67452414	151.3074246
MONA VALE	Former Caltex service station and adjacent properties	79 Barrenjoey Road, 2 Polo Avenue, 6 Polo Avenue, 45 Bassett STREET	Service Station	Contamination formerly regulated under the CLM Act	-33.6743659	151.3096932

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MONA VALE	7-Eleven (former Mobil) Service Station	24 Barrenjoey ROAD	Service Station	Regulation under CLM Act not required	-33.676909	151.3082515
MONA VALE	BP Peninsula Express Service Station	Corner Barrenjoey Road and Darley Street East STREET	Service Station	Regulation under CLM Act not required	-33.67670799	151.3090068
MONA VALE	BP Service Station Mona Vale	1721 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.68043443	151.3023553
MONA VALE	Caltex Investigation Area	Polo Ave, Perak STREET	Service Station	Contamination formerly regulated under the CLM Act	-33.67431333	151.3091148
MONA VALE	Taronga Place properties	Taronga PLACE	Petroleum Storage	Under assessment	-33.674146	151.306485
MOOBALL	Mooball General Store	5913 Tweed Valley WAY	Service Station	Regulation under CLM Act not required	-28.44204594	153.4887648
MOONBI	Caltex Moonbi Service Station	New England HIGHWAY	Service Station	Regulation under CLM Act not required	-31.02264369	151.069094
MOORE PARK	Area 2, Moore Park	Driver AVENUE	Unclassified	Regulation under CLM Act not required	-33.89426868	151.2226839
MOOREBANK	Caltex Service Station	216 Newbridge ROAD	Service Station	Regulation under CLM Act not required	-33.92930835	150.9551469
MOOREBANK	Joyce Foam Products	5-9 Bridges ROAD	Chemical Industry	Regulation under CLM Act not required	-33.92596302	150.9335273
MOOREBANK	ABB Australia Pty Ltd	(a) 1 Bapaume ROAD	Other Industry	Ongoing maintenance required to manage residual contamination	-33.94143741	150.9208754
MOOREBANK	Caltex Service Station Moorebank	2 Bridges ROAD	Service Station	Regulation under CLM Act not required	-33.92839682	150.9327012
MOOREBANK	Former Landfill Site	Newbridge ROAD	Landfill	Under assessment	-33.93907207	150.9654125
MOORLAND	Caltex Service Station	99 Jericho ROAD	Service Station	Regulation under CLM Act not required	-31.79436622	152.6514849
MOREE	Former Freedom Service Station Site Moree	1 Dover STREET	Service Station	Contamination currently regulated under CLM Act	-29.4715814	149.8440279
MOREE	Caltex Depot	101 Gosport STREET	Other Petroleum	Regulation under CLM Act not required	-29.47603684	149.8476728
MOREE	Former Golden Fleece Depot	Gosport STREET	Other Petroleum	Contamination currently regulated under CLM Act	-29.47698315	149.8477108
MOREE	Former Mobil Depot	Gosport STREET	Other Petroleum	Contamination currently regulated under CLM Act	-29.47771921	149.8478438
MOREE	Moree Airport Evaporation Pond	Newell HIGHWAY	Unclassified	Regulation under CLM Act not required	-29.50289837	149.8411301
MOREE	Caltex Service Station	54 Alice STREET	Service Station	Contamination currently regulated under CLM Act	-29.47158492	149.8433182
MOREE	Former Shell Depot	Adelaide STREET	Other Petroleum	Contamination formerly regulated under the CLM Act	-29.47655335	149.8465698
MOREE	Shell Coles Express Service Station	Corner Gwydir and Balo STREET	Service Station	Regulation under CLM Act not required	-29.46081826	149.8419975
MOREE	BP Truckstop and Depot Moree	Newell Highway - 423 Frome STREET	Service Station	Regulation under CLM Act not required	-29.48223274	149.8463679
MORISSET	Railcorp Station Masters Cottage	24 Dora STREET	Unclassified	Regulation under CLM Act not required	-33.10849681	151.4880317
MORPETH	Telstra Cable Installation and RTA Bridge work	Northumberland STREET	Other Petroleum	Regulation under CLM Act not required	-32.72489729	151.6266795



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
MORPETH	Former Service Station	Swan STREET	Service Station	Regulation under CLM Act not required	-32.72477413	151.6250642
MORTLAKE	Former Petroleum Storage Site	108-116 Tennyson ROAD	Other Petroleum	Regulation under CLM Act not required	-33.83979033	151.1064889
MORTLAKE	Kendall Bay Sediments	Kendall Bay OTHER	Gasworks	Contamination currently regulated under CLM Act	-33.83905999	151.1120458
MORTLAKE	Former AGL site	Tennyson ROAD	Gasworks	Contamination formerly regulated under the CLM Act	-33.84287407	151.1109313
MORTLAKE	Majors Bay Redevelopment	14-22 Hilly STREET	Other Industry	Under assessment	-33.840371	151.106442
MORUYA	Former Fuel Depot Moruya	11 to 13 Ford STREET	Other Petroleum	Under assessment	-35.9112243	150.0826475
MORUYA	Caltex Service Station Moruya	80-84 Campbell STREET	Service Station	Regulation under CLM Act not required	-35.91195596	150.0824213
MORUYA	Caltex Service Station	26 Campbell STREET	Service Station	Regulation under CLM Act not required	-35.9104985	150.0711419
MOSMAN	7-Eleven Mosman	162A Spit Road Corner Mitchell ROAD	Service Station	Regulation under CLM Act not required	-33.81747016	151.2433633
MOSMAN	BP Service Station	175 Ourimbah ROAD	Service Station	Regulation under CLM Act not required	-33.82106757	151.233291
MOSMAN	7-Eleven Service Station Mosman	45 Spit ROAD	Service Station	Regulation under CLM Act not required	-33.82302718	151.2435627
MOSS VALE	Woolworths Service Station Moss Vale	609 Argyle STREET	Service Station	Regulation under CLM Act not required	-34.55409411	150.3609797
MOSS VALE	Coles Express Service Station	579 Argyle STREET	Service Station	Regulation under CLM Act not required	-34.55313422	150.364684
MOSS VALE	Moss Vale Refuelling Facility	Lackey ROAD	Other Petroleum	Regulation under CLM Act not required	-34.54662421	150.3721525
MOUNT ANNAN	Great Southern Railways Aqueduct	Off Narellan ROAD	Unclassified	Regulation under CLM Act not required	-34.07308479	150.7707436
MOUNT COLAH	Caltex Service Station Mount Colah	603 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.67034662	151.1151861
MOUNT DRUITT	Caltex (former Mobil) Service Station	17 Mount STREET	Service Station	Regulation under CLM Act not required	-33.76567994	150.8244544
MOUNT HUTTON	Woolworths Service Station	46 Wilsons ROAD	Service Station	Regulation under CLM Act not required	-32.9836378	151.67309
MOUNT PRITCHARD	7-Eleven Service Station	352 Elizabeth DRIVE	Service Station	Regulation under CLM Act not required	-33.90260656	150.8963326
MOUNT THORLEY	Lowes Petroleum (Former BP) Depot Mount Thorley	74 Mount Thorley ROAD	Other Petroleum	Regulation under CLM Act not required	-32.62443074	151.1025122
MOUNT VICTORIA	Former Mobil Service Station	81 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.5889727	150.2511783
MOUNT VICTORIA	Caltex Service Station	36a Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.58436517	150.2465528
MUDGEES	Caltex Service Station	114-116 Church STREET	Service Station	Regulation under CLM Act not required	-32.59428029	149.5876199
MUDGEES	Shell Coles Express Service Station	47 Church STREET	Service Station	Regulation under CLM Act not required	-32.59347493	149.5884623
MUDGEES	BP Service Station Mudgee	77 Church STREET	Service Station	Regulation under CLM Act not required	-32.59545872	149.588123

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
MUDGEES	Mobil Depot	Cnr Inglis Street & Douro STREET	Other Petroleum	Contamination currently regulated under CLM Act	-32.60023979	149.5823448
MUDGEES	Mudgee Gasworks	Mortimer Street and Court STREET	Gasworks	Regulation under CLM Act not required	-32.59168859	149.5817705
MUDGEES	Former Essential Energy Depot	27-31 Inglis STREET	Other Industry	Regulation under CLM Act not required	-32.60073	149.585658
MUDGEES	Former Caltex Depot Mudgee	cnr Nicholson Street & Atkinson STREET	Other Petroleum	Regulation under CLM Act not required	-32.60125298	149.5851398
MULGRAVE	7-Eleven (former Mobil) Service Station	Corner Windsor Road and Mulgrave ROAD	Service Station	Regulation under CLM Act not required	-33.61687781	150.8341809
MULWALA	Mulwala ADI Explosives Factory	Bayly STAIRS	Other Industry	Regulation being finalised	-35.97572689	145.9809786
MURWILLUMBAH	Puma Murwillumbah (formerly Matilda )	182 Tweed Valley WAY	Service Station	Contamination currently regulated under CLM Act	-28.3263681	153.4103824
MURWILLUMBAH	Murwillumbah Ambulance Depot	27 Queen STREET	Other Petroleum	Regulation under CLM Act not required	-28.32552576	153.4000182
MURWILLUMBAH SOUTH	Former Norco Butter Factory (Eastern Portion)	230 Tweed Valley WAY	Other Petroleum	Regulation under CLM Act not required	-28.32791359	153.4073052
MUSWELLBROOK	Former Caltex Depot	1 Lower William STREET	Other Petroleum	Regulation under CLM Act not required	-32.26614257	150.8865136
MUSWELLBROOK	Vacant Rail Land	27 Brook STREET	Unclassified	Regulation under CLM Act not required	-32.26346086	150.8873181
MUSWELLBROOK	United Branded (Former Mobil) Service Station Muswellbrook	49-51 Maitland STREET	Service Station	Regulation under CLM Act not required	-32.27218162	150.8900206
MUSWELLBROOK	Former Mobil Depot Muswellbrook	43-51 Ford STREET	Other Petroleum	Regulation under CLM Act not required	-32.2599725	150.887573
MUSWELLBROOK	Woolworths Petrol	72 Brook STREET	Service Station	Regulation under CLM Act not required	-32.26325377	150.8905966
MUSWELLBROOK	Caltex Muswellbrook Service Station	84-86 Maitland STREET	Service Station	Regulation under CLM Act not required	-32.27793094	150.8980938
MUSWELLBROOK	Former Gasworks	Cnr Carl St and Foley STREET	Gasworks	Regulation under CLM Act not required	-32.26672337	150.8935982
MUSWELLBROOK	Bayswater Power Station	New England HIGHWAY	Other Industry	Regulation under CLM Act not required	-32.3954046	150.9502683
MUSWELLBROOK	Former Industrial Site	Lot 89 Rathmore STREET	Other Industry	Regulation under CLM Act not required	-32.30544071	150.8823657
MUSWELLBROOK	Caltex Service Station	12-16 Sydney STREET	Service Station	Regulation under CLM Act not required	-32.26785559	150.8879601
MUSWELLBROOK	Former Caltex Depot	47-50 Victoria STREET	Service Station	Regulation under CLM Act not required	-32.26788823	150.8930609
NABIAC	Caltex Service Station NABIAC	3964 Wallanbah (Cnr Wallanbah Rd and Pacific Hwy) ROAD	Service Station	Regulation under CLM Act not required	-32.09864883	152.3754346
NAMBUCCA HEADS	Former Mobil Service Station	6 Bowra STREET	Service Station	Regulation under CLM Act not required	-30.64282127	153.0035884
NARELLAN	Caltex Service Station Narellan	1 George Hunter DRIVE	Service Station	Regulation under CLM Act not required	-34.03963992	150.7432386
NARELLAN	Former Landfill	1 Elyard STREET	Landfill	Regulation under CLM Act not required	-34.043474	150.7393256
NAROOMA	Narooma Service Station	60 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-36.21617955	150.126261



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
NAROOMA	Former Caltex - Narooma	82 Princes HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-36.21711766	150.1279305
NARRABEEN	Caltex Service Station	1509-1511 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.70455756	151.2969352
NARRABEEN	Shell Coles Express Service Station	1418 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.70013931	151.3002782
NARRABEEN	Narrabeen Shotgun Range Sydney Academy of Sport	Wakehurst PARKWAY	Unclassified	Ongoing maintenance required to manage residual contamination	-33.72138423	151.2642798
NARRABEEN	7-Eleven Service Station	1234 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.71958892	151.298272
NARRABRI	Caltex Service Station	13 Doyle STREET	Service Station	Regulation under CLM Act not required	-30.3239182	149.7843052
NARRABRI	Lowes Petroleum (Former Mobil) Narrabri Depot	3 Old Gunnedah ROAD	Other Petroleum	Regulation under CLM Act not required	-30.33473586	149.789587
NARRABRI	Caltex Service Station	31-35 Cooma ROAD	Service Station	Regulation under CLM Act not required	-30.33968576	149.7657241
NARRABRI	Caltex Narrabri Service Station	31 Dangar (Cnr Anne and Dangar) STREET	Service Station	Regulation under CLM Act not required	-30.32989667	149.7756598
NARRABRI	Caltex Service Station	12 Reid STREET	Other Petroleum	Regulation under CLM Act not required	-30.32282764	149.7901182
NARRABRI	Cargill Soapstock Disposal Site	Westport ROAD	Unclassified	Contamination formerly regulated under the CLM Act	-30.4698458	149.6981931
NARRABRI	Caltex Service Station	7-13 James STREET	Service Station	Regulation under CLM Act not required	-30.33016168	149.7940732
NARRANDERA	Former Mobil Narrandera Depot	24 Whitton STREET	Other Petroleum	Regulation under CLM Act not required	-34.7410523	146.5620667
NARRANDERA	Former Mobil Emoleum Narrandera Depot	5-7 Margaret STREET	Other Petroleum	Regulation under CLM Act not required	-34.74105391	146.5628144
NARROMINE	Narromine Fuel (Former Caltex) Service Station	Cnr Burraway Street and Algalah STREET	Service Station	Regulation under CLM Act not required	-32.23565321	148.2454259
NELLIGEN	Former Clay Target Shooting Range	1398 Kings Highway and adjoining land on Old Bolaro Mountain	Unclassified	Contamination currently regulated under CLM Act	-35.64392469	150.0955224
NELLIGEN	Lot 2 Old Bolaro Road	Old Bolaro ROAD	Unclassified	Contamination formerly regulated under the CLM Act	-35.64485609	150.0937341
NELSON BAY	Shell Coles Express Service Station	25 Stockton STREET	Service Station	Regulation under CLM Act not required	-32.72265762	152.1437317
NELSON BAY	Former Caltex Service Station Nelson Bay	38 Stockton STREET	Service Station	Regulation under CLM Act not required	-32.72335662	152.1429384
NEMINGHA	Caltex Service Station and Depot Nemingha	428 Armidale (previously 16 New England Highway) ROAD	Service Station	Regulation under CLM Act not required	-31.12425169	150.9909054
NEUTRAL BAY	Caltex Service Station	16-38 Military ROAD	Service Station	Regulation being finalised	-33.82907162	151.2163342
NEUTRAL BAY	Shell Coles Express Service Station	200-204 Ben Boyd ROAD	Service Station	Regulation under CLM Act not required	-33.82915781	151.219437
NEW LAMBTON	Caltex Service Station New Lambton	144 Bridges ROAD	Service Station	Regulation under CLM Act not required	-32.93283668	151.7141748
NEW LAMBTON	BP Service Station	105 St James ROAD	Service Station	Regulation under CLM Act not required	-32.92910325	151.7155801
NEW LAMBTON	7-Eleven (former Mobil) Service Station	291 Turton ROAD	Service Station	Regulation under CLM Act not required	-32.91773864	151.7243096

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
NEWCASTLE	Reclaimed Land	26-28 Honeysuckle DRIVE	Unclassified	Contamination formerly regulated under the CLM Act	-32.92604705	151.7649508
NEWCASTLE	Wharf Road Newcastle Car Park	313-317 Wharf ROAD	Unclassified	Regulation under CLM Act not required	-32.92570385	151.7744076
NEWCASTLE	Newcastle Foreshore	40 Stevenson Place STREET	Other Industry	Regulation under CLM Act not required	-32.92556503	151.7876742
NEWCASTLE	BHP Steelworks (Closure site)	Bound by Hunter River, Selwyn Street & Industrial DRIVE	Metal Industry	Ongoing maintenance required to manage residual contamination	-32.89436064	151.7590762
NEWCASTLE	SRA Land	Scott STREET	Gasworks	Regulation under CLM Act not required	-32.92641425	151.7837817
NEWCASTLE WEST	Former Mobil Service Station	113 Parry STREET	Service Station	Regulation under CLM Act not required	-32.92560628	151.7558542
NEWPORT	7-Eleven (former Mobil) Service Station	307 Barrenjoey ROAD	Service Station	Regulation under CLM Act not required	-33.65632902	151.3182089
NEWPORT	Former Caltex Service Station Newport	316-324 Barrenjoey ROAD	Service Station	Regulation under CLM Act not required	-33.65634516	151.3191571
NEWTOWN	Caltex Service Station Newtown	26 - 36 Enmore ROAD	Service Station	Regulation under CLM Act not required	-33.89851331	151.17714
NEWTOWN	Former Service Station	81 Wilson STREET	Service Station	Contamination formerly regulated under the CLM Act	-33.89626791	151.1827556
NEWTOWN	Aluminium Enterprises	66 Brocks LANE	Metal Industry	Contamination was addressed via the planning process (EP&A Act)	-33.89467126	151.1847528
NEWTOWN	Adjacent to Former Service Station	79 Wilson STREET	Service Station	Contamination formerly regulated under the CLM Act	-33.89630155	151.1826567
NORAVILLE	Former Toukley Landfill	Wilfred Barrett DRIVE	Landfill	Regulation under CLM Act not required	-33.27734185	151.5537784
NORTH ALBURY	Caltex Service Station and Diesel Stop	79 Union ROAD	Service Station	Regulation under CLM Act not required	-36.05496713	146.9487635
NORTH BOAMBEE VALLEY	Caltex Service Station	Cnr Pacific Hwy & Halls ROAD	Service Station	Regulation under CLM Act not required	-30.30639482	153.1007996
NORTH BONDI	Caltex Service Station North Bondi	321 Old South Head ROAD	Service Station	Regulation under CLM Act not required	-33.88463526	151.268551
NORTH NARRABEEN	7-Eleven Service Station	1501-1503 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.70749859	151.296351
NORTH RICHMOND	Caltex Service Station	50 Bells Line Of ROAD	Service Station	Regulation under CLM Act not required	-33.57991338	150.7202346
NORTH ROCKS	7-Eleven Service Station North Rocks	340 North Rocks ROAD	Service Station	Regulation under CLM Act not required	-33.76895144	151.0305952
NORTH ST MARYS	BP Service Station	76 Glossop STREET	Service Station	Regulation under CLM Act not required	-33.76020183	150.7818149
NORTH STRATHFIELD	Budget Service Station	143 Concord ROAD	Service Station	Regulation under CLM Act not required	-33.85945248	151.0927853
NORTH STRATHFIELD	Former Caltex Service Station	92a Concord ROAD	Service Station	Regulation under CLM Act not required	-33.86244297	151.0932434
NORTH SYDNEY	Iora Complex	1 Kiara PLACE	Gasworks	Regulation under CLM Act not required	-33.843145	151.2161142
NORTH SYDNEY	Neutral Bay Sediments	Adjacent to HMAS Platypus, 118 High STREET	Gasworks	Contamination formerly regulated under the CLM Act	-33.842724	151.2174523
NORTH SYDNEY	HMAS Platypus Neutral Bay	High STREET	Gasworks	Contamination currently regulated under CLM Act	-33.84325935	151.2170347

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
NORTH WOLLONGONG	Former Mobil Depot	122-126 Montague STREET	Other Petroleum	Regulation under CLM Act not required	-34.40988259	150.8939374
NORTHMEAD	Former Prestige Plastics	1C Redbank ROAD	Other Industry	Regulation under CLM Act not required	-33.79716925	150.989926
NORTHMEAD	Coles Express Service Station Northmead	197 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.77741733	151.0001719
NORTHMEAD	Sydney Water Land	51c Hammers ROAD	Landfill	Regulation under CLM Act not required	-33.7887535	150.9858088
NORTHMEAD	Caltex Service Station	98-100 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.78786563	150.9945909
NORTHMEAD	7-Eleven Service Station Northmead	56 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.79090731	150.9967332
NOWRA	Former Gasworks Managers Residence	24 Osborne STREET	Gasworks	Regulation under CLM Act not required	-34.8708875	150.5992586
NOWRA	Fire Station	69 Bridge ROAD	Gasworks	Regulation under CLM Act not required	-34.87081582	150.6004881
NOWRA	Historically Filled Land	70 Bridge ROAD	Unclassified	Regulation under CLM Act not required	-34.87081809	150.6013231
NOWRA	Shell Coles Express Service Station	55 Kinghorne STREET	Service Station	Regulation under CLM Act not required	-34.87633757	150.6023481
NOWRA	Former gasworks	Lamonds LANE	Gasworks	Contamination currently regulated under CLM Act	-34.87111182	150.6000803
NOWRA	Former Hollingworth Scrap Yard	72-74 Jervis and 117 East STREET	Other Industry	Regulation under CLM Act not required	-34.88324216	150.6034361
NOWRA	Woolworths Service Station	2 Berry STREET	Service Station	Regulation being finalised	-34.87266278	150.6014052
NOWRA	Harry Sawkins Park	Bounded by Princes Hwy, Graham St & McGrath AVENUE	Gasworks	Regulation under CLM Act not required	-34.87093993	150.6037157
NOWRA EAST	Mobil Service Station	Lot 3 Kalandar STREET	Service Station	Contamination formerly regulated under the CLM Act	-34.88850535	150.6093504
NYNGAN	Caltex Service Station	39-41 Pangee STREET	Service Station	Regulation under CLM Act not required	-31.56101006	147.1914997
NYNGAN	Caltex Service Station	126 Pangee STREET	Service Station	Regulation under CLM Act not required	-31.56482841	147.2002892
OAK FLATS	Shellharbour City Works Depot	132 Industrial ROAD	Other Industry	Regulation under CLM Act not required	-34.56546013	150.8087225
OBERON	Caltex Service Station and Depot	Lowes Mount ROAD	Service Station	Regulation under CLM Act not required	-33.69509055	149.8570553
OBERON	Oberon Timber Complex	Lowes Mount ROAD	Other Industry	Regulation under CLM Act not required	-33.69264862	149.8564588
OBERON	Former Shell Depot	32 O'Connell ROAD	Other Petroleum	Regulation under CLM Act not required	-33.6997172	149.8450057
OBERON	CSR Ltd Property and King's Stockyard Creek	Off Endeavour STREET	Other Industry	Contamination formerly regulated under the CLM Act	-33.6922152	149.8686909
OCEAN SHORES	Former Ocean Shores Service Station	Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-28.51270299	153.5301496
OLD GUILDFORD	Caltex Service Station	636-644 Woodville ROAD	Service Station	Regulation under CLM Act not required	-33.86670857	150.9879189
ORANGE	Caltex Orange Depot	184 Byng STREET	Service Station	Regulation under CLM Act not required	-33.28285589	149.1050273

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
ORANGE	Woolworths Orange Service Station	357-361 Summer Street, corner William STREET	Service Station	Regulation under CLM Act not required	-33.28445811	149.1053604
ORANGE	BP Orange Service Station (Reliance Petroleum)	81 Summer STREET	Service Station	Regulation under CLM Act not required	-33.2825884	149.0951535
ORANGE	BP-Branded Lowes Petroleum Depot	197 - 201 Margaret STREET	Other Petroleum	Regulation under CLM Act not required	-33.27145977	149.1078103
ORANGE	Caltex Summer Street Service Station Orange	70-74 Summer Street, corner Hill STREET	Service Station	Regulation under CLM Act not required	-33.28311722	149.0940712
ORANGE	Lowes Petroleum (BP-branded) Service Station	76 Peisley STREET	Service Station	Regulation under CLM Act not required	-33.29025034	149.1027194
ORANGE	Former Mobil Service Station	24-28 Bathurst ROAD	Service Station	Regulation under CLM Act not required	-33.2866912	149.1066505
ORANGE	BP (Reliance Petroleum) Service Station Orange	56-60 Bathurst ROAD	Service Station	Regulation under CLM Act not required	-33.28980053	149.1086212
ORANGE	Former Mobil Service Station	168 Peisley STREET	Service Station	Regulation under CLM Act not required	-33.28525478	149.1037259
ORANGE	Electrolux Orange	5-7 Edward STREET	Other Industry	Contamination currently regulated under CLM Act	-33.29874849	149.1038449
OURIMBAH	Palmdale Service Centre Pty Ltd	3130 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.3381336	151.374586
OURIMBAH	Shell Coles Express Service Station	78-80 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.3468202	151.3710098
OXLEY VALE	Hayes Transport Services	10 Manilla ROAD	Other Petroleum	Regulation under CLM Act not required	-31.06991417	150.9101381
OYSTER BAY	Shell Coles Express Service Station	20 Carvers ROAD	Service Station	Contamination currently regulated under CLM Act	-34.00934475	151.0758626
OYSTER COVE	Cove Marine Pty Ltd	60 Frederick STREET	Unclassified	Contamination currently regulated under POEO Act	-32.73549959	151.952446
PADDINGTON	7-Eleven Service Station	59 Oxford STREET	Service Station	Contamination currently regulated under CLM Act	-33.88322921	151.2205024
PADDINGTON	Former Workshop	52 Hopewell STREET	Other Industry	Under assessment	-33.88194	151.222046
PADSTOW	Caltex Padstow	115 Fairford ROAD	Service Station	Regulation under CLM Act not required	-33.9434571	151.0345671
PADSTOW	Selleys / Dulux	1-29 Gow STREET	Chemical Industry	Regulation under CLM Act not required	-33.93904125	151.0381725
PADSTOW	Exide	55 Bryant STREET	Other Industry	Contamination currently regulated under CLM Act	-33.94265241	151.0378986
PADSTOW	Galvatech	49 Gow STREET	Metal Industry	Contamination currently regulated under POEO Act	-33.93808679	151.0346862
PADSTOW	Foseco Australia	7 Stuart STREET	Chemical Industry	Regulation under CLM Act not required	-33.94342957	151.0377316
PADSTOW	Sebel Furniture	Parts 64 and 92 Gow STREET	Other Industry	Regulation under CLM Act not required	-33.93606752	151.0322057
PAGEWOOD	Former Email Site	Corner of Page Street and Holloway STREET	Other Industry	Contamination currently regulated under CLM Act	-33.94302462	151.2132036
PAMBULA	Offsite area (roadways) adjacent to United Service Station Pambula (former Shell)	Corner Quondola Street and Bullara STREET	Service Station	Regulation under CLM Act not required	-36.93104481	149.8746763



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
PARKES	Caltex Service Station Parkes	352-360 Clarinda STREET	Service Station	Regulation under CLM Act not required	-33.13317454	148.173643
PARKES	Former Caltex Parkes (Mugincoble) Depot - Eugowra Rd, Mugincoble	Eugowra ROAD	Service Station	Regulation under CLM Act not required	-33.19007031	148.224822
PARKES	BP Truckstop	(Newell Highway) 1 Forbes ROAD	Other Petroleum	Regulation under CLM Act not required	-33.14309226	148.1710282
PARKES	Former BP Telescope Service Station	339-341 Clarinda STREET	Service Station	Regulation under CLM Act not required	-33.13216152	148.1743239
PARKES	BP Reliance East End Service Station Parkes	46 Clarinda STREET	Service Station	Regulation under CLM Act not required	-33.14243539	148.1846227
PARKLEA	Caltex Parklea Service Station	Old Windsor (north of Miami Street) ROAD	Service Station	Regulation under CLM Act not required	-33.72427108	150.9388531
PARRAMATTA	BP Service Station	435 Church STREET	Service Station	Regulation under CLM Act not required	-33.80498714	151.0056151
PARRAMATTA	Coleman Oval Embankment	Cnr of Pitt STREET and Maquarie STREET	Unclassified	Regulation under CLM Act not required	-33.80441625	150.9954841
PARRAMATTA	7-Eleven (former Mobil) Service Station	81 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.80919769	151.0142894
PARRAMATTA	Parramatta Park Toilet Block Demolition	The Cresent Toilet Block Parramatta PARK	Unclassified	Regulation under CLM Act not required	-33.81054034	150.9961968
PAUPONG	Former Timber Treatment Plant	Off Paupong ROAD	Other Industry	Regulation under CLM Act not required	-36.57657408	148.6624998
PENDLE HILL	7-Eleven Service Station	217 Wentworth AVENUE	Service Station	Regulation under CLM Act not required	-33.8017814	150.9577994
PENNANT HILLS	Shell Coles Express Pennant Hills West	386 Pennant Hills ROAD	Service Station	Contamination currently regulated under CLM Act	-33.73936462	151.0680237
PENRITH	Mirvac Industrial Site	2101 Castlereagh ROAD	Other Industry	Regulation under CLM Act not required	-33.73497514	150.6954097
PENRITH	7-Eleven (former Mobil) Service Station	212-222 Andrews ROAD	Service Station	Regulation under CLM Act not required	-33.73059678	150.6952571
PENRITH	Lowes Petroleum (Former Mobil) Depot Penrith	174 Coreen AVENUE	Other Petroleum	Regulation under CLM Act not required	-33.74484268	150.6980504
PENRITH	Caltex Service Station	Castlereagh Rd Cnr Lugard STREET	Service Station	Regulation under CLM Act not required	-33.73426843	150.6933382
PENRITH	BP Express Service Station	Corner Coreen Avenue and Castlereagh ROAD	Service Station	Regulation under CLM Act not required	-33.74385498	150.6925743
PENRITH	Crane Enfield Metals	Castlereagh ROAD	Metal Industry	Contamination currently regulated under CLM Act	-33.73734959	150.696442
PENRITH	7-Eleven Service Station Penrith	30 Henry STREET	Service Station	Regulation under CLM Act not required	-33.75408799	150.7045594
PENRITH	Caltex Penrith Service Station	153 Coreen AVENUE	Service Station	Regulation under CLM Act not required	-33.74287244	150.6927071
PENRITH	Jet 60 Dry Cleaners	Shop 3 134-138 Henry STREET	Unclassified	Regulation under CLM Act not required	-33.75231953	150.6964541
PENSHURST	7-Eleven Service Station	612 Forest ROAD	Service Station	Regulation under CLM Act not required	-33.96153533	151.0793525
PENSHURST	Caltex Service Station	641 King Georges ROAD	Service Station	Regulation under CLM Act not required	-33.95985335	151.0891118

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
PERISHER VALLEY	Perisher Centre Loading Dock	Kosciuszko ROAD	Other Petroleum	Regulation under CLM Act not required	-36.40392862	148.4111593
PERISHER VALLEY	Perisher Ski Resort	Kosciuszko ROAD	Other Petroleum	Regulation under CLM Act not required	-36.41106374	148.4005469
PETERSHAM	Fanny Durack Aquatic Centre	Station STREET	Unclassified	Regulation under CLM Act not required	-33.89194583	151.151824
PHEASANTS NEST	7-Eleven Service Station	(Southbound) Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-34.28291571	150.6394606
PHEASANTS NEST	7-Eleven (former Mobil) Service Station	(Northbound) Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-34.28303112	150.6363145
PICTON	Coles Express Picton	93-99 Argyle STREET	Service Station	Regulation under CLM Act not required	-34.16844337	150.6114236
PICTON	McDonalds	69 -71 Argyle STREET	Service Station	Regulation under CLM Act not required	-34.16711877	150.6121524
PLUMPTON	Woolworths Service Station Plumpton (Plumpton Marketplace	260 Jersey ROAD	Service Station	Regulation under CLM Act not required	-33.74478874	150.8369408
PORT BOTANY	Vopak B	20 Friendship ROAD	Chemical Industry	Regulation under CLM Act not required	-33.97946548	151.2121752
PORT BOTANY	Vopak A	49 Friendship ROAD	Chemical Industry	Regulation under CLM Act not required	-33.97426175	151.2206228
PORT BOTANY	Terminals	45 Friendship ROAD	Chemical Industry	Regulation under CLM Act not required	-33.97609287	151.2174402
PORT BOTANY	Bunnerong Canal	Between Brotherson Dock and Bumborah Point ROAD	Unclassified	Regulation under CLM Act not required	-33.96800557	151.2227633
PORT BOTANY	Bulk Liquids Berth UPSS, Port Botany	Charlotte ROAD	Other Petroleum	Regulation under CLM Act not required	-33.97386329	151.2120157
PORT BOTANY	Port Operations Centre UPSS, Port Botany	Penrhyn ROAD	Other Petroleum	Regulation under CLM Act not required	-33.96803686	151.2205968
PORT BOTANY	Port Botany Railway Corridors	Friendship ROAD	Other Industry	Regulation under CLM Act not required	-33.95467008	151.2178012
PORT BOTANY	Smith Bros	4 Bumborah Point ROAD	Other Petroleum	Regulation under CLM Act not required	-33.9681757	151.2239505
PORT KEMBLA	Coates Hire Facility (Eastern Portion)	1 Flinders STREET	Other Industry	Regulation under CLM Act not required	-34.47104817	150.89162
PORT KEMBLA	Shell Port Kembla CVRO	87-89 Flinders STREET	Other Petroleum	Regulation under CLM Act not required	-34.46964995	150.8953859
PORT KEMBLA	Darcy Road Rail Sidings	Darcy ROAD	Other Industry	Regulation under CLM Act not required	-34.47792834	150.9105503
PORT KEMBLA	No 2 Steelworks	Five Islands ROAD	Metal Industry	Regulation under CLM Act not required	-34.45965024	150.8844432
PORT KEMBLA	Port Kembla Orica	Foreshore Road and Darcy ROAD	Other Industry	Contamination currently regulated under CLM Act	-34.47773583	150.9054545
PORT KEMBLA	Port Kembla, Auszinc Metals and Alloys	Lot 2 Shellharbour ROAD	Metal Industry	Regulation under CLM Act not required	-34.49335414	150.8961205
PORT KEMBLA	South Yard Rail Sidings	Lot 3 Old Port ROAD	Unclassified	Regulation under CLM Act not required	-34.47500551	150.8951759
PORT KEMBLA	Manildra Park	Flinders STREET	Other Petroleum	Contamination formerly regulated under the CLM Act	-34.46946878	150.8935731
PORT KEMBLA	Port Kembla Copper Smelter	Military ROAD	Metal Industry	Under assessment	-34.4810006	150.9063426



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
PORT KEMBLA	Caltex Service Station	16 Flinders STREET	Service Station	Regulation under CLM Act not required	-34.47058088	150.8945864
PORT KEMBLA	BHP Area 21	Springhill ROAD	Metal Industry	Contamination formerly regulated under the CLM Act	-34.45244614	150.8676517
PORT KEMBLA	Port Kembla Steelworks Recycling Area	Springhill ROAD	Unclassified	Regulation under CLM Act not required	-34.45271181	150.8677127
PORT KEMBLA	Commonwealth Rolling Mills (CRM)	Old Port ROAD	Metal Industry	Regulation under CLM Act not required	-34.47476117	150.8974746
PORT KEMBLA	Port Kembla, Former Electricity Commission Site	Old Port Road/Christie Drive ROAD	Other Industry	Regulation under CLM Act not required	-34.46899143	150.8982854
PORT KEMBLA	Port Kembla Steelworks - Steelhaven	Five Islands ROAD	Other Industry	Regulation under CLM Act not required	-34.47605247	150.891144
PORT KEMBLA	Port Kembla Steelworks - No.1 Works Site	Five Islands ROAD	Metal Industry	Regulation under CLM Act not required	-34.47386606	150.8794912
PORT KEMBLA	Port Kembla Springhill Works	Springhill ROAD	Metal Industry	Regulation under CLM Act not required	-34.45905808	150.8749558
PORT MACQUARIE	Former Mobil Depot	211 Lake ROAD	Other Petroleum	Regulation under CLM Act not required	-31.44688513	152.8864499
PORT MACQUARIE	Caltex Service Station	112-114 Gordon STREET	Service Station	Regulation under CLM Act not required	-31.43491709	152.9047618
PORT MACQUARIE	Caltex Port Macquarie Service Station	29 Lord STREET	Service Station	Regulation under CLM Act not required	-31.43326436	152.9169873
PORT MACQUARIE	Coles Myer	43 John Oxley DRIVE	Service Station	Regulation under CLM Act not required	-31.45741442	152.8739626
PORT MACQUARIE	Air BP Avgas Facility	Oliver DRIVE	Other Petroleum	Regulation under CLM Act not required	-31.43227222	152.8681083
PORT MACQUARIE	Former Mobil Service Station	Corner Oxley Highway and Major Innes DRIVE	Service Station	Regulation under CLM Act not required	-31.45738931	152.873956
PORT MACQUARIE	Port Macquarie Council Depot	Koala STREET	Unclassified	Regulation under CLM Act not required	-31.45341586	152.9032764
PORT MACQUARIE	Shell Coles Express Port Macquarie Service Station	121 Gordon STREET	Service Station	Regulation under CLM Act not required	-31.4343131	152.9046869
PORT MACQUARIE	Caltex Service Station	92 Hastings River DRIVE	Service Station	Regulation under CLM Act not required	-31.42934052	152.8830188
PORT MACQUARIE	Caltex Service Station	12-14 Bolwarra ROAD	Service Station	Regulation under CLM Act not required	-31.45015286	152.8854769
PORT MACQUARIE	Car park	28 Hayward STREET	Other Industry	Regulation under CLM Act not required	-31.43385131	152.9072399
PORTLAND	Ivanhoe Colliery	Pipers Flat ROAD	Other Industry	Regulation under CLM Act not required	-33.36595748	150.0099577
PORTLAND	Mt Piper Power Station	350 Boulder ROAD	Other Petroleum	Regulation under CLM Act not required	-33.35581541	150.0350801
PRAIRIEWOOD	7-Eleven (former Caltex) Service Station	485-487 Smithfield ROAD	Service Station	Regulation under CLM Act not required	-33.87102509	150.9031383
PROSPECT	7-Eleven (former Mobil) Service Station Prospect	354 Flushcombe ROAD	Service Station	Regulation under CLM Act not required	-33.79541624	150.9049417
PROSPECT	Pincott's Cottage, Gate C1	Off Reservoir ROAD	Unclassified	Regulation under CLM Act not required	-33.81589773	150.9144343
PROSPECT	Gatehouse, 544 Reservoir Road	544 Reservoir ROAD	Unclassified	Regulation under CLM Act not required	-33.81049244	150.9157439

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PROSPECT	Cottage 3, William Lawson Drive	William Lawson DRIVE	Unclassified	Regulation under CLM Act not required	-33.81490331	150.9149885
PUNCHBOWL	Former BP Service Station	1375 Canterbury Road, corner Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.93170424	151.0537302
PUNCHBOWL	Punchbowl Laundry	42-44 Belmore ROAD	Chemical Industry	Regulation being finalised	-33.93582701	151.0562638
PUNCHBOWL	Caltex Service Station Punchbowl	1285-1289 Canterbury ROAD	Service Station	Regulation under CLM Act not required	-33.93146308	151.0596348
PUTNEY	Putney Marina	20 Waterview STREET	Other Industry	Regulation being finalised	-33.82608091	151.1003966
PYMBLE	Caltex Service Station	1117 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.74102977	151.1385257
PYMBLE	Shell Coles Express Service Station	21 Ryde ROAD	Service Station	Regulation under CLM Act not required	-33.75198512	151.1438115
PYMBLE	Pymble West Dry Cleaners	6 Philip MALL	Other Industry	Under assessment	-33.76109009	151.1284329
PYRMONT	Former Council Works Depot (Fig and Wattle Depot)	14-26 Wattle STREET	Other Industry	Regulation under CLM Act not required	-33.8752655	151.1942645
QUAKERS HILL	7-Eleven (former Mobil) Service Station	83 Lalor ROAD	Service Station	Regulation under CLM Act not required	-33.72759077	150.8966764
QUAKERS HILL	BP Branded Parkway (Former Caltex) Service Station Quakers Hill	450 Quakers Hill PARKWAY	Service Station	Regulation under CLM Act not required	-33.72998613	150.9023617
QUEANBEYAN	Former Mobil Service Station	153 Uriarra ROAD	Service Station	Regulation under CLM Act not required	-35.34425514	149.2148687
QUEANBEYAN	Bill Lilley Automotive	169 Crawford STREET	Service Station	Regulation under CLM Act not required	-35.35138121	149.232486
QUEANBEYAN	Woolworths Queanbeyan Service Station	196 Crawford (Cnr Morisset St) STREET	Service Station	Regulation under CLM Act not required	-35.35163055	149.2335759
QUEANBEYAN	Caltex Queanbeyan Service Station	88 Macquoid (also known as Bungendore Rd) STREET	Service Station	Regulation under CLM Act not required	-35.34930535	149.2438607
QUEANBEYAN	Former Mobil Emoleum Depot	109-111 High STREET	Other Petroleum	Regulation under CLM Act not required	-35.3396115	149.237556
QUEANBEYAN	Former Caltex Depot	20-30 Railway STREET	Other Petroleum	Regulation under CLM Act not required	-35.34523	149.22333
QUEANBEYAN EAST	BP-Branded Service Station Queanbeyan	50 Yass ROAD	Service Station	Regulation under CLM Act not required	-35.34126641	149.2445103
QUEANBEYAN WEST	Caltex Service Station	Lanyon Dr Cnr Mccrae St (1 Suraci Place) STREET	Service Station	Regulation under CLM Act not required	-35.36372923	149.2067531
QUIRINDI	Former Mobil Depot Quirindi	4-6 Cross STREET	Other Petroleum	Regulation under CLM Act not required	-31.49903355	150.681972
QUIRINDI	Tamarang Servicentre Quirindi	113-117 Station STREET	Service Station	Under assessment	-31.50179204	150.6814611
QUIRINDI	Caltex Service Station, Quirindi	199-201 George STREET	Service Station	Regulation under CLM Act not required	-31.50654793	150.6803589
RAMSGATE	Shell Coles Express Service Station	Grand Parade cnr Ramsgate ROAD	Service Station	Regulation under CLM Act not required	-33.98537988	151.1471234
RANDWICK	7-Eleven Service Station	126-130 Barker STREET	Service Station	Contamination currently regulated under CLM Act	-33.92096152	151.2355927

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RANDWICK	Caltex Service Station	2 Alison ROAD	Service Station	Regulation under CLM Act not required	-33.9065752	151.2320697
RANDWICK	Service Station	33-37 Carrington Road cnr Albion STREET	Service Station	Contamination currently regulated under CLM Act	-33.90655015	151.2525065
RANDWICK	Metro Petroleum	345 Avoca STREET	Service Station	Regulation under CLM Act not required	-33.92544832	151.2396799
RANDWICK	Service Station, Randwick	33-37 Carrington ROAD	Service Station	Contamination currently regulated under CLM Act	-33.90655015	151.2525065
RAVENSWORTH	Ravensworth Operations Narama Mine	Lemington ROAD	Other Industry	Regulation under CLM Act not required	-32.47115903	151.0359579
RAVENSWORTH	Cumnock Colliery	Pikes Gully ROAD	Other Industry	Regulation under CLM Act not required	-32.40218281	150.9960082
RAYMOND TERRACE	Shell Coles Express Raymond Terrace	107 Adelaide (formerly Pacific Highway) STREET	Service Station	Regulation under CLM Act not required	-32.76110922	151.7492847
RAYMOND TERRACE	Caltex Service Station Raymond Terrace	136 Adelaide (Cnr Adelaide and Glenelg St) STREET	Service Station	Regulation under CLM Act not required	-32.76503842	151.7425264
RAYMOND TERRACE	Former Motor Registry	53 William STREET	Other Petroleum	Regulation under CLM Act not required	-32.76286473	151.7445839
RAYMOND TERRACE	Raymond Terrace Wastewater Treatment Works	22 Elizabeth AVENUE	Other Industry	Under assessment	-32.774431	151.745983
REDFERN	BP Service Station	116 Regent STREET	Service Station	Regulation under CLM Act not required	-33.89367876	151.1995256
REDFERN	Former Printing Works	101a Marriott	Other Industry	Regulation under CLM Act not required	-33.89512556	151.2113422
REDFERN	BP-branded Jasbe Surry Hills	411 Cleveland STREET	Service Station	Regulation under CLM Act not required	-33.89183974	151.2132466
REVESBY	Dorf Clark Industries	184-194 Milperra ROAD	Metal Industry	Regulation under CLM Act not required	-33.93387149	151.000553
REVESBY	Bituminous Products	33-35 Violet STREET	Chemical Industry	Contamination currently regulated under CLM Act	-33.93702092	151.0067896
REVESBY	Mirotone Pty Ltd	21 Marigold STREET	Chemical Industry	Contamination currently regulated under POEO Act	-33.93559608	151.0002207
REVESBY	Caltex Service Station Revesby	181 The River ROAD	Service Station	Regulation under CLM Act not required	-33.95573605	151.0171779
RHODES	Homebush Bay Sediments adjoining the former UCAL and Allied Feeds sites	NULL	Chemical Industry	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.8263749	151.0839216
RHODES	Former Glad factory site	10-16 Marquet STREET	Chemical Industry	Regulation under CLM Act not required	-33.82884048	151.0848716
RHODES	Former Allied Feeds site	Walker STREET	Other Industry	Contamination was addressed via the planning process (EP&A Act)	-33.82465376	151.0870401
RHODES	Former UCAL site	Walker STREET	Chemical Industry	Ongoing maintenance required to manage residual contamination	-33.82727505	151.0853195
RHODES	Homebush Bay sediments adjoining former Berger Paint factory	Oulton AVENUE	Chemical Industry	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.83535308	151.083238
RICHMOND	Caltex Richmond Service Station	98 March (Cnr East Market St) STREET	Service Station	Regulation under CLM Act not required	-33.59937996	150.7514483

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RIVERSTONE	Axalta Coating Systems	15-23 Melbourne ROAD	Other Industry	Regulation under CLM Act not required	-33.6636649	150.8557519
RIVERSTONE	7-Eleven Riverstone	55 Garfield ROAD	Service Station	Regulation under CLM Act not required	-33.67802232	150.8635246
RIVERSTONE	Woolworths Vineyard Service Station, Riverstone	1 Woodland Street, corner of Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.65607641	150.8724067
RIVERSTONE	Vacant Commercial Land	88-94 Junction ROAD	Unclassified	Regulation under CLM Act not required	-33.66226398	150.8789967
RIVERWOOD	7-Eleven Riverwood	30 Bonds ROAD	Service Station	Regulation under CLM Act not required	-33.9523701	151.0583887
ROCKDALE	7-Eleven (former Mobil) Service Station	293 West Botany STREET	Service Station	Regulation under CLM Act not required	-33.94995672	151.1484667
ROCKDALE	7-Eleven Service Station	99 Railway STREET	Service Station	Regulation under CLM Act not required	-33.95247322	151.1356785
ROOTY HILL	7-Eleven (former Mobil) Service Station	106 Rooty Hill Road South ROAD	Service Station	Regulation under CLM Act not required	-33.78036181	150.8501998
ROOTY HILL	7-Eleven (former Mobil) Service Station	1042 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.78214955	150.8287656
ROSE BAY	Caltex Rose Bay Service Station	488 Old South Head ROAD	Service Station	Regulation under CLM Act not required	-33.87475145	151.2723847
ROSE BAY	Rose Bay Budget Service station	638 -646 New South Head ROAD	Service Station	Contamination currently regulated under CLM Act	-33.87062149	151.2677617
ROSEBERY	Autofoil P/L	2 Mentmore AVENUE	Other Industry	Regulation under CLM Act not required	-33.91121318	151.2054882
ROSEBERY	Caltex Rosebery Service Station	321 Gardeners (Cnr Macquarie St) ROAD	Service Station	Contamination currently regulated under CLM Act	-33.92302898	151.2059541
ROSEBERY	Former Industrial Site (Former Electroplating Facility)	108 Dunning AVENUE	Other Industry	Regulation under CLM Act not required	-33.91630811	151.201557
ROSEBERY	Rosebery Service Station	395 Gardeners ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.92246784	151.2024589
ROSEHILL	James Hardie Australia and former James Hardie lands	Devon STREET	Other Industry	Ongoing maintenance required to manage residual contamination	-33.82539019	151.0339466
ROSEHILL	James Hardie Factory (former, western portion)	181 James Ruse DRIVE	Other Industry	Contamination currently regulated under CLM Act	-33.81605834	151.0238145
ROSELANDS	Roselands Shopping Centre	24 Roseland AVENUE	Service Station	Regulation under CLM Act not required	-33.93499281	151.0691284
ROSELANDS	7-Eleven (former Mobil) Service Station	91 Canary's ROAD	Service Station	Regulation under CLM Act not required	-33.93356078	151.0736274
ROSEVILLE	Mobil Service Station	2 Boundary STREET	Service Station	Regulation under CLM Act not required	-33.78769177	151.1796011
ROSEVILLE CHASE	Coles Express Roseville Chase	388 Eastern Valley WAY	Service Station	Regulation under CLM Act not required	-33.78337722	151.1973901
ROZELLE	Caltex Service Station	121 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.86252996	151.168497
ROZELLE	7-Eleven (former Mobil) Service Station	178-180 (176-184) Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.8630268	151.1680857
ROZELLE	Kennards Rozelle	15-39 Wellington STREET	Other Petroleum	Regulation under CLM Act not required	-33.86176757	151.1686519
ROZELLE	White Bay Power Station	Robert STREET	Other Industry	Regulation under CLM Act not required	-33.86674636	151.1772204



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
ROZELLE	BP Service Station	Corner Darling Street and Thornton STREET	Service Station	Regulation under CLM Act not required	-33.8591647	151.1716591
RUFUS RIVER	SA Water Depot - Rufus River	Old Wentworth STREET	Other Petroleum	Regulation under CLM Act not required	-34.04191512	141.2679475
RUSHCUTTERS BAY	d'Albora Marinas	1b New Beach ROAD	Other Industry	Contamination currently regulated under POEO Act	-33.87351297	151.2345082
RUTHERFORD	Rutherford Transpacific	11 Kyle STREET	Other Industry	Regulation under CLM Act not required	-32.71105203	151.500311
RUTHERFORD	Shell Coles Express Service Station Rutherford	118 New England HIGHWAY	Service Station	Regulation under CLM Act not required	-32.7208703	151.5394595
RUTHERFORD	Caltex Service Station	134-138 New England HIGHWAY	Service Station	Regulation under CLM Act not required	-32.7202589	151.5381526
RUTHERFORD	Transpacific Industrial Services/Nationwide Oil Pty Ltd	99 Kyle STREET	Chemical Industry	Regulation under CLM Act not required	-32.71262159	151.5013865
RYDALMERE	Caltex Service Station	309 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.81196193	151.0371185
RYDALMERE	Mitsubishi Electric	348 Victoria ROAD	Other Industry	Contamination currently regulated under CLM Act	-33.81040138	151.0392812
RYDALMERE	Rheem Australia	1 Alan STREET	Other Industry	Contamination formerly regulated under the CLM Act	-33.81545013	151.0295476
RYDALMERE	BP Service Station	265 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.8109483	151.0328101
RYDALMERE	Hunter Douglas	Victoria ROAD	Chemical Industry	Regulation under CLM Act not required	-33.81009112	151.0384732
RYDALMERE	United Petroleum (former 7-Eleven) Service Station Rydalmere	262-272 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.81006724	151.032377
RYDE	Shell Coles Express Ryde	45 Lane Cove ROAD	Service Station	Regulation under CLM Act not required	-33.80726028	151.109981
RYDE	Caltex Service Station	110 Lane Cove ROAD	Service Station	Regulation under CLM Act not required	-33.80142973	151.1137925
RYDE	7-Eleven (former Mobil) Service Station	326-328 Blaxland ROAD	Service Station	Regulation under CLM Act not required	-33.80242183	151.1004278
RYDE	Ryde Bus Depot	51 - 75 Buffalo ROAD	Other Petroleum	Regulation under CLM Act not required	-33.81679771	151.1225255
SANCTUARY POINT	United Service Station, Sanctuary Point	147 Larmer AVENUE	Service Station	Regulation under CLM Act not required	-35.09918861	150.6329537
SANDGATE	Caltex Service Station Sandgate	162 Maitland ROAD	Service Station	Regulation under CLM Act not required	-32.86501596	151.706161
SANDGATE	North Limited Storage Handling facility	Maitland ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-32.86598453	151.7012866
SANS SOUCI	7-Eleven (Former Mobil) Service Station	474 Rocky Point ROAD	Service Station	Regulation under CLM Act not required	-33.99088939	151.1333779
SANS SOUCI	Kendall Street Reserve	Lawson Street and Kendall STREET	Landfill	Under assessment	-33.99966431	151.13005
SANS SOUCI	Former Service Station	542-544 Rocky Point ROAD	Service Station	Contamination was addressed via the planning process (EP&A Act)	-33.99376148	151.1316131
SANS SOUCI	Former 7-Eleven Ramsgate	368 Rocky Point ROAD	Service Station	Contamination currently regulated under CLM Act	-33.98631668	151.135849
SCONE	Shell Coles Express Service Station	91- 93 Kelly STREET	Service Station	Contamination currently regulated under CLM Act	-32.04715941	150.8676346

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
SCONE	Scone Works Depot	220 Susan STREET	Other Petroleum	Regulation under CLM Act not required	-32.04444892	150.879152
SCONE	Mobil Scone Airport Elt	8 Walter Pye AVENUE	Other Petroleum	Regulation under CLM Act not required	-32.03596733	150.8323698
SCONE	BP - Former Depot	Scone St, Guernsey St & Susan STREET	Service Station	Contamination formerly regulated under the CLM Act	-32.04599284	150.8662046
SEVEN HILLS	7-Eleven (Former Mobil) Service Station Seven Hills	151 Prospect HIGHWAY	Service Station	Regulation under CLM Act not required	-33.76894646	150.9427004
SEVEN HILLS	Australia Post	3 Powers ROAD	Unclassified	Regulation under CLM Act not required	-33.77434009	150.9395495
SEVEN HILLS	Transport Infrastructure Development Corporation	1 Powers ROAD	Other Industry	Regulation under CLM Act not required	-33.77387442	150.9379787
SEVEN HILLS	BP-branded Jasbe Petroleum Service Station	156 Prospect HIGHWAY	Service Station	Regulation under CLM Act not required	-33.76906502	150.9414821
SEVEN HILLS	Caltex Service Station	38 Abbott ROAD	Service Station	Regulation under CLM Act not required	-33.76692649	150.9548271
SEVEN HILLS	Caltex Service Station Seven Hills	105 Station ROAD	Service Station	Regulation under CLM Act not required	-33.77435881	150.9448733
SEVEN HILLS	Australian Waste Oil Refineries	27 Powers ROAD	Other Industry	Contamination currently regulated under CLM Act	-33.77536127	150.9511122
SHELLY BEACH	Former Shelly Beach Landfill	Oaks AVENUE	Landfill	Regulation under CLM Act not required	-33.36700551	151.4913631
SHORTLAND	Former Astra St landfill	1, 2 & 28 Astra STREET	Landfill	Contamination currently regulated under CLM Act	-32.86716222	151.6966948
SHORTLAND	Tuxford Park landfill	10 King STREET	Landfill	Regulation under CLM Act not required	-32.87721139	151.6936837
SHORTLAND	Former Lorna St landfill	8/475 Sandgate ROAD	Landfill	Regulation under CLM Act not required	-32.87888726	151.7023245
SHORTLAND	7-Eleven (Former BP) Service Station	298-302 Sandgate ROAD	Service Station	Regulation under CLM Act not required	-32.8861645	151.6953912
SILVERWATER	Silverwater Landfill	Carnarvon ROAD	Landfill	Regulation under CLM Act not required	-33.83506394	151.033214
SILVERWATER	Vacant property	103-105 Silverwater ROAD	Other Industry	Regulation under CLM Act not required	-33.83831374	151.0472576
SILVERWATER	Storage Facility	54-58 Derby STREET	Unclassified	Under assessment	-33.83855869	151.0478649
SILVERWATER	Former Printing Facility	46-58 Derby STREET	Unclassified	Under assessment	-33.83855869	151.0478649
SILVERWATER	Silverwater Correctional Complex	Holker STREET	Landfill	Under assessment	-33.82944797	151.0567486
SINGLETON	BP Service Station Singleton	53 George (Cnr Macquarie St) STREET	Other Petroleum	Regulation under CLM Act not required	-32.56182325	151.1748054
SINGLETON	Singleton Gasworks	55-57 John STREET	Gasworks	Contamination currently regulated under CLM Act	-32.56774715	151.1658188
SINGLETON	Shell Coles Express Service Station	69-73 George STREET	Service Station	Regulation under CLM Act not required	-32.56297156	151.1755215
SINGLETON	Bulga Surface Operations	Broke ROAD	Other Industry	Regulation under CLM Act not required	-32.68325751	151.1206158
SINGLETON	Mobil Singleton Airport Elt	74B Range ROAD	Other Petroleum	Regulation under CLM Act not required	-32.60270846	151.1944828



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
SINGLETON	Putty Saw Mill	(via Singleton) Putty ROAD	Unclassified	Contamination currently regulated under CLM Act	-32.99958725	150.7111684
SINGLETON	NSW Mines Rescue Services - Singleton	6 Lachlan AVENUE	Other Industry	Regulation under CLM Act not required	-32.54537821	151.156584
SMITHFIELD	Caltex Smithfield	16-18 Tait STREET	Service Station	Regulation under CLM Act not required	-33.84596441	150.9435497
SMITHFIELD	Freestones	1 Hume ROAD	Other Petroleum	Regulation under CLM Act not required	-33.83577694	150.9310112
SMITHFIELD	Liquip International	13 Hume ROAD	Other Industry	Regulation under CLM Act not required	-33.83802635	150.9319034
SMITHFIELD	Coles Express (former Mobil) Service Station	678 The Horsley Drive, corner Smithfield ROAD	Service Station	Regulation under CLM Act not required	-33.85376154	150.9400104
SMITHFIELD	Former Landfill	Little STREET	Landfill	Contamination being managed via the planning process (EP&A Act)	-33.85025253	150.9411561
SOUTH ALBURY	BP Border Service Station	Corner Ebdon Street and Wodonga PLACE	Service Station	Contamination currently regulated under CLM Act	-36.08875942	146.9093882
SOUTH BOWENFELS	Shell Coles Express Service Station	Lot 1 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.50589001	150.1238487
SOUTH COOGEE	Caltex South Coogee Service Station	169-173 Malabar ROAD	Service Station	Regulation under CLM Act not required	-33.93233184	151.2574377
SOUTH GRAFTON	Shell Coles Express Service Station	91 Bent STREET	Service Station	Regulation under CLM Act not required	-29.70605829	152.9400329
SOUTH GRAFTON	Former United (former Mobil) Service Station	Corner Pacific Highway and Charles STREET	Service Station	Regulation under CLM Act not required	-29.70814828	152.9412928
SOUTH GRAFTON	Former Caltex Service Station	46-58 Schwinghammer STREET	Service Station	Regulation under CLM Act not required	-29.71128273	152.9458313
SOUTH GRAFTON	Former Caltex Depot South Grafton	72-82 Swallow ROAD	Other Petroleum	Regulation under CLM Act not required	-29.73168549	152.944024
SOUTH GRAFTON	Caltex Service Station	Pacific Hwy Cnr Gwyder HIGHWAY	Service Station	Regulation under CLM Act not required	-29.70739015	152.9425508
SOUTH KEMPSEY	Caltex Service Station	52 Lachlan STREET	Service Station	Regulation under CLM Act not required	-31.09361084	152.8370796
SOUTH LISMORE	North Coast Petroleum (Former Mobil) Depot Lismore	19-21 Elliot ROAD	Other Petroleum	Regulation under CLM Act not required	-28.81212046	153.2661935
SOUTH LISMORE	Former Mobil Service Station	126 - 128 Union STREET	Service Station	Regulation under CLM Act not required	-28.81242175	153.267541
SOUTH LISMORE	Caltex Service Station	237 Union STREET	Service Station	Regulation under CLM Act not required	-28.82052708	153.2648111
SOUTH LISMORE	Former Mobil Depot	26-32 Phyllis STREET	Other Petroleum	Regulation under CLM Act not required	-28.81005206	153.2660073
SOUTH MURWILLUMBAH	Former Caltex Depot	39 Lundberg DRIVE	Service Station	Regulation under CLM Act not required	-28.332622	153.4212884
SOUTH MURWILLUMBAH	Caltex Service Station	1-7 Buchanan (Cnr Tweed Valley Way) STREET	Service Station	Regulation under CLM Act not required	-28.32687988	153.4093274
SOUTH MURWILLUMBAH	Former Mobil Depot	45 Wardrop STREET	Other Petroleum	Regulation under CLM Act not required	-28.33421395	153.3993772
SOUTH NOWRA	Caltex South Nowra	100 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.90516081	150.6029621
SOUTH PENRITH	7-Eleven Service Station	45 Aspen STREET	Service Station	Regulation under CLM Act not required	-33.77727694	150.7107228

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
SOUTH TAMWORTH	Caltex Service Station	2 Kathleen Street, corner Kent STREET	Service Station	Regulation under CLM Act not required	-31.10361712	150.9186343
SOUTH WENTWORTHVILLE	Aldi Stores Development	331-339 Great Western HIGHWAY	Metal Industry	Regulation under CLM Act not required	-33.81605854	150.9697429
SOUTH WENTWORTHVILLE	Caltex Service Station	313 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.81643692	150.9718802
SOUTH WEST ROCKS	Former Trial Bay Caltex Depot	Phillip DRIVE	Other Petroleum	Regulation under CLM Act not required	-30.89190078	153.0573056
SOUTH WEST ROCKS	Former Shell Trial Bay Depot	Phillip DRIVE	Other Petroleum	Regulation under CLM Act not required	-30.89273836	153.0612772
SOUTH WEST ROCKS	Residential area and Reserve opposite Former Caltex terminal	Phillip DRIVE	Other Petroleum	Regulation under CLM Act not required	-30.89172594	153.0573164
SPRINGVALE	Springvale Colliery	Castlereagh HIGHWAY	Other Industry	Regulation under CLM Act not required	-33.40334736	150.1070462
ST CLAIR	7-Eleven (former Mobil) Service Station	4 Endeavour AVENUE	Service Station	Regulation under CLM Act not required	-33.79430926	150.7885793
ST IVES	7-Eleven (former Mobil) St Ives Service Station	157-159 Mona Vale Road, corner Putarri AVENUE	Service Station	Regulation under CLM Act not required	-33.73265301	151.1563899
ST IVES	Caltex Service Station	452 Mona Vale ROAD	Service Station	Regulation under CLM Act not required	-33.70752272	151.187545
ST IVES	Caltex Service Station	164 Mona Vale ROAD	Service Station	Regulation under CLM Act not required	-33.7307595	151.1570462
ST IVES	Caltex Service Station	363 Mona Vale ROAD	Service Station	Regulation under CLM Act not required	-33.7168971	151.1735263
ST IVES	Shell Service Station	179-181 Mona Vale ROAD	Service Station	Contamination currently regulated under CLM Act	-33.73124859	151.1575827
ST MARYS	Former Woolworths Service Station	120-128 Forrester ROAD	Service Station	Regulation under CLM Act not required	-33.75525115	150.7752897
ST MARYS	7-Eleven (former Mobil) Service Station	2 Christie STREET	Service Station	Regulation under CLM Act not required	-33.74790843	150.7767667
ST MARYS	7-Eleven (former Mobil) Service Station	2 Wilson STREET	Service Station	Regulation under CLM Act not required	-33.77790415	150.771689
ST MARYS	Solveco	38 LINKS ROAD	Other Industry	Contamination currently regulated under CLM Act	-33.73873	150.771747
ST MARYS	Integral Energy Mt Druitt Transmission Substation	69 Kurrajong North ROAD	Other Industry	Regulation under CLM Act not required	-33.76376093	150.7921691
ST MARYS	Caltex St Marys Service Station	Wordoo St Cnr Forrester ROAD	Service Station	Regulation under CLM Act not required	-33.75334263	150.7755489
ST MARYS	Chemcolour Industries Ltd	19-25 Anne STREET	Chemical Industry	Under assessment	-33.75027071	150.7725397
ST MARYS	Old Drycleaning location	1-7 Queen STREET	Other Industry	Under assessment	-33.762246	150.774427
ST PETERS	Cooks River Rail Terminal	20 Canal ROAD	Unclassified	Regulation under CLM Act not required	-33.91943986	151.1726689
ST PETERS	Camdenville Park	May STREET	Other Industry	Regulation under CLM Act not required	-33.90911815	151.176951
ST PETERS	Former Tidyburn Facility	53 Barwon Park ROAD	Chemical Industry	Contamination formerly regulated under the CLM Act	-33.9130091	151.1809912
ST PETERS	BP Express Service Station	2 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.90982281	151.1809936

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
ST PETERS	Former Industrial Manufacturing Facility (Taubman's Paints)	75 Mary STREET	Other Industry	Regulation under CLM Act not required	-33.91307297	151.1731383
STANMORE	125 Corunna Road	125 Corunna ROAD	Unclassified	Regulation under CLM Act not required	-33.88937382	151.1644589
STRATHFIELD	7-Eleven (former Mobil) Service Station	577 Liverpool ROAD	Service Station	Regulation under CLM Act not required	-33.88736091	151.0743474
STRATHFIELD SOUTH	Former Landfill Site	7-9 Dunlop STREET	Landfill	Regulation under CLM Act not required	-33.89509698	151.0796751
STROUD	Stroud Fuel Supplies (Former Caltex) Service Station	1 Cowper STREET	Service Station	Regulation under CLM Act not required	-32.39092749	151.9563089
SUFFOLK PARK	BP Service Station	207-209 Broken Head ROAD	Service Station	Regulation under CLM Act not required	-28.68800088	153.6083821
SUFFOLK PARK	Suffolk Park dip site	Cnr Broken Head Road & Beech DRIVE	Cattle Dip	Regulation under CLM Act not required	-28.6874242	153.6072824
SURRY HILLS	Woolworths Petrol Surry Hills	475 Cleveland STREET	Service Station	Regulation under CLM Act not required	-33.89203644	151.216217
SURRY HILLS	Former Legion Cabs (Trading) Cooperative	81 & 81A (Formerly 69 - 81) Foveaux STREET	Service Station	Regulation under CLM Act not required	-33.88470082	151.2107944
SURRY HILLS	Ausgrid Road Reserve	Mary STREET	Other Industry	Regulation under CLM Act not required	-33.88292195	151.2095176
SUTHERLAND	United Service Station and Sutherland Reservoir	1 to 3 Oxford STREET	Service Station	Contamination currently regulated under CLM Act	-34.029532	151.0579906
SUTHERLAND	7-Eleven Service Station	693 Old Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.02976735	151.0588789
SUTTON FOREST	Coles Express Sutton Forest West	Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-34.60808989	150.2250592
SWANSEA	Caltex Service Station	126 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.08811841	151.6381764
SWANSEA	Swansea 1 - Wastewater Pumping Station	137 and 137a Northcote AVENUE	Other Industry	Under assessment	-33.09745672	151.6473257
SYDENHAM	SRA Land	117 Railway PARADE	Other Industry	Regulation under CLM Act not required	-33.91560723	151.1656846
SYDENHAM	Sydenham XPT Maintenance Facility	Way STREET	Other Industry	Regulation under CLM Act not required	-33.91698468	151.1614089
SYDNEY	Interpro House (OSP 46581)	447 Kent STREET	Other Petroleum	Regulation under CLM Act not required	-33.87225413	151.204761
SYDNEY OLYMPIC PARK	RMS Western Precinct	14A-14E and 16 Hill ROAD	Other Petroleum	Regulation under CLM Act not required	-33.82239777	151.0758664
SYDNEY OLYMPIC PARK	Haslams Creek South Area 3	At Kronos Hill, Kevin Coombes AVENUE	Landfill	Contamination formerly regulated under the CLM Act	-33.84113059	151.0602966
SYDNEY OLYMPIC PARK	Bicentennial Park	Bicentennial DRIVE	Landfill	Ongoing maintenance required to manage residual contamination	-33.84456248	151.0788116
SYDNEY OLYMPIC PARK	Former Golf Driving Range Landfill	Sarah Durack AVENUE	Landfill	Ongoing maintenance required to manage residual contamination	-33.85358517	151.0713987
SYDNEY OLYMPIC PARK	Kronos Hill Landfill	Kevin Coombes AVENUE	Landfill	Ongoing maintenance required to manage residual contamination	-33.84014442	151.0649521
SYDNEY OLYMPIC PARK	Wilson Park (Former oil gas plant site)	Newington ROAD	Gasworks	Ongoing maintenance required to manage residual contamination	-33.82633586	151.0534322
SYDNEY OLYMPIC PARK	Woo-la-ra Landfill	Hill ROAD	Landfill	Ongoing maintenance required to manage residual contamination	-33.82695807	151.07282

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
SYDNEY OLYMPIC PARK	Aquatic Centre Carpark Landfill	Shane Gould AVENUE	Landfill	Ongoing maintenance required to manage residual contamination	-33.85093439	151.0656713
SYDNEY OLYMPIC PARK	Blaxland Common Landfill	Jamieson STREET	Landfill	Ongoing maintenance required to manage residual contamination	-33.82638382	151.05972
SYLVANIA	Caltex Service Station - Sylvania Heights	414-416 Princes HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-34.02361051	151.0895394
SYLVANIA	Caltex Service Station	61 Port Hacking ROAD	Service Station	Regulation under CLM Act not required	-34.0140089	151.104212
TALBINGO	Old Town Landfill	Bridle STREET	Landfill	Regulation under CLM Act not required	-35.59018237	148.3041771
TALBINGO	T3 Spoil dump and adjoining river sediments	Off Snowy Mountains HIGHWAY	Landfill	Contamination formerly regulated under the CLM Act	-35.6177268	148.2926158
TALBINGO	Former grit blasting site	Old Damsite ROAD	Other Industry	Regulation under CLM Act not required	-35.60894551	148.3030165
TAMINDA	Mobil Depot	9 Hinkler ROAD	Other Petroleum	Regulation under CLM Act not required	-31.09584286	150.9040493
TAMWORTH	Caltex Tamworth Service Station	109 Gunnedah ROAD	Service Station	Regulation under CLM Act not required	-31.09723226	150.8955299
TAMWORTH	Curlew Crescent	19-29 Curlew CRESCENT	Metal Industry	Regulation under CLM Act not required	-31.06963607	150.9069306
TAMWORTH	Coles Express Tamworth	251 - 253 Goonoo Goonoo ROAD	Service Station	Contamination currently regulated under CLM Act	-31.11058167	150.9236721
TAMWORTH	Former Service Station, Fitzpatrick Super Fund, Tamworth	210 Goonoo Goonoo ROAD	Service Station	Regulation under CLM Act not required	-31.10613594	150.9234143
TAMWORTH	Gunnedah Road Site	49 GUNNEDAH ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-31.09574904	150.9021583
TAMWORTH	Elovera Former Sheep Dip	730 Ascot Calala ROAD	Cattle Dip	Regulation under CLM Act not required	-31.1801846	150.962897
TAMWORTH	Housing NSW	29 -33 White STREET	Other Petroleum	Regulation under CLM Act not required	-31.0915651	150.9357811
TAMWORTH	BP Tamworth Service Station and Depot	27-29 Gunnedah ROAD	Service Station	Under assessment	-31.09642128	150.9058193
TAMWORTH	Former Mobil Service Station	373-375 Armidale ROAD	Service Station	Regulation under CLM Act not required	-31.10122679	150.9441341
TAMWORTH	Kensell's Mitsubishi	11-14 Kable AVENUE	Other Petroleum	Regulation under CLM Act not required	-31.08921565	150.9273063
TAMWORTH	Caltex Star Tamworth	21 White STREET	Service Station	Regulation under CLM Act not required	-31.09255137	150.9341709
TAMWORTH	Former Service Station Tamworth	(Cnr Scott Rd) 254-256 Goonoo Goonoo ROAD	Service Station	Regulation under CLM Act not required	-31.1118945	150.9228523
TARCUTTA	Mobil Service Station	(Hume Highway) 32 Sydney STREET	Service Station	Contamination formerly regulated under the CLM Act	-35.2772942	147.73574
TAREE	Caltex Taree	12 Pitt STREET	Service Station	Regulation under CLM Act not required	-31.90551738	152.4783334
TAREE	Former Caltex Depot	44 Stevenson STREET	Other Petroleum	Regulation under CLM Act not required	-31.90563595	152.4640848
TAREE	Former BP Service Station (Reliance Petroleum)	150 Manning River DRIVE	Service Station	Regulation under CLM Act not required	-31.93842026	152.4682056
TAREE	Former Shell Depot	53-55 Stevenson STREET	Other Petroleum	Regulation under CLM Act not required	-31.90514622	152.4649706



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
TAREE	United Service Station and Former Mobil Depot	85 Muldoon Street, corner Grey Gum ROAD	Service Station	Regulation under CLM Act not required	-31.89744109	152.4508569
TAREE	Caltex Service Station	104-106 Commerce STREET	Service Station	Regulation under CLM Act not required	-31.90720519	152.4500926
TAREE	Footpath in front of the former BP service station	53-55 Victoria STREET	Service Station	Regulation under CLM Act not required	-31.91015653	152.4659073
TAREN POINT	Former Oyster Farmer	(formerly 98 Woodlands Rd) 2R Alexander AVENUE	Other Industry	Contamination being managed via the planning process (EP&A Act)	-34.01698788	151.1247494
TAREN POINT	Former Oyster Farmer	1A Atkinson ROAD	Other Industry	Regulation under CLM Act not required	-34.02081803	151.1283282
TAREN POINT	Former manufacturing site	46-50 Bay ROAD	Other Industry	Regulation under CLM Act not required	-34.0236184	151.1231649
TAREN POINT	Mangrove Lane Cycle pathway	Mangrove LANE	Unclassified	Regulation under CLM Act not required	-34.02404025	151.1324783
TAREN POINT	Caltex Service Station	114 Taren Point ROAD	Service Station	Regulation under CLM Act not required	-34.02065958	151.1218938
TAREN POINT	Shell Coles Express Service Station	99-103 Parraweena ROAD	Service Station	Regulation under CLM Act not required	-34.02630233	151.1200897
TAREN POINT	Redevelopment Site	25 Bay ROAD	Other Industry	Under assessment	-34.021451	151.12813
TELARAH	Former Ausgrid Depot	Green STREET	Other Industry	Regulation under CLM Act not required	-32.7276446	151.5269745
TELARAH	ACIRL	5 Junction STREET	Other Industry	Regulation under CLM Act not required	-32.73457183	151.5400128
TEMPE	Tempe Depot	1a Gannon STREET	Other Petroleum	Regulation under CLM Act not required	-33.92408255	151.1596469
TEMPE	Caltex Service Station	775 Princes HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-33.9253681	151.1596532
TEMPE	Former Tempe Tip	South STREET	Landfill	Contamination currently regulated under CLM Act	-33.9255792	151.1668117
TEMPE	Railcorp Site Renwick Street	Renwick STREET	Other Industry	Regulation under CLM Act not required	-33.91997709	151.1576058
TERALBA	Lake Macquarie Teralba Sanitary Depot	Griffen ROAD	Landfill	Regulation under CLM Act not required	-32.9372059	151.6214528
TERALBA	Teralba, Lucky's Scrap Metal	21 Racecourse ROAD	Metal Industry	Contamination currently regulated under CLM Act	-32.946805	151.61698
TERANIA CREEK	Former Izzards Cattle Tick Dip	Wallace ROAD	Cattle Dip	Contamination formerly regulated under the CLM Act	-28.65425776	153.2767438
THIRLMERE	Thirlmere Rail Heritage Museum	10 Barbour ROAD	Other Industry	Regulation under CLM Act not required	-34.20689245	150.5693902
THORNLEIGH	Caltex Thornleigh Service Station	192-198 Pennant Hills (Cnr Duffy Ave) ROAD	Service Station	Regulation under CLM Act not required	-33.72660793	151.08364
THORNLEIGH	Coles Express Service Station Thornleigh	188 - 190 Pennant Hills ROAD	Service Station	Regulation under CLM Act not required	-33.72502184	151.0850569
THORNTON	Energy Australia Thornton Pole Yard	55 Weakleys DRIVE	Other Industry	Regulation under CLM Act not required	-32.79973875	151.6374998
TIGHES HILL	Holcim Australia Cement Batching Plant	340 Industrial DRIVE	Other Industry	Regulation under CLM Act not required	-32.90532418	151.7574857
TIGHES HILL	SRA Land	73 Elizabeth STREET	Unclassified	Regulation under CLM Act not required	-32.90795794	151.754631



Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
TIGHES HILL	Former Ampol Depot	94 Elizabeth STREET	Other Petroleum	Regulation being finalised	-32.90658137	151.757239
TIGHES HILL	Former Mobil Terminal	110 Elizabeth STREET	Other Petroleum	Contamination formerly regulated under the CLM Act	-32.90600406	151.7586907
TOCUMWAL	Former Mobil Depot	250 Murray STREET	Other Petroleum	Regulation under CLM Act not required	-35.79180653	145.5648214
TOCUMWAL	Former Mobil Depot	79-83 Deniliquin ROAD	Other Petroleum	Regulation under CLM Act not required	-35.80914914	145.5585528
TOMAGO	Balcombe Sweat Furnace	26 Laverick AVENUE	Metal Industry	Regulation under CLM Act not required	-32.82557395	151.7056416
TOMAGO	Minmet	25 School DRIVE	Metal Industry	Contamination currently regulated under POEO Act	-32.8301553	151.7300603
TOMAGO	RZM Site - Tomago	1877 Pacific HIGHWAY	Other Industry	Under assessment	-32.81419433	151.6985159
TOMERONG	Log Cabin Service Station (United Petroleum)	D1300 Princes HIGHWAY	Service Station	Under assessment	-35.01820959	150.5779687
TOONGABBIE	7-Eleven (Former Mobil) Service Station Toongabbie	3 Metella ROAD	Service Station	Regulation under CLM Act not required	-33.78692357	150.9462837
TOORMINA	Caltex Service Station	2 Minorca PLACE	Service Station	Regulation under CLM Act not required	-30.35229568	153.0906606
TORONTO	Coles XP (Former Mobil) Toronto Service Station	133 - 137 Cary (Cnr Thorne St) STREET	Service Station	Regulation under CLM Act not required	-33.01187681	151.5930879
TORONTO	BP Toronto Service Station	132 Cary (Cnr Donnelly Ave) STREET	Service Station	Regulation under CLM Act not required	-33.01144673	151.5937863
TORONTO	Toronto Hotel	74 Victory PARADE	Unclassified	Regulation under CLM Act not required	-33.01214835	151.5958127
TORONTO	Caltex Service Station	147 Cary STREET	Service Station	Regulation under CLM Act not required	-33.01288007	151.5928388
TOUKLEY	Former Shell Toukley Autoport	211 Main ROAD	Service Station	Regulation under CLM Act not required	-33.26383791	151.5386268
TOUKLEY	Independent (Mobil) Toukley Service Station	287 Main ROAD	Service Station	Regulation under CLM Act not required	-33.26469166	151.5462414
TRANGIE	Caltex Service Station	(Mitchell Hwy) 76 Narromine STREET	Service Station	Regulation under CLM Act not required	-32.03234676	147.985164
TUGGERAH	BP Tuggerah	100 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.30578167	151.4198083
TUMBARUMBA	Former Caltex Depot	150 Albury STREET	Other Petroleum	Regulation under CLM Act not required	-35.77024081	147.9927182
TUMBI UMBI	Former Tumbi Landfill	140 Bellevue ROAD	Landfill	Regulation under CLM Act not required	-33.3993472	151.456471
TUMUT	CSR Blue Dam	Jepsen AVENUE	Other Industry	Regulation being finalised	-35.30098337	148.1958308
TUMUT	CSR Railway cutting	Jepsen AVENUE	Unclassified	Regulation being finalised	-35.30422002	148.1942579
TUMUT	Former Telstra Depot	22-26 Carey STREET	Other Industry	Regulation under CLM Act not required	-35.29873079	148.2191122
TUROSS HEAD	Tern Inn Restaurant (abandoned UPSS)	2 Trafalgar ROAD	Service Station	Regulation under CLM Act not required	-36.05871059	150.1308443
TURRAMURRA	7-Eleven (former Mobil) Service Station Turramurra	1408 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.73326389	151.1264194

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
TURRAMURRA	Woolworths (Former Mobil) Service Station	1233 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.73317594	151.1313195
TURRELLA	Tulloch Australia Pty Limited	61 Turrella STREET	Chemical Industry	Contamination currently regulated under CLM Act	-33.92857213	151.1475387
TURRELLA	Rail Corridor and adjacent industrial land	Other	Unclassified	Under assessment	-33.928742	151.149291
TWEED HEADS	Former Mobil Quix Service Station	60 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-28.20143775	153.5445381
TWEED HEADS	Francis Street Road Reserve adjacent to 79-81 Wharf Street,	79-81 Wharf STREET	Other Petroleum	Regulation under CLM Act not required	-28.17351959	153.542262
TWEED HEADS SOUTH	Former BP Depot	142 Minjungbal DRIVE	Other Petroleum	Regulation under CLM Act not required	-28.20860702	153.5455932
TWEED HEADS SOUTH	Coles Express Service Station	Corner Minjungbal Drive and Heffron STREET	Service Station	Regulation under CLM Act not required	-28.19459987	153.5419978
TWEED HEADS SOUTH	Woolworths Plus Petrol (Woolworths Caltex Tweed Heads	98-102 Pacific (100 Minjungbal Drive) HIGHWAY	Service Station	Regulation under CLM Act not required	-28.20488521	153.5448675
TWEED HEADS WEST	Caltex Service Station	96 to 98 Kennedy DRIVE	Service Station	Regulation being finalised	-28.1871486	153.5229866
TYAGARAH	Tyagarah Airstrip	25 Staceys WAY	Other Petroleum	Under assessment	-28.59553079	153.5469165
ULAN	Ulan Coal Mine	4505 Ulan ROAD	Other Industry	Regulation under CLM Act not required	-32.25620603	149.7558075
ULLADULLA	Coles Express Ulladulla	153 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-35.36288274	150.47272
ULLADULLA	Woolworths Petrol Station	155-157 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-35.36316263	150.4725668
ULLADULLA	Caltex Service Station	62A Deering Street, corner Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-35.36276828	150.473578
ULTIMO	Shell Coles Express Service Station	387-429 Wattle STREET	Service Station	Regulation under CLM Act not required	-33.88138825	151.1966791
UNANDERRA	Endeavour Energy Springhill Field Service Centre	195 Five Island ROAD	Other Industry	Regulation under CLM Act not required	-34.45837706	150.8598825
UNANDERRA	BlueScope Stainless Steel	13 Marley PLACE	Metal Industry	Contamination currently regulated under CLM Act	-34.44959798	150.8571632
UNANDERRA	Unanderra Weekend Detention Centre	34-40 Lady Penryhn DRIVE	Landfill	Regulation under CLM Act not required	-34.4620226	150.8473821
UNANDERRA	Veolia Environmental Services	9 Waynote PLACE	Other Industry	Regulation under CLM Act not required	-34.46042393	150.863232
UNANDERRA	Caltex Service Station	86-98 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.45414951	150.845165
UNANDERRA	Former Prime Service Station and adjoining lands	41-49 Princes HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-34.45056105	150.8490833
URALLA	Caltex Service Station	103 Bridge STREET	Service Station	Regulation under CLM Act not required	-30.64524911	151.4934484
URALLA	Phoenix Foundry	44 Duke STREET	Metal Industry	Regulation under CLM Act not required	-30.65093272	151.5004479
URANQUINTY	Former Caltex Depot Kapooka (Wagga Wagga)	6876 Olympic (Uranquinty Rd) HIGHWAY	Service Station	Regulation under CLM Act not required	-35.15319793	147.3085469
URUNGA	Former Antimony Process plant	Hillside DRIVE	Chemical Industry	Contamination currently regulated under CLM Act	-30.50422942	153.0132011

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VALENTINE	BP Express Service Station	855 Macquarie DRIVE	Service Station	Regulation under CLM Act not required	-33.00801109	151.6425806
VALENTINE	Valentine Public School	Tallawalla ROAD	Unclassified	Regulation under CLM Act not required	-33.0091613	151.6423231
VILLAWOOD	Nepotian (Former Toll) Site	110A Christina ROAD	Other Industry	Under assessment	-33.87919117	150.9812193
VILLAWOOD	Former Defence Site	29 Biloela STREET	Landfill	Regulation under CLM Act not required	-33.88782978	150.9886275
VILLAWOOD	Former Siemens/Westinghouse	49 Miowera ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-33.87641909	150.9836746
VILLAWOOD	Former Orica Crop Care	2 Christina ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-33.880329	150.9896329
VILLAWOOD	PPG Industries	9 Birmingham AVENUE	Chemical Industry	Regulation under CLM Act not required	-33.87800757	150.9887929
VILLAWOOD	Former Electrical Component Manufacturer	66 Christina ROAD	Other Industry	Ongoing maintenance required to manage residual contamination	-33.88018315	150.9838773
VILLAWOOD	Ettason Villawood Site	2A Birmingham AVENUE	Chemical Industry	Under assessment	-33.879144	150.982761
VINEYARD	Shell Coles Express Service Station	731 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.65780463	150.8753245
WAGGA WAGGA	Caltex Service Station	170 Fitzmaurice STREET	Service Station	Regulation under CLM Act not required	-35.10289587	147.3679002
WAGGA WAGGA	Former BP Service Station	31 Bourke STREET	Service Station	Regulation under CLM Act not required	-35.12626628	147.3547199
WAGGA WAGGA	Caltex (former Mobil) Service Station	106 Edward STREET	Service Station	Regulation under CLM Act not required	-35.11910909	147.3682364
WAGGA WAGGA	Former Caltex Depot	60 Lake Albert DRIVE	Service Station	Regulation under CLM Act not required	-35.12316794	147.37724
WAGGA WAGGA	Former Mobil Depot Wagga Wagga	97-99 Coleman STREET	Other Petroleum	Regulation under CLM Act not required	-35.12173871	147.3576651
WAGGA WAGGA	Ashmont Autoport	Cnr Tobruk Street and Bardia STREET	Service Station	Regulation under CLM Act not required	-35.12517373	147.329919
WAGGA WAGGA	Former Caltex Service Station	343 Hammond AVENUE	Service Station	Regulation under CLM Act not required	-35.12420793	147.4157959
WAGGA WAGGA	Caltex Service Station	56 - 60 Docker St STREET	Service Station	Regulation under CLM Act not required	-35.11737947	147.3558145
WAGGA WAGGA	Former Iron Foundry	212-230 Hammond STREET	Metal Industry	Regulation under CLM Act not required	-35.12605478	147.4045461
WAGGA WAGGA	Coles Express Wagga Wagga	353-355 Edward STREET	Service Station	Regulation under CLM Act not required	-35.11606625	147.3509339
WAGGA WAGGA	Former Wiradjuri landfill	Narrung STREET	Landfill	Under assessment	-35.09628532	147.3619535
WAGGA WAGGA	Former Gasworks	54 Chaston STREET	Gasworks	Contamination currently regulated under CLM Act	-35.12262069	147.3482778
WAGGA WAGGA	Former Gasworks	Cnr Tarcutta Street and Cross STREET	Gasworks	Contamination currently regulated under CLM Act	-35.10871183	147.3737933
WAGGA WAGGA	BP Wagga Wagga	180 Edward STREET	Service Station	Regulation under CLM Act not required	-35.11850802	147.3639619
WAGGA WAGGA	Former Dry Cleaning Facility	183 Fitzmaurice STREET	Other Industry	Contamination currently regulated under CLM Act	-35.10209987	147.3683852

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WAHROONGA	Coles Express Wahroonga	1601 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.71945571	151.1163002
WAHROONGA	7-Eleven Service Station	1579 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.71974617	151.1168106
WAITARA	Caltex Service Station	59-61 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.71064349	151.1024644
WALGETT	Former Shell Depot	Castlereagh HIGHWAY	Other Petroleum	Regulation under CLM Act not required	-30.00861179	148.1239938
WALLERAWANG	Wallerawang Power Station	1 Main STREET	Other Petroleum	Regulation under CLM Act not required	-33.40339296	150.0855101
WALLERAWANG	Lidsdale Coal Loading Facility	Main STREET	Other Industry	Regulation under CLM Act not required	-33.39996523	150.0737717
WALLSEND	Caltex Maryland Service Station Wallsend	41 Minmi ROAD	Service Station	Regulation under CLM Act not required	-32.88967866	151.6619253
WALLSEND	Coles Express Wallsend East	15 Thomas STREET	Service Station	Regulation under CLM Act not required	-32.90719444	151.6693426
WALLSEND	OneSteel Recycling	64-80 Sandgate ROAD	Metal Industry	Regulation under CLM Act not required	-32.89425477	151.6799648
WALLSEND	Ausgrid Wallsend Depot	Abbott STREET	Other Industry	Regulation under CLM Act not required	-32.90162796	151.6857267
WALLSEND	Cnr of Douglas Street and 111 Newcastle Road Wallsend	111 Newcastle ROAD	Metal Industry	Under assessment	-32.90414175	151.6830784
WAMBERAL	Caltex Service Station	654 The Entrance ROAD	Service Station	Regulation under CLM Act not required	-33.42338668	151.4375685
WANGI WANGI	Myuna Colliery	Wangi Point ROAD	Other Industry	Regulation under CLM Act not required	-33.06139532	151.5697186
WARATAH	Waratah Area Health	Turton ROAD	Unclassified	Regulation under CLM Act not required	-32.90961233	151.7260867
WARATAH	Waratah former Gasworks	Turton and Georgetown ROADS	Gasworks	Under assessment	-32.9057763	151.7270033
WARILLA	Woolworths Petrol Warilla	43 -57 Shellharbour ROAD	Service Station	Regulation under CLM Act not required	-34.5470966	150.863748
WARKWORTH	Emulsion Plant, Dyno Nobel Asia Pacific Pty Ltd	186 Long Point ROAD	Chemical Industry	Regulation under CLM Act not required	-32.5781708	151.0834387
WARKWORTH	United Colliery	Jerrys Plains ROAD	Other Industry	Regulation under CLM Act not required	-32.5654356	150.9916698
WARNERS BAY	Caltex Service Station	55 King STREET	Service Station	Regulation under CLM Act not required	-32.97418806	151.6476184
WARNERS BAY	7-Eleven (former Mobil) Service Station	393 Hillsborough ROAD	Service Station	Regulation under CLM Act not required	-32.9659363	151.6543264
WARNERS BAY	Historically Filled Land	41-43 Charles STREET	Unclassified	Regulation under CLM Act not required	-32.97340461	151.6464383
WARNERVALE	Former Timber Treatment Plant	Aldenham and Railway ROADS	Other Industry	Contamination formerly regulated under the CLM Act	-33.24732018	151.4469037
WARRAGAMBA	Warragamba Dam Viewing Platform	Eighteenth STREET	Unclassified	Regulation under CLM Act not required	-33.88546354	150.6024501
WARRAGAMBA	Megarrity's Creek Site	Weir ROAD	Unclassified	Regulation under CLM Act not required	-33.892067	150.590225
WARRAWONG	Caltex Service Station	75-77 King STREET	Service Station	Regulation under CLM Act not required	-34.49037817	150.888802



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WARREN	Former Shell Depot	8 Dubbo STREET	Other Petroleum	Regulation under CLM Act not required	-31.69379262	147.8308088
WARREN	Caltex Warren Service Station	1 Coonamble ROAD	Service Station	Regulation under CLM Act not required	-31.69508383	147.8405578
WARREN	Former Mobil Warren Depot	16 Dubbo STREET	Other Petroleum	Contamination currently regulated under CLM Act	-31.6943058	147.8314606
WARWICK FARM	Warwick Farm Public School	95 Lawrence Hargrave ROAD	Landfill	Under assessment	-33.91050532	150.9302197
WATERLOO	Proposed Construction Site	2 John STREET	Other Industry	Regulation under CLM Act not required	-33.89989686	151.2010324
WATERLOO	Waverley Woollahra Process Plant	355 Botany ROAD	Other Industry	Regulation under CLM Act not required	-33.9063092	151.2042672
WATERLOO	Shell Coles Express Service Station	867-877 South Dowling STREET	Service Station	Regulation under CLM Act not required	-33.90179774	151.2143789
WATERLOO	Lawrence Dry Cleaners	887-893 Bourke STREET	Unclassified	Contamination currently regulated under CLM Act	-33.89897433	151.2101436
WATERLOO	Diversity Waterloo	1-13 Archibald AVENUE	Other Industry	Under assessment	-33.90204305	151.2097328
WATERLOO	Iconic (Former Chubb Factory) Waterloo	830-838 Elizabeth STREET	Other Industry	Regulation under CLM Act not required	-33.90227718	151.2060305
WATERLOO	22-24 Archibald Avenue	22-24 Archibald AVENUE	Other Petroleum	Under assessment	-33.90263766	151.2132105
WAUCHOPE	Expressway Spares UST	3 Sancrox ROAD	Other Petroleum	Regulation under CLM Act not required	-31.44421922	152.8218723
WAUCHOPE	Former Shell Depot	56-64 High STREET	Other Petroleum	Regulation under CLM Act not required	-31.45804845	152.7314151
WAUCHOPE	Wauchope Service Station	57 High STREET	Service Station	Regulation under CLM Act not required	-31.45737022	152.7305018
WAUCHOPE	Former Timber Treatment Site	Blackbutt DRIVE	Other Industry	Regulation under CLM Act not required	-31.46575645	152.7228555
WAUCHOPE	Shell Coles Express Service Station	64 High STREET	Service Station	Regulation under CLM Act not required	-31.45764495	152.7315975
WAUCHOPE	Wauchope Public Primary School	2 Waugh STREET	Landfill	Regulation under CLM Act not required	-31.4556387	152.7295455
WAVERTON	SRA Land	95 Bay ROAD	Unclassified	Contamination formerly regulated under the CLM Act	-33.83716728	151.1969497
WAVERTON	Berry's Bay Woodley's Marina	1 Balls Head DRIVE	Other Industry	Contamination formerly regulated under the POEO Act	-33.84441851	151.1947433
WAVERTON	Oyster Cove AGL	2 King STREET	Gasworks	Ongoing maintenance required to manage residual contamination	-33.83637995	151.193541
WELLINGTON	Former Caltex Service Station	124-128 Lee STREET	Service Station	Regulation under CLM Act not required	-32.55082729	148.9411537
WELLINGTON	BP Wellington Service Station	35A Maxwell STREET	Service Station	Under assessment	-32.55835121	148.9447284
WELLINGTON	Woolworths Petrol Wellington	79 Lee STREET	Service Station	Under assessment	-32.54874227	148.9408531
WENTWORTH	Caltex - Wentworth	110 Adams STREET	Service Station	Regulation under CLM Act not required	-34.1024927	141.9160539
WENTWORTH FALLS	Bodington Hospital	Bodington DRIVE	Unclassified	Contamination formerly regulated under the CLM Act	-33.73201608	150.3874102



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WENTWORTH POINT	RMS Eastern Precinct	3-7 Burroway ROAD	Other Petroleum	Regulation under CLM Act not required	-33.8233882	151.0815668
WENTWORTH POINT	Former TNT Express	23 Bennelong PARKWAY	Other Petroleum	Regulation under CLM Act not required	-33.83115118	151.0726636
WENTWORTHVILLE	Former Workshop	2 Rawson Rd and 8 Barfil CRESCENT	Unclassified	Regulation under CLM Act not required	-33.81568808	150.9671853
WERRINGTON	Caltex Service Station	Cnr Dunheved Rd and Henry Lawson DRIVE	Service Station	Regulation under CLM Act not required	-33.74577725	150.7409877
WERRINGTON	Claremont Meadows Former landfill	Gipps STREET	Landfill	Regulation under CLM Act not required	-33.77341076	150.7557628
WERRINGTON COUNTY	7-Eleven Werrington	Lot 122 Dunheved ROAD	Service Station	Regulation under CLM Act not required	-33.74699408	150.7428609
WEST BALLINA	Caltex Big Prawn Service Station	Pacific HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-28.86374913	153.5321482
WEST GOSFORD	Caltex Service Station	283 Manns ROAD	Service Station	Regulation under CLM Act not required	-33.41659727	151.325219
WEST GOSFORD	Caltex Service Station	69-71 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.42729985	151.3214621
WEST GOSFORD	Caltex Service Station	30a Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.42778813	151.3190581
WEST NOWRA	Endeavour Energy Nowra Field Service Centre	20 Depot ROAD	Other Industry	Regulation under CLM Act not required	-34.88993085	150.5878854
WEST PENNANT HILLS	7-Eleven (former Mobil) Service Station	552 Pennant Hills ROAD	Service Station	Regulation under CLM Act not required	-33.74686545	151.0508067
WEST RYDE	7-Eleven (former Mobil) Service Station	917 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.80921103	151.0932917
WEST RYDE	Pfizer Australia Pty Ltd	38-42 Wharf ROAD	Chemical Industry	Regulation under CLM Act not required	-33.81021085	151.0693631
WEST RYDE	Reckitt Benckiser	44 Wharf ROAD	Chemical Industry	Regulation under CLM Act not required	-33.81172205	151.0692752
WEST RYDE	JHM Property Development	2A Mellor STREET	Other Industry	Regulation under CLM Act not required	-33.81207534	151.094598
WEST TAMWORTH	Woolworths Petrol	119 Bridge STREET	Service Station	Regulation under CLM Act not required	-31.09358262	150.9167693
WEST WYALONG	Lowes Petroleum (Former BP) Depot West Wyalong	Compton (formerly known as Town Bypass/Railway Road) ROAD	Other Petroleum	Regulation under CLM Act not required	-33.93440247	147.2154596
WEST WYALONG	Caltex Depot	(Wyalong By-pass Rd) Lot 1-3 Showground ROAD	Service Station	Regulation under CLM Act not required	-33.92556	147.1981659
WEST WYALONG	Former Mobil Depot	104 Compton ROAD	Other Petroleum	Regulation under CLM Act not required	-33.93449194	147.2147948
WESTON	Illegal Dumping Site	Corner Kline Street & First STREET	Unclassified	Regulation under CLM Act not required	-32.81367986	151.4551507
WETHERILL PARK	Former Fuel Storage Depot	200-212 Cowpasture ROAD	Other Petroleum	Regulation under CLM Act not required	-33.84568871	150.8764012
WETHERILL PARK	Sims Wetherill Park	35-37 Frank STREET	Metal Industry	Regulation under CLM Act not required	-33.84056122	150.9086265
WETHERILL PARK	Shell Coles Express Service Station	565 Polding STREET	Service Station	Regulation under CLM Act not required	-33.8569731	150.8992804
WETHERILL PARK	Cleanaway (Formerly Nationwide Oil) Wetherill Park	6 Davis ROAD	Other Industry	Regulation under CLM Act not required	-33.83770038	150.9045197

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WETHERILL PARK	BOC Sydney Operations Centre	428-440 Victoria STREET	Other Industry	Regulation under CLM Act not required	-33.84400237	150.8967556
WETHERILL PARK	Camide Former Landfill	Newton ROAD	Landfill	Regulation under CLM Act not required	-33.83898879	150.8963813
WICKHAM	Caltex Terminal	156 Hannell STREET	Other Petroleum	Contamination currently regulated under CLM Act	-32.91520778	151.7563638
WICKHAM	Former Warehouse	10 Dangar STREET	Unclassified	Regulation under CLM Act not required	-32.92383206	151.759761
WICKHAM	Former Factory	57 Annie STREET	Other Industry	Regulation under CLM Act not required	-32.91524827	151.7539893
WICKHAM	Railcorp Wickham	50 Railway STREET	Other Industry	Regulation under CLM Act not required	-32.9210433	151.7544687
WICKHAM	Fuchs Lubricants (Australasia) Pty Ltd Wickham	2 Holland STREET	Other Industry	Regulation under CLM Act not required	-32.9214709	151.7556928
WICKHAM	Former Wool Store Building	33 Annie STREET	Other Petroleum	Under assessment	-32.91585059	151.755215
WILBERFORCE	Former Drum Reconditioners	12-14 Box AVENUE	Other Industry	Contamination formerly regulated under the CLM Act	-33.5453884	150.8587934
WILBERFORCE	Former Solvent Recycling Site	13 Box AVENUE	Chemical Industry	Regulation under CLM Act not required	-33.54557427	150.8577006
WILEY PARK	Sydney Water Property	1B Hillcrest STREET	Other Industry	Regulation under CLM Act not required	-33.92391634	151.0676256
WILLIAMTOWN	Hunter Land Effluent Pond	38 Cabbage Tree ROAD	Other Industry	Regulation under CLM Act not required	-32.80750069	151.8310107
WILLOUGHBY	Shell Coles Express Service Station	616-626 Willoughby ROAD	Service Station	Regulation under CLM Act not required	-33.80593769	151.1988559
WILLOUGHBY	Caltex Service Station	157 Penhur STREET	Service Station	Regulation under CLM Act not required	-33.79793513	151.1981926
WILLOUGHBY	BP Express Tower	498 Willoughby STREET	Service Station	Under assessment	-33.81022918	151.199315
WILLOUGHBY EAST	Willoughby Bus Depot	Corner Ann Street and Stan STREET	Other Industry	Regulation under CLM Act not required	-33.7982569	151.2038993
WILTON	Condell Park Homestead	(Part Lot 17 DP 270536) Condell Park ROAD	Unclassified	Regulation under CLM Act not required	-34.21910141	150.6837962
WINDANG	Caltex Service Station	244-248 Windang ROAD	Service Station	Regulation under CLM Act not required	-34.5274434	150.8691161
WINDSOR	Former Caltex Service Station	46-52 Macquarie STREET	Service Station	Regulation under CLM Act not required	-33.60783315	150.8213428
WINDSOR	Former Caltex Windsor Depot and Service Station	48-50 Mileham STREET	Service Station	Regulation under CLM Act not required	-33.61538627	150.8157517
WINDSOR	Woolworths (former Caltex) Service Station	Cnr Macquarie Street & Baker STREET	Service Station	Regulation under CLM Act not required	-33.60569346	150.8232803
WINGHAM	Former Caltex Service Station	1036-1038 Wingham ROAD	Service Station	Regulation under CLM Act not required	-31.86236594	152.3805752
WINGHAM	Bogas Service Station	Cnr Primrose Street and Isabella STREET	Service Station	Regulation under CLM Act not required	-31.86833656	152.3716346
WINMALEE	Prime (Caltex supplied) (former Mobil) Winmalee Service Station	281 Hawkesbury ROAD	Service Station	Regulation under CLM Act not required	-33.68223276	150.5997203
WIRLINGA	Former Liquid Waste Disposal Facility	704 Riverina ROAD	Unclassified	Regulation under CLM Act not required	-36.07103958	147.0193522

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WOLLI CREEK	Former Ausgrid Substation 10061	13 Gertrude STREET	Other Industry	Regulation under CLM Act not required	-33.93364031	151.1543818
WOLLONGONG	Redevelopment site	33 - 39 Beatson STREET	Other Petroleum	Regulation under CLM Act not required	-34.43196083	150.8976661
WOLLONGONG	Caltex Service Station	9 Flinders STREET	Service Station	Regulation under CLM Act not required	-34.41505616	150.8932515
WOLLONGONG	Greenhouse Park	Springhill ROAD	Landfill	Contamination currently regulated under CLM Act	-34.44119949	150.8931764
WOLLONGONG	Former Wollongong Gasworks	120 and 122 Smith STREET	Gasworks	Regulation under CLM Act not required	-34.42030173	150.8906745
WOLLONGONG	Woolworths Service Station	425 Crown STREET	Service Station	Contamination currently regulated under CLM Act	-34.42637378	150.8799288
WOLLONGONG	Wollongong Harbour Central Spur	Off Endeavour DRIVE	Other Petroleum	Regulation under CLM Act not required	-34.42066879	150.906821
WOODBURN	Caltex Service Station	129 River STREET	Service Station	Regulation under CLM Act not required	-29.07206887	153.3409769
WOODBURN	Crown Reserve 88037 Woodburn	Pacific HIGHWAY	Landfill	Regulation under CLM Act not required	-29.06580577	153.3541886
WOOLGOOLGA	Caltex Woolgoolga Service Station	16 Bosworth ROAD	Service Station	Regulation under CLM Act not required	-30.12569561	153.1946006
WOOLGOOLGA	United Petroleum Service Station	56 Clarence STREET	Service Station	Regulation under CLM Act not required	-30.11045544	153.1904609
WOOLLAHRA	Former Service Station	20 Wallis STREET	Service Station	Regulation under CLM Act not required	-33.8901965	151.2372752
WOOLLAHRA	Proposed Jewish Care Centre	7 -21 Saber STREET	Unclassified	Regulation under CLM Act not required	-33.8904055	151.2480062
WOOLLAHRA	Caltex Woollahra Service Station	116 Old South Head ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.88959697	151.2553736
WOOLLOOMOOLOO	Former BP Service Station	2 Dowley STREET	Service Station	Contamination being managed via the planning process (EP&A Act)	-33.86940191	151.2218741
WOLOMIN	Woolomin Gold Rush Store	65 Nundle ROAD	Other Petroleum	Contamination currently regulated under CLM Act	-31.30415134	151.149729
WOOLOOWARE	Caltex Service Station	100 Woollooware ROAD	Service Station	Regulation under CLM Act not required	-34.05274635	151.1408413
WOOLOOWARE	Oyster Farm	Captain Cook DRIVE	Other Industry	Under assessment	-34.03807914	151.1476055
WOONGARRAH	Former Warnervale Landfill	236-264 Hakone ROAD	Landfill	Regulation under CLM Act not required	-33.2376313	151.464362
WOOTTON	Former Chemical Spill Site	11859 Pacific HIGHWAY	Chemical Industry	Regulation under CLM Act not required	-32.28168548	152.3117819
WOY WOY	Mobil Former Woy Woy Service Station and adjacent land	177-181 Blackwall ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.49254403	151.3270829
WOY WOY	Barry Robertson Holden	231 Blackwall ROAD	Service Station	Regulation under CLM Act not required	-33.49621068	151.3285128
WOY WOY	Bogas Service Station	66 Memorial AVENUE	Service Station	Contamination currently regulated under CLM Act	-33.5069738	151.3315579
WYALONG	Caltex Service Station	50 Neeld (Newell Highway) STREET	Service Station	Regulation under CLM Act not required	-33.92665025	147.2446546
WYOMING	Caltex Service Station Wyoming	465 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.40945391	151.3499812

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
WYONG	Wyong Bayer/Kemcon	16 Lucca ROAD	Chemical Industry	Contamination formerly regulated under the CLM Act	-33.26192339	151.4429446
WYONG	Caltex Service Station	M1 Pacific (Northbound) MOTORWAY	Service Station	Regulation under CLM Act not required	-33.25641477	151.4024821
WYONG	Caltex Service Station	M1 Pacific (Southbound) MOTORWAY	Service Station	Regulation under CLM Act not required	-33.25330747	151.4053862
WYONG	IXOM Facility	8 Pavitt CRESCENT	Other Industry	Under assessment	-33.26379108	151.4485113
YAGOONA	Galserv Galvanising Services	117-153 Rookwood ROAD	Metal Industry	Contamination currently regulated under CLM Act	-33.89493085	151.0388013
YAGOONA	BP Service Station Potts Hill (Yagoona)	155 Rookwood ROAD	Service Station	Regulation under CLM Act not required	-33.89330525	151.0390969
YAGOONA	7-Eleven (former Mobil) Service Station	519 Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-33.90760623	151.0207783
YAGOONA	Shell Coles Express Service Station	112 Rookwood ROAD	Service Station	Regulation under CLM Act not required	-33.89856213	151.0370458
YAGOONA	Sydney Water Corporation Potts Hill Complex	91 Brunner ROAD	Other Industry	Regulation under CLM Act not required	-33.89887589	151.0289165
YALLAH	Tallawarra Power Station site	Princes HIGHWAY	Unclassified	Ongoing maintenance required to manage residual contamination	-34.52412143	150.8062159
YAMBA	Caltex Service Station	22 Treelands DRIVE	Service Station	Regulation under CLM Act not required	-29.42701701	153.3279204
YANCO	Former Service Station	14 Main AVENUE	Service Station	Contamination formerly regulated under the CLM Act	-34.60356494	146.4105016
YASS	Caltex Service Station	228 Comur STREET	Service Station	Regulation under CLM Act not required	-34.84440036	148.9140179
YASS	Caltex Service Station	1715 Yass Valley WAY	Service Station	Regulation under CLM Act not required	-34.80708856	148.8824228
YASS	Former Mobil Depot Yass	54-58 Laidlaw STREET	Service Station	Contamination currently regulated under CLM Act	-34.83252976	148.9068888
YASS	Former Gasworks	Dutton STREET	Gasworks	Contamination currently regulated under CLM Act	-34.83982614	148.9060029
YASS	Transgrid Depot Yass	Perry STREET	Unclassified	Under assessment	-34.86238341	148.9052809
YENNORA	Former Alcoa Australia Rolled Products Facility - Area 3	1 Kiora CRESCENT	Metal Industry	Regulation under CLM Act not required	-33.86568158	150.9649297
YENNORA	Spicer Axle Australia Manufacturing Facility	205-231 Fairfield ROAD	Other Industry	Regulation under CLM Act not required	-33.85655114	150.9579167
YENNORA	Former Caltex Service Station	137-141 Fairfield STREET	Service Station	Regulation under CLM Act not required	-33.86824768	150.9706137
YENNORA	Former Metal Plant	44 Larra STREET	Metal Industry	Contamination formerly regulated under the CLM Act	-33.86340576	150.9764349
YENNORA	TetraPak Site	6 Foray STREET	Other Industry	Contamination formerly regulated under the CLM Act	-33.8557183	150.9561605
YENNORA	19 Pine Road, Yennora	Pine ROAD	Metal Industry	Under assessment	-33.86713232	150.9621172
YETHOLME	Yetholme CCA Timber Treatment Plant	351 Eusdale ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-33.45386256	149.8537787
YOUNG	Former Mobil Depot and Service Station Young	149 Lovell STREET	Service Station	Regulation under CLM Act not required	-34.31024587	148.290424

Suburb	Site Name	Address	Contamination Activity Type	Management Class	Latitude	Longitude
YOUNG	Former Shell Depot	166 Nasmyth STREET	Other Petroleum	Regulation under CLM Act not required	-34.31025192	148.2931008
YOUNG	Former battery recycler	45 Nasmyth STREET	Metal Industry	Contamination currently regulated under CLM Act	-34.31201571	148.306772
YOUNG	Adjacent to former battery recycler	47 Nasmyth STREET	Metal Industry	Contamination formerly regulated under the CLM Act	-34.31176273	148.3064765
YOUNG	Mobil Depot	186 Nasmyth STREET	Other Petroleum	Contamination currently regulated under CLM Act	-34.30954389	148.2908476
YOUNG	Former Caltex Depot	95 Lovell STREET	Service Station	Regulation under CLM Act not required	-34.31127119	148.2955092
ZETLAND	Energy Australia/ Ausgrid Zetland Depot	122 - 138 Joynton AVENUE	Other Industry	Regulation under CLM Act not required	-33.90883116	151.2101184
ZETLAND	Former Goodrich Control Systems, Zetland	84 - 92 Epsom ROAD	Other Industry	Under assessment	-33.91025707	151.2078048



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## Appendix D

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### Data Quality Assessment

## DATA QUALITY ASSESSMENT

### D1. Data Quality Objectives

The Preliminary Site (Contamination) Investigation (PSI) was prepared with reference to the seven step data quality objective (DQO) process which is provided in Appendix B, Schedule B2 of the *National Environment Protection (Assessment of Site Contamination) Measure 1999* as amended 2013 (NEPC, 2013). The DQO process is outlined as follows:

- Stating the Problem;
- Identifying the Decision;
- Identifying Inputs to the Decision;
- Defining the Boundary of the Assessment;
- Developing a Decision Rule;
- Specifying Acceptable Limits on Decision Errors; and
- Optimising the Design for Obtaining Data.

The DQOs have been addressed within the report as shown in Table D1.

**Table D1: Data Quality Objectives**

Data Quality Objective	Report Section where Addressed
State the Problem	S1 Introduction
Identify the Decision	S11 Discussion S12 Conclusion and Recommendations
Identify Inputs to the Decision	S1 Introduction S2 Scope of Works S3 Site Information S8 Site Assessment Criteria S10 Laboratory Results
Define the Boundary of the Assessment	S3 Site Information Drawing 1 - Appendix A
Develop a Decision Rule	S8 Site Assessment Criteria
Specify Acceptable Limits on Decision Errors	S7 Field wWwork Methods S8 Site Assessment Criteria QA/QC Procedures and Results – Sections D2, D3
Optimise the Design for Obtaining Data	S2 Scope of Works S7.3 Sampling Locations and Rationale QA/QC Procedures and Results – Sections D2, D3

## D2. FIELD AND LABORATORY QUALITY CONTROL

The field and laboratory quality control (QC) procedures and results are summarised in Tables D2 and D3. Reference should be made to the fieldwork and analysis procedures in Section 7 and the laboratory results certificates in Appendix G for further details.

**Table D2: Field QC**

Item	Frequency	Acceptance Criteria	Achievement
Intra-laboratory replicates	5% primary samples	RPD <30% inorganics), <50% (organics)	yes <sup>1</sup>

NOTES: 1 qualitative assessment of RPD results overall; refer Section D2.1

**Table D3: Laboratory QC**

Item	Frequency	Acceptance Criteria	Achievement
Analytical laboratories used		NATA accreditation	yes
Holding times		In accordance with NEPC (2013) which references various Australian and international standards	yes
Laboratory / Reagent Blanks	1 per lab batch	<PQL	yes
Laboratory duplicates	10% primary samples	Laboratory specific <sup>1</sup>	
Matrix Spikes	1 per lab batch	70-130% recovery (inorganics); 60-140% (organics); 10-140% (SVOC, speciated phenols)	yes
Surrogate Spikes	organics by GC	70-130% recovery (inorganics); 60-140% (organics); 10-140% (SVOC, speciated phenols)	yes
Control Samples	1 per lab batch	70-130% recovery (inorganics); 60-140% (organics); 10-140% (SVOC, speciated phenols)	yes

NOTES: 1 ELS: <5xPQL – any RPD; >5xPQL – 0-50%RPD

In summary, the QC data is considered to be of sufficient quality to be acceptable for the assessment.

### Q1.1 Intra-Laboratory Replicates

Intra-laboratory replicates were analysed as an internal check of the reproducibility within the primary laboratory ELS and as a measure of consistency of sampling techniques. The comparative results of analysis between original and intra-laboratory replicate samples are summarised in Table D4.

Note that, where both samples are below LOR/PQL the difference and RPD has been given as zero. Where one sample is reported below LOR/PQL, but a concentration is reported for the other, the LOR/PQL value has been used for calculation of the RPD for the less than LOR/PQL sample.

**Table D4: Relative Percentage Difference Results – Intra-laboratory Replicates**

			Metals								PAH			
			Arsenic	Cadmium	Chromium (VI)	Copper	Lead	Mercury (inorganic)	Nickel	Zinc	Total PAHs	Benzo(a)pyrene TEQ	Naphthalene	Benzo(a)pyrene (BaP)
Sample ID	Sampled Date	Units												
BD1/20181126	26/11/2018	mg/kg	<4	<0.4	2	5	1	<0.1	1	3	<0.05	<0.5	<0.1	<0.05
UA4/ 1.35-1.45	26/11/2018	mg/kg	<4	<0.4	4	6	2	<0.1	2	5	<0.05	<0.5	<0.1	<0.05
		Difference	0	0	2	1	1	0	1	2	0	0	0	0
		RPD	0 %	0 %	<b>67 %</b>	18 %	<b>67 %</b>	0 %	<b>67 %</b>	<b>50 %</b>	0 %	0 %	0 %	0 %
BD2/20181127	27/11/2018	mg/kg	<4	<0.4	9	14	19	1	3	23	0.65	<0.5	0.2	0.1
UA9/ 0-0.1	27/11/2018	mg/kg	<4	<0.4	4	14	17	0.8	2	25	0.56	<0.5	<0.1	0.1
		Difference	0	0	5	0	2	0.2	1	2	0.09	0	0.1	0
		RPD	0 %	0 %	<b>77 %</b>	0 %	11 %	22 %	<b>40 %</b>	8 %	15 %	0 %	<b>67 %</b>	0 %
BD3/20181127	27/11/2018	mg/kg	<4	<0.4	7	34	21	<0.1	4	100	1.7	<0.5	<0.1	0.2
UA12/0-0.1	27/11/2018	mg/kg	12	<0.4	14	27	19	<0.1	4	86	2.0	<0.5	<0.1	0.2
		Difference	8	0	7	7	2	0	0	14	0.3	0	0.9	0
		RPD	<b>100 %</b>	0 %	<b>67 %</b>	23 %	10 %	0 %	0 %	15 %	16 %	0 %	0 %	0 %

The calculated RPD values were within the acceptable range of  $\pm 30$  for inorganic analytes and  $\pm 50\%$  for organics with the exception of those in bold. However, this is not considered to be significant because:

- The typically low actual differences in the concentrations of the replicate pairs where some RPD exceedances occurred. High RPD values reflect the small differences between two small numbers;
- The number of replicate pairs being collected from fill soils which were heterogeneous in nature;
- Soil replicates, rather than homogenised soil duplicates, were used to minimise the risk of possible volatile loss, hence greater variability can be expected;
- Most of the recorded concentrations being relatively close to the LOR/PQL. High RPD values reflect the low concentrations;
- The majority of RPDs within a replicate pair being within the acceptable limits; and
- All other QA/QC parameters met the DQIs.

Overall, the intra-laboratory replicate comparisons indicate that the sampling techniques were generally consistent and repeatable.

### D3. Data Quality Indicators

The reliability of field procedures and analytical results was assessed against the following data quality indicators (DQIs):

- Completeness – a measure of the amount of usable data from a data collection activity;
- Comparability – the confidence (qualitative) that data may be considered to be equivalent for each sampling and analytical event;
- Representativeness – the confidence (qualitative) of data representativeness of media present on-site;
- Precision – a measure of variability or reproducibility of data; and
- Accuracy – a measure of closeness of the data to the 'true' value.

The DQIs were assessed as outlined in the following Table D5.

**Table D5: Data Quality Indicators**

Data Quality Indicator	Method(s) of Achievement
Completeness	Planned systematic and selected target locations sampled;  Preparation of field logs, sample location plan and chain of custody (COC) records;  Laboratory sample receipt information received confirming receipt of samples intact and appropriateness of the chain of custody;



	<p>Samples analysed for contaminants of potential concern (COPC) identified in the Conceptual Site Model (CSM);</p> <p>Completion of COC documentation;</p> <p>NATA endorsed laboratory certificates provided by the laboratory;</p> <p>Satisfactory frequency and results for field and laboratory QC samples as discussed in Section D2.</p>
Comparability	<p>Using appropriate techniques for sample recovery, storage and transportation, which were the same for the duration of the project;</p> <p>Works undertaken by appropriately experienced and trained DP environmental scientist / engineer;</p> <p>Use of NATA registered laboratories, with test methods the same or similar between laboratories;</p> <p>Satisfactory results for field and laboratory QC samples.</p>
Representativeness	<p>Target media sampled;</p> <p>Spatial distribution of sample locations;</p> <p>Sample numbers recovered and analysed are considered to be representative of the target media and complying with DQOs;</p> <p>Samples were extracted and analysed within holding times;</p> <p>Samples were analysed in accordance with the analysis request.</p>
Precision	<p>Acceptable RPD between original samples and replicates;</p> <p>Satisfactory results for all other field and laboratory QC samples.</p>
Accuracy	<p>Satisfactory results for all field and laboratory QC samples.</p>

Based on the above, it is considered that the DQIs have been complied with. As such, it is concluded that the field and laboratory test data obtained are reliable and useable for this assessment.

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## Appendix E

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### Summary of Analytical Results

Table E1: Summary of Analytical Results - Site Assessment Criteria

				Metals								TRH							BTEX					
				Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Zinc	C6-C10	C10-C16	C16-C34 (F3)	C34-C40 (F4)	C10 - C40 (Sum of total)	C6-C10 less BTEX (F1)	C10-C16 less NAPHTHALENE (F2)	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
PQL				4	0.4	1	1	1	0.1	1	1	25	50	100	100	50	25	50	0.2	1	0.5	2	1	1
NEPM 2013 Table 1A(1) HILs/ HSLs Comm/Ind D Soil, Coarse Soil, 0-1m				3,000	900	3600**	240,000	1,500	730	6,000	400,000	-	-	-	-	-	260	NL	3	NL	NL	230	-	230
CRC Care Direct Contact HSL				-	-	-	-	-	-	-	-	26,000	20,000	27,000	38,000	-	-	-	430	99,000	27,000	81,000	-	-
CRC Care Direct Contact Intrusive Maintenance Worker, 0-2m				-	-	-	-	-	-	-	-	82,000	62,000	85,000	120,000	-	-	-	1,100	120,000	85,000	130,000	-	130,000
NEPM 2013 EILs/ ESLs Comm/Ind Aged, Coarse Soil 0-2m				160	-	670	260	1,800	-	210	640	-	-	1,700	3,300	-	215	170	75	135	165	-	-	180
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil				-	-	-	-	-	-	-	-	700	1,000	3,500	10,000	-	-	-	-	-	-	-	-	-
Sample ID	Sample Depth	Sample Date	Soil Matrix																					
UA1/ 0.4-0.5	0.4-0.5	26/11/2018	FILLING	<4	<0.4	13	12	16	<0.1	14	35	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA1/ 1.1-1.2	1.1-1.2	26/11/2018	FILLING	<4	<0.4	1	10	1	<0.1	3	9	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA2/0.4-0.5	0.4-0.5	26/11/2018	SANDSTONE	<4	<0.4	2	6	3	<0.1	2	4	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA3/ 0-0.1	0-0.1	26/11/2018	FILLING	<4	<0.4	47	22	4	<0.1	46	30	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA4/ 0-0.1	0-0.1	26/11/2018	FILLING	<4	<0.4	28	17	11	<0.1	29	29	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA4/ 1.35-1.45	1.35-1.45	26/11/2018	SANDSTONE	<4	<0.4	4	6	2	<0.1	2	5	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
BD1/20181126*	-	26/11/2018	FILLING	<4	<0.4	2	5	1	<0.1	1	3	-	-	-	-	-	-	-	-	-	-	-	-	-
UA5/0.4-0.5	0.4-0.5	26/11/2018	FILLING	<4	<0.4	17	20	17	0.2	11	27	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA6/ 0.9-1.0	0.9-1	26/11/2018	FILLING	<4	<0.4	7	5	7	<0.1	2	17	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA6/ 0-0.1	0-0.1	26/11/2018	FILLING	<4	<0.4	4	5	4	<0.1	1	8	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA7/ 0-0.1	0-0.1	27/11/2018	FILLING	<4	<0.4	10	17	17	<0.1	12	73	<25	<50	190	<100	190	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA8/ 0.4-0.5	0.4-0.5	27/11/2018	FILLING	<4	<0.4	8	29	29	<0.1	6	63	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA9/ 0-0.1	0-0.1	27/11/2018	FILLING	<4	<0.4	4	14	17	0.8	2	25	<25	<50	130	<100	130	<25	<50	<0.2	<1	<0.5	<2	<1	<1
BD2/20181127*	-	27/11/2018	FILLING	<4	<0.4	9	14	19	1	3	23	-	-	-	-	-	-	-	-	-	-	-	-	-
UA10/0.2-0.3	0.2-0.3	27/11/2018	FILLING	<4	<0.4	16	17	25	<0.1	2	34	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA11/0-0.2	0-0.2	27/11/2018	FILLING	4	<0.4	14	13	10	<0.1	3	50	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA12/0-0.1	0-0.1	27/11/2018	FILLING	12	<0.4	14	27	19	<0.1	4	86	<25	120	530	180	830	<25	120	<0.2	<1	<0.5	<2	<1	<1
BD3/20181127*	-	27/11/2018	FILLING	<4	<0.4	7	34	21	<0.1	4	100	-	-	-	-	-	-	-	-	-	-	-	-	-
UA13/0.7-0.8	0.7-0.8	27/11/2018	FILLING	<4	<0.4	8	14	38	<0.1	13	40	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA13/0-0.15	0-0.15	27/11/2018	FILLING	11	<0.4	24	25	24	<0.1	4	24	<25	<50	120	<100	120	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA14/ 0.4-0.5	0.4-0.5	27/11/2018	FILLING	<4	<0.4	4	35	7	<0.1	3	51	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA14/0.9-1	0.9-1	27/11/2018	FILLING	<4	<0.4	6	7	7	<0.1	3	24	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA15/ 0-0.1	0-0.1	27/11/2018	FILLING	<4	<0.4	9	29	25	0.1	6	80	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA15/0.7-0.8	0.7-0.8	27/11/2018	FILLING	<4	<0.4	6	14	9	<0.1	2	72	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA16/ 0.5-0.6	0.5-0.6	29/11/2018	FILLING	<4	<0.4	17	49	14	<0.1	62	43	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1
UA17/ 0-0.15	0-0.15	29/11/2018	FILLING	<4	<0.4	7	2	9	<0.1	2	13	<25	<50	<100	<100	<50	<25	<50	<0.2	<1	<0.5	<2	<1	<1

**Notes:**  
\* Blind replicate samples taken from the same location as the sample listed above  
\*\* Criteria for chromium (VI) only

Table E1: Summary of Analytical Results - Site Assessment Criteria

				PAH																		OCPs					
				Acenaphthene	Acenaphthylene	Anthracene	Benz(a)anthracene	Benzo(a) pyrene	Benzo(b,j,k)fluoranthene	Benzo(g,h,i)perylene	Carcinogenic PAHs (as BaP TEQ)	Chrysene	Dibenz(a,h)anthracene	Fluoranthene	Fluorene	Indeno(1,2,3-c,d)pyrene	Naphthalene	Phenanthrene	Pyrene	Total +ve PAHs		Phenols	Aldrin and Dieldrin	Chlordance	DDT, DDE, DDD	Endosulfan	Endrin
PQL				0.1	0.1	0.1	0.1	0.05	0.2	0.1		0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.05	5	0.2	0.1	0.1	0.1	0.1		
NEPM 2013 Table 1A(1) HILs/ HSLs Comm/Ind D Soil, Coarse Soil, 0-1m				-	-	-	-	-	-	-	40	-	-	-	-	-	NL	-	-	4,000	660	45	530	3600	2,000	100	
CRC Care Direct Contact HSL				-	-	-	-	-	-	-	-	-	-	-	-	-	11,000	-	-	-	-	-	-	-	-	-	
CRC Care Direct Contact Intrusive Maintenance Worker, 0-2m				-	-	-	-	-	-	-	-	-	-	-	-	-	29,000	-	-	-	-	-	-	-	-	-	
NEPM 2013 EILs/ ESLs Comm/Ind Aged, Coarse Soil 0-2m				-	-	-	-	1.4	-	-	-	-	-	-	-	-	370	-	-	-	-	-	-	-	-	-	
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil				-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sample ID	Sample Depth	Sample Date	Soil Matrix																								
UA1/ 0.4-0.5	0.4-0.5	26/11/2018	FILLING	<0.1	<0.1	<0.1	0.4	0.4	0.8	0.3	0.6	0.4	<0.1	0.5	<0.1	0.2	<0.1	0.1	0.6	3.7	<5	<0.2	<0.1	<0.1	<0.1	<0.1	
UA1/ 1.1-1.2	1.1-1.2	26/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.05	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-						
UA2/0.4-0.5	0.4-0.5	26/11/2018	SANDSTONE	<0.1	<0.1	<0.1	<0.1	<0.05	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-						
UA3/ 0-0.1	0-0.1	26/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.05	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.1	<5	<0.2	<0.1	<0.1	<0.1		
UA4/ 0-0.1	0-0.1	26/11/2018	FILLING	<0.1	<0.1	<0.1	0.2	0.2	0.4	0.2	<0.5	0.2	<0.1	0.3	<0.1	0.2	<0.1	0.2	0.3	2.2	-						
UA4/ 1.35-1.45	1.35-1.45	26/11/2018	SANDSTONE	<0.1	<0.1	<0.1	<0.1	<0.05	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<5	<0.2	<0.1	<0.1	<0.1		
BD1/20181126*	-	26/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.05	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-						
UA5/0.4-0.5	0.4-0.5	26/11/2018	FILLING	0.1	<0.1	0.4	1.1	1.2	2	0.9	1.8	1	0.1	1.9	0.1	0.7	<0.1	1.3	1.8	13	-						
UA6/ 0.9-1.0	0.9-1	26/11/2018	FILLING	<0.1	<0.1	<0.1	0.1	0.2	0.4	0.2	0.6	0.2	<0.1	0.2	<0.1	0.2	<0.1	<0.1	0.2	1.7	<5	<0.2	<0.1	<0.1	<0.1		
UA6/ 0-0.1	0-0.1	26/11/2018	FILLING	<0.1	<0.1	<0.1	0.4	0.4	0.8	0.3	<0.5	0.4	<0.1	0.6	<0.1	0.3	<0.1	0.1	0.6	3.9	-						
UA7/ 0-0.1	0-0.1	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	0.09	<0.2	<0.1	<0.5	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.1	0.4	<5	<0.2	<0.1	<0.1	<0.1	<0.1		
UA8/ 0.4-0.5	0.4-0.5	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.05	<0.2	<0.1	<0.5	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.1	0.3	-							
UA9/ 0-0.1	0-0.1	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	0.1	<0.2	<0.1	<0.5	0.1	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	0.2	0.56	-						
BD2/20181127*	-	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	0.1	<0.2	<0.1	<0.5	<0.1	<0.1	0.2	<0.1	<0.1	0.2	<0.1	0.2	0.65	-						
UA10/0.2-0.3	0.2-0.3	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	0.1	<0.2	<0.1	<0.5	0.1	<0.1	0.3	<0.1	<0.1	<0.1	0.1	0.3	0.93	<5	<0.2	<0.1	<0.1	<0.1		
UA11/0-0.2	0-0.2	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	0.1	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	-							
UA12/0-0.1	0-0.1	27/11/2018	FILLING	<0.1	<0.1	<0.1	0.1	0.2	0.4	0.2	0.9	0.3	<0.1	0.2	<0.1	0.2	<0.1	<0.1	0.2	2	-						
BD3/20181127*	-	27/11/2018	FILLING	<0.1	<0.1	<0.1	0.1	0.2	0.4	0.2	<0.5	0.2	<0.1	0.2	<0.1	0.2	<0.1	<0.1	0.2	1.7	-						
UA13/0.7-0.8	0.7-0.8	27/11/2018	FILLING	<0.1	<0.1	<0.1	0.3	0.2	0.4	0.2	<0.5	0.3	<0.1	0.5	<0.1	0.1	<0.1	0.2	0.5	2.7	-						
UA13/0-0.15	0-0.15	27/11/2018	FILLING	<0.1	<0.1	0.2	0.7	0.64	1	0.4	<0.5	0.7	<0.1	1.4	<0.1	0.3	<0.1	0.5	1.4	7.4	<5	<0.2	<0.1	<0.1	<0.1		
UA14/ 0.4-0.5	0.4-0.5	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.05	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<5	<0.2	<0.1	<0.1	<0.1	<0.1		
UA14/0.9-1	0.9-1	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.05	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	-							
UA15/ 0-0.1	0-0.1	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	0.07	<0.2	<0.1	1.3	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	0.1	0.3	<5	<0.2	<0.1	<0.1	<0.1	<0.1		
UA15/0.7-0.8	0.7-0.8	27/11/2018	FILLING	<0.1	<0.1	0.1	0.7	0.88	1	0.7	1.7	0.7	0.1	1.1	<0.1	0.5	<0.1	0.3	1.2	7.6	-						
UA16/ 0.5-0.6	0.5-0.6	29/11/2018	FILLING	<0.1	0.1	0.2	1.2	1.2	2	0.7	<0.5	1.1	0.1	2.4	<0.1	0.6	<0.1	1	2.2	13	-						
UA17/ 0-0.15	0-0.15	29/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.05	<0.2	<0.1	-	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.05	<5	<0.2	<0.1	<0.1	<0.1	<0.1		

**Notes:**  
 \* Blind replicate samples taken from the same location as the sam  
 \*\* Criteria for chromium (VI) only

Table E1: Summary of Analytical Results - Site Assessment Criteria

								OPPs		PCBs (Sum of total)	Asbestos ID
				Heptachlor	HCB	Methoxychlor	All other OCPs	Chlorpyrifos	All other OPPs		
PQL				0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
NEPM 2013 Table 1A(1) HILs/ HSLs Comm/Ind D Soil, Coarse Soil, 0-1m				50	80	2500	-	2000	-	7	-
CRC Care Direct Contact HSL				-	-	-	-	-	-	-	-
CRC Care Direct Contact Intrusive Maintenance Worker, 0-2m				-	-	-	-	-	-	-	-
NEPM 2013 EILs/ ESLs Comm/Ind Aged, Coarse Soil 0-2m				-	-	-	-	-	-	-	-
NEPM 2013 Table 1B(7) Management Limits Comm / Ind, Coarse Soil				-	-	-	-	-	-	-	-
Sample ID	Sample Depth	Sample Date	Soil Matrix								
UA1/ 0.4-0.5	0.4-0.5	26/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	0
UA1/ 1.1-1.2	1.1-1.2	26/11/2018	FILLING					-	-	-	0
UA2/0.4-0.5	0.4-0.5	26/11/2018	SANDSTONE					-	-	-	0
UA3/ 0-0.1	0-0.1	26/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0
UA4/ 0-0.1	0-0.1	26/11/2018	FILLING					-	-	-	0
UA4/ 1.35-1.45	1.35-1.45	26/11/2018	SANDSTONE	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0
BD1/20181126*	-	26/11/2018	FILLING					-	-	-	-
UA5/0.4-0.5	0.4-0.5	26/11/2018	FILLING					-	-	-	0
UA6/ 0.9-1.0	0.9-1	26/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0
UA6/ 0-0.1	0-0.1	26/11/2018	FILLING					-	-	-	0
UA7/ 0-0.1	0-0.1	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0
UA8/ 0.4-0.5	0.4-0.5	27/11/2018	FILLING					-	-	-	0
UA9/ 0-0.1	0-0.1	27/11/2018	FILLING					-	-	-	0
BD2/20181127*	-	27/11/2018	FILLING					-	-	-	-
UA10/0.2-0.3	0.2-0.3	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0
UA11/0-0.2	0-0.2	27/11/2018	FILLING					-	-	-	0
UA12/0-0.1	0-0.1	27/11/2018	FILLING					-	-	-	0
BD3/20181127*	-	27/11/2018	FILLING					-	-	-	-
UA13/0.7-0.8	0.7-0.8	27/11/2018	FILLING					-	-	-	0
UA13/0-0.15	0-0.15	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0
UA14/ 0.4-0.5	0.4-0.5	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0
UA14/0.9-1	0.9-1	27/11/2018	FILLING					-	-	-	0
UA15/ 0-0.1	0-0.1	27/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0
UA15/0.7-0.8	0.7-0.8	27/11/2018	FILLING					-	-	-	0
UA16/ 0.5-0.6	0.5-0.6	29/11/2018	FILLING					-	-	-	0
UA17/ 0-0.15	0-0.15	29/11/2018	FILLING	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0

**Notes:**  
\* Blind replicate samples taken from the same location as the sam  
\*\* Criteria for chromium (VI) only



Table E2: Summary of Analytical Results - Waste Classification

				Metals							TRH												BTEX							
				Arsenic	Cadmium	Chromium (III+VI)	Copper	Lead	Mercury	Nickel	Nickel TCLp	Zinc	C10-C16	C16-C34	C34-C40	F2-NAPHTHALENE	C6 - C9	C10 - C14	C15 - C28	C29-C36	+C10- C36 (Sum of total)	C10 - C40 (Sum of total)	C6-C10 less BTEX (F1)	C6-C10	Benzene	Ethylbenzene	Toluene	Xylene (m & p)	Xylene (o)	Xylene Total
				mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/L	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
PQL				4	0.4	1	1	1	0.1	1	0.01	1	50	100	100	50	25	50	100	100	250	50	25	25	0.2	1	0.5	2	1	1
Waste Classification Criteria																														
NSW EPA 2014 General Solid Waste CT1				100	20	100	-	100	4	40	-	-	-	-	-	-	-	-	-	10000	-	-	-	10	600	288	-	-	1000	
NSW EPA 2014 General Solid Waste SCC1, TCLP1				500	100	1900	-	1500	50	1050	2	-	-	-	-	-	-	-	-	10000	-	-	-	18	1080	518	-	-	1800	
NSW EPA 2014 Restricted Solid Waste CT2				400	80	400	-	400	16	160	-	-	-	-	-	-	-	-	-	40000	-	-	-	40	2400	1152	-	-	4000	
NSW EPA 2014 Restricted Solid Waste SCC2, TCLP2				2000	400	7600	-	6000	200	4200	8	-	-	-	-	-	-	-	-	40000	-	-	-	72	4320	2073	-	-	7200	
Published Background Concentrations																														
ANZECC (1992)				0.2-30	0.04-2	0.5-110	1-190	<2-200	0.001-0.1	2-400	-	2-180	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
NEPC (1999)				18,264	-	5-1000	2-100	2-200	-	5-500	-	10-300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Sample ID	Sample Depth	Sample Date	Soil Matrix																											
UA1/ 0.4-0.5	0.4-0.5	26/11/2018	FILLING	<4	<0.4	13	12	16	<0.1	14	-	35	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA1/ 1.1-1.2	1.1-1.2	26/11/2018	FILLING	<4	<0.4	1	10	1	<0.1	3	-	9	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA2/0.4-0.5	0.4-0.5	26/11/2018	SANDSTONE	<4	<0.4	2	6	3	<0.1	2	-	4	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA3/ 0-0.1	0-0.1	26/11/2018	FILLING	<4	<0.4	47	22	4	<0.1	46	0.02	30	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA4/ 0-0.1	0-0.1	26/11/2018	FILLING	<4	<0.4	28	17	11	<0.1	29	-	29	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA4/ 1.35-1.45	1.35-1.45	26/11/2018	SANDSTONE	<4	<0.4	4	6	2	<0.1	2	-	5	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
BD1/20181126*	-	26/11/2018	FILLING	<4	<0.4	2	5	1	<0.1	1	-	3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UA5/0.4-0.5	0.4-0.5	26/11/2018	FILLING	<4	<0.4	17	20	17	0.2	11	-	27	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA6/ 0.9-1.0	0.9-1	26/11/2018	FILLING	<4	<0.4	7	5	7	<0.1	2	-	17	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA6/ 0-0.1	0-0.1	26/11/2018	FILLING	<4	<0.4	4	5	4	<0.1	1	-	8	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA7/ 0-0.1	0-0.1	27/11/2018	FILLING	<4	<0.4	10	17	17	<0.1	12	-	73	<50	190	<100	<50	<25	<50	<100	180	255	190	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA8/ 0.4-0.5	0.4-0.5	27/11/2018	FILLING	<4	<0.4	8	29	29	<0.1	6	-	63	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA9/ 0-0.1	0-0.1	27/11/2018	FILLING	<4	<0.4	4	14	17	0.8	2	-	25	<50	130	<100	<50	<25	<50	<100	110	185	130	<25	<25	<0.2	<1	<0.5	<2	<1	<1
BD2/20181127*	-	27/11/2018	FILLING	<4	<0.4	9	14	19	1	3	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UA10/0.2-0.3	0.2-0.3	27/11/2018	FILLING	<4	<0.4	16	17	25	<0.1	2	-	34	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA11/0-0.2	0-0.2	27/11/2018	FILLING	4	<0.4	14	13	10	<0.1	3	-	50	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA12/0-0.1	0-0.1	27/11/2018	FILLING	12	<0.4	14	27	19	<0.1	4	-	86	120	530	180	120	<25	<50	390	300	715	830	<25	<25	<0.2	<1	<0.5	<2	<1	<1
BD3/20181127*	-	27/11/2018	FILLING	<4	<0.4	7	34	21	<0.1	4	-	100	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
UA13/0.7-0.8	0.7-0.8	27/11/2018	FILLING	<4	<0.4	8	14	38	<0.1	13	-	40	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA13/0-0.15	0-0.15	27/11/2018	FILLING	11	<0.4	24	25	24	<0.1	4	-	24	<50	120	<100	<50	<25	<50	<100	<100	<250	120	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA14/ 0.4-0.5	0.4-0.5	27/11/2018	FILLING	<4	<0.4	4	35	7	<0.1	3	-	51	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA14/0.9-1	0.9-1	27/11/2018	FILLING	<4	<0.4	6	7	7	<0.1	3	-	24	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA15/ 0-0.1	0-0.1	27/11/2018	FILLING	<4	<0.4	9	29	25	0.1	6	-	80	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA15/0.7-0.8	0.7-0.8	27/11/2018	FILLING	<4	<0.4	6	14	9	<0.1	2	-	72	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA16/ 0.5-0.6	0.5-0.6	29/11/2018	FILLING	<4	<0.4	17	49	14	<0.1	62	<0.02	43	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1
UA17/ 0-0.15	0-0.15	29/11/2018	FILLING	<4	<0.4	7	2	9	<0.1	2	-	13	<50	<100	<100	<50	<25	<50	<100	<100	<250	<50	<25	<25	<0.2	<1	<0.5	<2	<1	<1

**Notes:**

\* Blind replicate samples taken from the same location as the sample listed above

\*\* Criteria for Endosulfan only

\*\*\* Criteria for Chlorpyrifos only

\*\*\*\* No Asbestos Detected (NAD)

Table E2: Summary of Analytical Results - Waste Classification

				PAHs																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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Notes:

- \* Blind replicate samples taken from the same location as the sample listed above
- \*\* Criteria for Endosulfan only
- \*\*\* Criteria for Chlorpyrifos only
- \*\*\*\* No Asbestos Detected (NAD)

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## Appendix F

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Borehole Logs

# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 69.8 AHD  
**EASTING:** 337499  
**NORTHING:** 6253912  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA01  
**PROJECT No:** 86625.00  
**DATE:** 26/11/2018  
**SHEET 1 OF 1**

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Well Construction Details	
				Type	Depth	Sample	Results & Comments			
70		FILLING: brown coarse grained sand filling with some clay and gravel, damp								
		1.1 m - some coarse grained gravel from 0.1 m to 0.2 m		A/E	0.1					
					0.2					
		0.4 m - becoming fine to medium grained sand filling		A/E	0.4					
					0.5					
1				A/E	1.0		14/100 mm refusal			
				A/E	1.1					
				A/E						
					1.2					
1.2	1.25	SANDSTONE: low strength, moderately weathered, light brown, medium to coarse grained sandstone								
		Bore discontinued at 1.25m due to auger refusal								

**RIG:** Bobcat

**DRILLER:** George Marino

**LOGGED:** Roshan Bhetwal    **CASING:** Uncased

**TYPE OF BORING:** Solid flight auger to 1.25 m

**WATER OBSERVATIONS:** No free groundwater observed

REMARKS:

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W	Water seep
E	Environmental sample	W	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 68.4 AHD  
**EASTING:** 337489  
**NORTHING:** 6253871  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA02  
**PROJECT No:** 86625.00  
**DATE:** 26/11/2018  
**SHEET 1 OF 1**

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per 150mm)
				Type	Depth	Sample	Results & Comments		
	0.05	PAVERS: brick pavers 50 mm thick		A/E	0.0				
		FILLING: dark brown sand filling with some silt, moist			0.1				
	0.4	SANDSTONE: low strength, moderately weathered, light brown, medium to coarse grained sandstone		A/E	0.4				
	0.6	Bore discontinued at 0.6m due to auger refusal			0.5				

**RIG:** Bobcat

**DRILLER:** George Marino

**LOGGED:** Roshan Bhetwal **CASING:** Uncased

**TYPE OF BORING:** Diatube to 0.05 m, Solid flight auger to 0.6 m

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:**

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PLD	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 67.1 AHD  
**EASTING:** 337500  
**NORTHING:** 6253856  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA03  
**PROJECT No:** 86625.00  
**DATE:** 26/11/2018  
**SHEET 1 OF 1**

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per 150mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
	0.05	PAVERS: brick pavers 50 mm thick										
		FILLING: dark grey, gravelly sand (medium to coarse grained) filling, moist			0.1							
				A/E								
	0.25	SANDSTONE: low strength, slightly weathered, light grey, medium to coarse grained sandstone			0.2							
	0.3	Bore discontinued at 0.3m due to auger refusal		A/E								
					0.3							

**RIG:** Bobcat

**DRILLER:** George Marino

**LOGGED:** Roshan Bhetwal **CASING:** Uncased

**TYPE OF BORING:** Diatube to 0.05 m, Solid flight auger to 0.3 m

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:**

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W	Water seep	S	Standard penetration test
E	Environmental sample	W	Water level	V	Shear vane (kPa)



# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 66.2 AHD  
**EASTING:** 337495  
**NORTHING:** 6253844  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA04  
**PROJECT No:** 86625.00  
**DATE:** 26/11/2018  
**SHEET** 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per 150mm)				
				Type	Depth	Sample	Results & Comments		5	10	15	20	
	0.05	PAVERS: brick pavers 50 mm thick			0.0								
		FILLING: dark grey, gravelly sand filling		A/E	0.1								
				A/E	0.4								
					0.5								
				A/E	0.9								
					1.0								
		1.2 m: light brown sand filling (possible colluvium)											
	1.3	SANDSTONE: very low to low strength, moderately to slightly weathered, light brown, medium to coarse grained sandstone		A/E*	1.35								
					1.45								
					1.5								
				A/E									
	1.6	Bore discontinued at 1.6m due to auger refusal			1.6								

**RIG:** Bobcat

**DRILLER:** George Marino

**LOGGED:** Roshan Bhetwal    **CASING:** Uncased

**TYPE OF BORING:**     Diatube to 0.05 m, Solid flight auger to 1.3 m

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:** Blind replicate sample BD1/20181126 taken from depth 1.35-1.45m

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U <sub>r</sub>	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W <sub>sp</sub>	Water seep
E	Environmental sample	W <sub>l</sub>	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 64.0 AHD  
**EASTING:** 337499  
**NORTHING:** 6253825  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA05  
**PROJECT No:** 86625.00  
**DATE:** 26/11/2018  
**SHEET 1 OF 1**

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per 100mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
04	0.05	PAVERS: brick pavers 50mm thick		A/E	0.0							
	0.1											
	- 0.3 m: becoming light brown medium grained sand filling with some fine gravel			0.4								
	A/E	0.5										
	A/E	0.6										
	0.6											
0.65	SANDSTONE: very low and low strength, slightly weathered, light grey, medium to coarse grained sandstone											
	Bore discontinued at 0.65m due to auger refusal											
65	1											

**RIG:** Bobcat

**DRILLER:** George Marino

**LOGGED:** Roshan Bhetwal **CASING:** Uncased

**TYPE OF BORING:** Diatube to 0.05 m, Solid flight auger to 0.65 m

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:**

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2

## SAMPLING & IN SITU TESTING LEGEND


A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U <sub>s</sub>	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	W <sub>s</sub>	Water seep	S	Standard penetration test
E	Environmental sample	W <sub>L</sub>	Water level	V	Shear vane (kPa)

# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 64.4 AHD  
**EASTING:** 337478  
**NORTHING:** 6253829  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA06  
**PROJECT No:** 86625.00  
**DATE:** 26/11/2018  
**SHEET 1 OF 1**

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per 150mm)
				Type	Depth	Sample	Results & Comments		
65	0.05	PAVERS: brick pavers 50 mm thick		A/E	0.0				
		FILLING: grey and light brown, medium grained sand filling with some sandstone gravel, moist			0.1				
1									
1.3									
1.35									

**RIG:** Bobcat

**DRILLER:** George Marino

**LOGGED:** Roshan Bhetwal **CASING:** Uncased

**TYPE OF BORING:** Diatube to 0.05 m, Solid flight auger to 1.35 m

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:**

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2


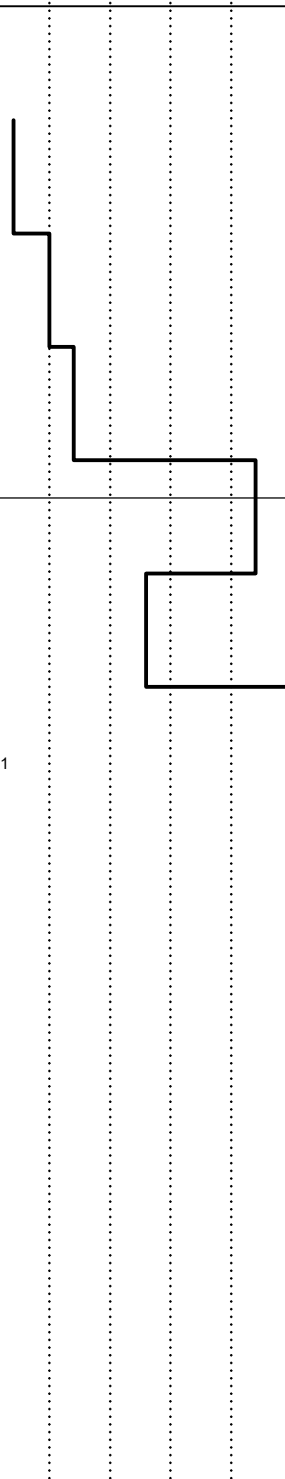
SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	>	Water seep
E	Environmental sample	≡	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)

# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 70.0 AHD  
**EASTING:** 337487  
**NORTHING:** 6253890  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA07  
**PROJECT No:** 86625.00  
**DATE:** 27/11/2018  
**SHEET** 1 OF 1

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per 150mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
7.0	0.15	FILLING: dark brown sandy clay filling with some rootlets and woodchips, damp		A/E	0.0							
				0.1								
	FILLING: clay filling with some gravel			0.4								
	A/E	0.5										
		0.6										
	A/E	0.65										
7.1	1.0	Bore discontinued at 0.65m due to hand-auger refusal										

**RIG:** Hand tools

**DRILLER:** Roshan Bhetwal

**LOGGED:** Roshan Bhetwal **CASING:** -

**TYPE OF BORING:** Hand auger to 0.65 m

**WATER OBSERVATIONS:** No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U <sub>r</sub>	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W <sub>sp</sub>	Water seep
E	Environmental sample	W <sub>l</sub>	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 68.7 AHD  
**EASTING:** 337472  
**NORTHING:** 6253877  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA08  
**PROJECT No:** 86625.00  
**DATE:** 27/11/2018  
**SHEET** 1 OF 1

[illegible]

**RIG:** Hand tools

**DRILLER:** Roshan Bhetwal

**LOGGED:** Roshan Bhetwal **CASING:** -

**TYPE OF BORING:** Hand auger to 0.6 m

**WATER OBSERVATIONS:** No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U <sub>r</sub>	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W <sub>sp</sub>	Water seep
E	Environmental sample	W <sub>l</sub>	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 69.3 AHD  
**EASTING:** 337439  
**NORTHING:** 6253893  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA09  
**PROJECT No:** 86625.00  
**DATE:** 27/11/2018  
**SHEET** 1 OF 1

[illegible]

**RIG:** Hand tools

**DRILLER:** Roshan Bhetwal

**LOGGED:** Roshan Bhetwal **CASING:** -

**TYPE OF BORING:** Hand auger to 0.9 m

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:** Blind replicate sample BD2/20181127 taken from depth 0-0.1m

☐ Sand Penetrometer AS1289.6.3.3

☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U <sub>r</sub>	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W <sub>sp</sub>	Water seep
E	Environmental sample	W <sub>l</sub>	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)






# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 68.0 AHD  
**EASTING:** 337426  
**NORTHING:** 6253890  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA10  
**PROJECT No:** 86625.00  
**DATE:** 27/11/2018  
**SHEET 1 OF 1**

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per 150mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
68		FILLING: dark brown sandy clay filling with some rootlets, organics, damp		PID	0.0							
		at 0.02m: becoming brown gravelly sand with some rootlets, damp			0.01							
					0.2							
				A/E	0.3							
		at 0.35m: sandstone gravel and glass fragments		A/E	0.4							
0.45		Bore discontinued at 0.45m due to hand-auger refusal										
68-1												

**RIG:** Hand tools

**DRILLER:** Roshan Bhetwal

**LOGGED:** Roshan Bhetwal **CASING:** -

**TYPE OF BORING:** Hand auger to 0.45 m

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:**

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2


SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 67.6 AHD  
**EASTING:** 337413  
**NORTHING:** 6253883  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA11  
**PROJECT No:** 86625.00  
**DATE:** 27/11/2018  
**SHEET 1 OF 1**

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per 150mm)
				Type	Depth	Sample	Results & Comments		
		FILLING: dark grey silty sand filling with some rootlets, organics, damp		A/E	0.0				5 10 15 20
	0.22	Bore discontinued at 0.22m due to hand-auger refusal			0.2				
	1								

**RIG:** Hand tools

**DRILLER:** Roshan Bhetwal

**LOGGED:** Roshan Bhetwal **CASING:** -

**TYPE OF BORING:** Hand auger to 0.22 m

**WATER OBSERVATIONS:** No free groundwater observed

**REMARKS:**

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 66.3 AHD  
**EASTING:** 337411  
**NORTHING:** 6253871  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA12  
**PROJECT No:** 86625.00  
**DATE:** 27/11/2018  
**SHEET 1 OF 1**

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per 150mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
		FILLING: dark brown silty sand filling with rootlets, organics, damp		A/E*	0.0							
					0.2							
	0.4	Bore discontinued at 0.4m due to hand-auger refusal										
	0.6											
	0.8											
	1.0											
	1.2											
	1.4											
	1.6											
	1.8											
	2.0											
	2.2											
	2.4											
	2.6											
	2.8											
	3.0											
	3.2											
	3.4											
	3.6											
	3.8											
	4.0											
	4.2											
	4.4											
	4.6											
	4.8											
	5.0											
	5.2											
	5.4											
	5.6											
	5.8											
	6.0											
	6.2											
	6.4											
	6.6											
	6.8											
	7.0											
	7.2											
	7.4											
	7.6											
	7.8											
	8.0											
	8.2											
	8.4											
	8.6											
	8.8											
	9.0											
	9.2											
	9.4											
	9.6											
	9.8											
	10.0											

**RIG:** Hand tools **DRILLER:** Roshan Bhetwal **LOGGED:** Roshan Bhetwal **CASING:** -  
**TYPE OF BORING:** Hand auger to 0.4 m  
**WATER OBSERVATIONS:** No free groundwater observed  
**REMARKS:** Blind replicate sample BD3/20181127 taken from depth 0-0.1m

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2


SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 68.0 AHD  
**EASTING:** 337445  
**NORTHING:** 6253873  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA13  
**PROJECT No:** 86625.00  
**DATE:** 27/11/2018  
**SHEET 1 OF 1**

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per 150mm)				
				Type	Depth	Sample	Results & Comments		5	10	15	20	
68		FILLING: dark brown silty sand filling with rootlets, organics, damp		A/E	0.0								
					0.15								
		at 0.3m: becoming gravelly sand filling, damp			0.4								
				A/E	0.5								
					0.7								
	0.8	Bore discontinued at 0.8m due to hand-auger refusal		A/E	0.8								
69													
1													

# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 69.2 AHD  
**EASTING:** 337466  
**NORTHING:** 6253879  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA14  
**PROJECT No:** 86625.00  
**DATE:** 27/11/2018  
**SHEET** 1 OF 1

[illegible]

**RIG:** Hand tools

**DRILLER:** Roshan Bhetwal

**LOGGED:** Roshan Bhetwal **CASING:** -

**TYPE OF BORING:** Hand auger to 1.05 m

**WATER OBSERVATIONS:** Free groundwater observed at 0.75m

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W	Water seep
E	Environmental sample	W	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 69.4 AHD  
**EASTING:** 337473  
**NORTHING:** 6253891  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA15  
**PROJECT No:** 86625.00  
**DATE:** 27/11/2018  
**SHEET** 1 OF 1

[illegible]

**RIG:** Hand tools

**DRILLER:** Roshan Bhetwal

**LOGGED:** Roshan Bhetwal **CASING:** -

**TYPE OF BORING:** Hand auger to 0.8 m

**WATER OBSERVATIONS:** No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U <sub>r</sub>	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W <sub>sp</sub>	Water seep
E	Environmental sample	W <sub>l</sub>	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)






# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 67.9 AHD  
**EASTING:** 337508  
**NORTHING:** 6253876  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA16  
**PROJECT No:** 86625.00  
**DATE:** 29/11/2018  
**SHEET 1 OF 1**

RL	Depth (m)	Description of Strata	Graphic Log	Sampling & In Situ Testing				Water	Dynamic Penetrometer Test (blows per 150mm)			
				Type	Depth	Sample	Results & Comments		5	10	15	20
68	0.0	FILLING: dark grey sandy clay filling with some silt, rootlets, wood chips, organics, damp  - at 0.3m: becoming dark brown gravelly sand		A/E	0.0							
	0.1				0.1							
	0.5			A/E	0.5							
	0.6				0.6							
	0.7											
	0.7	Bore discontinued at 0.7m due to hand-auger refusal										
	1											

**RIG:** Hand tools

**DRILLER:** Roshan Bhetwal

**LOGGED:** Roshan Bhetwal **CASING:** -

**TYPE OF BORING:** Hand auger to 0.7 m

**WATER OBSERVATIONS:** Free groundwater observed at 0.65m

**REMARKS:**

☐ Sand Penetrometer AS1289.6.3.3  
☐ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND					
A	Auger sample	G	Gas sample	PID	Photo ionisation detector (ppm)
B	Bulk sample	P	Piston sample	PL(A)	Point load axial test Is(50) (MPa)
BLK	Block sample	U	Tube sample (x mm dia.)	PL(D)	Point load diametral test Is(50) (MPa)
C	Core drilling	W	Water sample	pp	Pocket penetrometer (kPa)
D	Disturbed sample	>	Water seep	S	Standard penetration test
E	Environmental sample	≡	Water level	V	Shear vane (kPa)

# BOREHOLE LOG

**CLIENT:** Taronga Conservative Society Australia  
**PROJECT:** Upper Australia Habitat Redevelopment  
**LOCATION:** Taronga Zoological Park, Bradleys Head Road, Mosman

**SURFACE LEVEL:** 67.3 AHD  
**EASTING:** 337521  
**NORTHING:** 6253866  
**DIP/AZIMUTH:** 90°/--

**BORE No:** UA17  
**PROJECT No:** 86625.00  
**DATE:** 29/11/2018  
**SHEET** 1 OF 1

[illegible]

**RIG:** Hand tools

**DRILLER:** Roshan Bhetwal

**LOGGED:** Roshan Bhetwal **CASING:** -

**TYPE OF BORING:** Hand auger to 0.37 m

**WATER OBSERVATIONS:** No free groundwater observed

REMARKS:

☐ Sand Penetrometer AS1289.6.3.3  
☒ Cone Penetrometer AS1289.6.3.2

SAMPLING & IN SITU TESTING LEGEND			
A	Auger sample	G	Gas sample
B	Bulk sample	P	Piston sample
BLK	Block sample	U	Tube sample (x mm dia.)
C	Core drilling	W	Water sample
D	Disturbed sample	W	Water seep
E	Environmental sample	W	Water level
		PID	Photo ionisation detector (ppm)
		PL(A)	Point load axial test Is(50) (MPa)
		PL(D)	Point load diametral test Is(50) (MPa)
		pp	Pocket penetrometer (kPa)
		S	Standard penetration test
		V	Shear vane (kPa)



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## **Appendix G**

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Chain of Custody Documentation, Sample Receipt Advice and  
Laboratory Certificates of Analysis

## CERTIFICATE OF ANALYSIS 207144

### Client Details

<b>Client</b>	Douglas Partners Pty Ltd
<b>Attention</b>	Kurt Plambeck, Lisa Teng
<b>Address</b>	96 Hermitage Rd, West Ryde, NSW, 2114

### Sample Details

<b>Your Reference</b>	<b><u>86625.01, Mosman</u></b>
<b>Number of Samples</b>	26 Soil
<b>Date samples received</b>	03/12/2018
<b>Date completed instructions received</b>	03/12/2018

### Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.

Samples were analysed as received from the client. Results relate specifically to the samples as received.

Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

**Please refer to the last page of this report for any comments relating to the results.**

### Report Details

<b>Date results requested by</b>	11/12/2018
<b>Date of Issue</b>	10/12/2018
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. <b>Tests not covered by NATA are denoted with *</b>	

#### Asbestos Approved By

Analysed by Asbestos Approved Identifier: Panika Wongchanda  
 Authorised by Asbestos Approved Signatory: Lucy Zhu

#### Results Approved By

Jeremy Faircloth, Organics Supervisor  
 Leon Ow, Chemist  
 Long Pham, Team Leader, Metals  
 Matthew Tang, Asbestos Analyst  
 Nick Sarlamis, Inorganics Supervisor  
 Steven Luong, Senior Chemist

#### Authorised By



Jacinta Hurst, Laboratory Manager

## vTRH(C6-C10)/BTEXN in Soil

Our Reference		207144-1	207144-2	207144-3	207144-4	207144-5
Your Reference	UNITS	UA1/ 0.4-0.5	UA1/ 1.1-1.2	UA2/0.4-0.5	UA3/ 0-0.1	UA4/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	26/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	<25	<25	<25	<25	<25
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	<25	<25	<25	<25	<25
vTPH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	110	107	105	107	111

## vTRH(C6-C10)/BTEXN in Soil

Our Reference		207144-6	207144-8	207144-9	207144-10	207144-11
Your Reference	UNITS	UA4/ 1.35-1.45	UA5/0.4-0.5	UA6/ 0-0.1	UA6/ 0.9-1.0	UA7/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	<25	<25	<25	<25	<25
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	<25	<25	<25	<25	<25
vTPH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	108	111	104	103	105

## vTRH(C6-C10)/BTEXN in Soil

Our Reference		207144-12	207144-13	207144-15	207144-16	207144-17
Your Reference	UNITS	UA8/ 0.4-0.5	UA9/ 0-0.1	UA10/0.2-0.3	UA11/0-0.2	UA12/0-0.1
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	<25	<25	<25	<25	<25
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	<25	<25	<25	<25	<25
vTPH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	102	111	108	100	100

## vTRH(C6-C10)/BTEXN in Soil

Our Reference		207144-19	207144-20	207144-21	207144-22	207144-23
Your Reference	UNITS	UA13/0-0.15	UA13/0.7-0.8	UA14/ 0.4-0.5	UA14/0.9-1	UA15/ 0-0.1
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	<25	<25	<25	<25	<25
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	<25	<25	<25	<25	<25
vTPH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	102	104	105	98	97



vTRH(C6-C10)/BTEXN in Soil				
Our Reference		207144-24	207144-25	207144-26
Your Reference	UNITS	UA15/0.7-0.8	UA16/ 0.5-0.6	UA17/ 0-0.15
Date Sampled		27/11/2018	29/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	<25	<25	<25
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	<25	<25	<25
vTPH C <sub>6</sub> - C <sub>10</sub> less BTEX (F1)	mg/kg	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1
naphthalene	mg/kg	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	102	109	111

## svTRH (C10-C40) in Soil

Our Reference		207144-1	207144-2	207144-3	207144-4	207144-5
Your Reference	UNITS	UA1/ 0.4-0.5	UA1/ 1.1-1.2	UA2/0.4-0.5	UA3/ 0-0.1	UA4/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	26/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	<50	<50	<50	<50	<50
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	<100	<100	<100	<100	<100
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	<100	<100	<100	<100	<100
TRH >C <sub>10</sub> -C <sub>16</sub>	mg/kg	<50	<50	<50	<50	<50
TRH >C <sub>10</sub> - C <sub>16</sub> less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	<100	<100	<100	<100	<100
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	<50
Surrogate o-Terphenyl	%	101	97	97	97	94

## svTRH (C10-C40) in Soil

Our Reference		207144-6	207144-8	207144-9	207144-10	207144-11
Your Reference	UNITS	UA4/ 1.35-1.45	UA5/0.4-0.5	UA6/ 0-0.1	UA6/ 0.9-1.0	UA7/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	06/12/2018	05/12/2018	05/12/2018	06/12/2018
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	<50	<50	<50	<50	<50
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	<100	<100	<100	<100	<100
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	<100	<100	<100	<100	180
TRH >C <sub>10</sub> -C <sub>16</sub>	mg/kg	<50	<50	<50	<50	<50
TRH >C <sub>10</sub> - C <sub>16</sub> less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	<100	<100	<100	<100	190
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50	<50	190
Surrogate o-Terphenyl	%	94	97	94	93	97

## svTRH (C10-C40) in Soil

Our Reference		207144-12	207144-13	207144-15	207144-16	207144-17
Your Reference	UNITS	UA8/ 0.4-0.5	UA9/ 0-0.1	UA10/0.2-0.3	UA11/0-0.2	UA12/0-0.1
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	06/12/2018	05/12/2018	05/12/2018	06/12/2018
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	<50	<50	<50	<50	<50
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	<100	<100	<100	<100	390
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	<100	110	<100	<100	300
TRH >C <sub>10</sub> -C <sub>16</sub>	mg/kg	<50	<50	<50	<50	120
TRH >C <sub>10</sub> - C <sub>16</sub> less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	120
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	<100	130	<100	<100	530
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	<100	<100	<100	<100	180
Total +ve TRH (>C10-C40)	mg/kg	<50	130	<50	<50	830
Surrogate o-Terphenyl	%	94	93	93	96	102

## svTRH (C10-C40) in Soil

Our Reference		207144-19	207144-20	207144-21	207144-22	207144-23
Your Reference	UNITS	UA13/0-0.15	UA13/0.7-0.8	UA14/ 0.4-0.5	UA14/0.9-1	UA15/ 0-0.1
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	06/12/2018
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	<50	<50	<50	<50	<50
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	<100	<100	<100	<100	<100
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	<100	<100	<100	<100	<100
TRH >C <sub>10</sub> -C <sub>16</sub>	mg/kg	<50	<50	<50	<50	<50
TRH >C <sub>10</sub> - C <sub>16</sub> less Naphthalene (F2)	mg/kg	<50	<50	<50	<50	<50
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	120	<100	<100	<100	<100
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	120	<50	<50	<50	<50
Surrogate o-Terphenyl	%	93	92	93	95	93

svTRH (C10-C40) in Soil				
Our Reference		207144-24	207144-25	207144-26
Your Reference	UNITS	UA15/0.7-0.8	UA16/ 0.5-0.6	UA17/ 0-0.15
Date Sampled		27/11/2018	29/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	<50	<50	<50
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	<100	<100	<100
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	<100	<100	<100
TRH >C <sub>10</sub> -C <sub>16</sub>	mg/kg	<50	<50	<50
TRH >C <sub>10</sub> - C <sub>16</sub> less Naphthalene (F2)	mg/kg	<50	<50	<50
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	<100	<100	<100
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	<50	<50	<50
Surrogate o-Terphenyl	%	93	91	90

PAHs in Soil						
Our Reference		207144-1	207144-2	207144-3	207144-4	207144-5
Your Reference	UNITS	UA1/ 0.4-0.5	UA1/ 1.1-1.2	UA2/0.4-0.5	UA3/ 0-0.1	UA4/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	26/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.1	0.2
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.5	<0.1	<0.1	<0.1	0.3
Pyrene	mg/kg	0.6	<0.1	<0.1	<0.1	0.3
Benzo(a)anthracene	mg/kg	0.4	<0.1	<0.1	<0.1	0.2
Chrysene	mg/kg	0.4	<0.1	<0.1	<0.1	0.2
Benzo(b,j+k)fluoranthene	mg/kg	0.8	<0.2	<0.2	<0.2	0.4
Benzo(a)pyrene	mg/kg	0.4	<0.05	<0.05	<0.05	0.2
Indeno(1,2,3-c,d)pyrene	mg/kg	0.2	<0.1	<0.1	<0.1	0.2
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	0.3	<0.1	<0.1	<0.1	0.2
Total +ve PAH's	mg/kg	3.7	<0.05	<0.05	0.1	2.2
Benzo(a)pyrene TEQ calc (zero)	mg/kg	0.6	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	0.6	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	0.7	<0.5	<0.5	<0.5	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	112	101	100	91	93

PAHs in Soil						
Our Reference		207144-6	207144-7	207144-8	207144-9	207144-10
Your Reference	UNITS	UA4/ 1.35-1.45	BD1/20181126	UA5/0.4-0.5	UA6/ 0-0.1	UA6/ 0.9-1.0
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	26/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	1.3	0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	0.4	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	1.9	0.6	0.2
Pyrene	mg/kg	<0.1	<0.1	1.8	0.6	0.2
Benzo(a)anthracene	mg/kg	<0.1	<0.1	1.1	0.4	0.1
Chrysene	mg/kg	<0.1	<0.1	1	0.4	0.2
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	2	0.8	0.4
Benzo(a)pyrene	mg/kg	<0.05	<0.05	1.2	0.4	0.2
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	0.7	0.3	0.2
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	0.9	0.3	0.2
Total +ve PAH's	mg/kg	<0.05	<0.05	13	3.9	1.7
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	1.8	0.6	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	1.8	0.6	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	1.8	0.7	<0.5
Surrogate p-Terphenyl-d14	%	93	91	95	96	93



PAHs in Soil						
Our Reference		207144-11	207144-12	207144-13	207144-14	207144-15
Your Reference	UNITS	UA7/ 0-0.1	UA8/ 0.4-0.5	UA9/ 0-0.1	BD2/20181127	UA10/0.2-0.3
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
Naphthalene	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.1	0.2	0.2	0.3
Pyrene	mg/kg	0.1	0.1	0.2	0.2	0.3
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	0.1	<0.1	0.1
Benzo(b,j,k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	0.09	<0.05	0.1	0.1	0.1
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	0.4	0.3	0.56	0.65	0.93
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	95	97	93	96	95

PAHs in Soil						
Our Reference		207144-16	207144-17	207144-18	207144-19	207144-20
Your Reference	UNITS	UA11/0-0.2	UA12/0-0.1	BD3/20181127	UA13/0-0.15	UA13/0.7-0.8
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	0.5	0.2
Anthracene	mg/kg	<0.1	<0.1	<0.1	0.2	<0.1
Fluoranthene	mg/kg	<0.1	0.2	0.2	1.4	0.5
Pyrene	mg/kg	<0.1	0.2	0.2	1.4	0.5
Benzo(a)anthracene	mg/kg	<0.1	0.1	0.1	0.7	0.3
Chrysene	mg/kg	<0.1	0.3	0.2	0.7	0.3
Benzo(b,j,k)fluoranthene	mg/kg	<0.2	0.4	0.4	1	0.4
Benzo(a)pyrene	mg/kg	0.1	0.2	0.2	0.64	0.2
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	0.2	0.2	0.3	0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	0.2	0.2	0.4	0.2
Total +ve PAH's	mg/kg	0.1	2.0	1.7	7.4	2.7
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	0.9	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	0.9	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	1	<0.5
Surrogate p-Terphenyl-d14	%	99	96	97	96	97

PAHs in Soil						
Our Reference		207144-21	207144-22	207144-23	207144-24	207144-25
Your Reference	UNITS	UA14/ 0.4-0.5	UA14/0.9-1	UA15/ 0-0.1	UA15/0.7-0.8	UA16/ 0.5-0.6
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	0.3	1
Anthracene	mg/kg	<0.1	<0.1	<0.1	0.1	0.2
Fluoranthene	mg/kg	<0.1	<0.1	0.1	1.1	2.4
Pyrene	mg/kg	<0.1	<0.1	0.1	1.2	2.2
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	0.7	1.2
Chrysene	mg/kg	<0.1	<0.1	<0.1	0.7	1.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	1	2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	0.07	0.88	1.2
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	0.5	0.6
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	0.1	0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	0.7	0.7
Total +ve PAH's	mg/kg	<0.05	<0.05	0.3	7.6	13
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	1.3	1.7
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	1.3	1.7
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	1.3	1.7
Surrogate p-Terphenyl-d14	%	98	102	96	98	99

PAHs in Soil		
Our Reference		207144-26
Your Reference	UNITS	UA17/ 0-0.15
Date Sampled		29/11/2018
Type of sample		Soil
Date extracted	-	05/12/2018
Date analysed	-	06/12/2018
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5
Surrogate <i>p</i> -Terphenyl-d14	%	111

Organochlorine Pesticides in soil						
Our Reference		207144-1	207144-4	207144-6	207144-10	207144-11
Your Reference	UNITS	UA1/ 0.4-0.5	UA3/ 0-0.1	UA4/ 1.35-1.45	UA6/ 0.9-1.0	UA7/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	07/12/2018
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	128	118	125	124	90

Organochlorine Pesticides in soil						
Our Reference		207144-15	207144-19	207144-21	207144-23	207144-26
Your Reference	UNITS	UA10/0.2-0.3	UA13/0-0.15	UA14/ 0.4-0.5	UA15/ 0-0.1	UA17/ 0-0.15
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	07/12/2018	07/12/2018	07/12/2018	07/12/2018	07/12/2018
HCB	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
beta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
delta-BHC	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor Epoxide	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-Chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-chlordane	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan I	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDD	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan II	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
pp-DDT	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan Sulphate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	92	93	94	94	109



## Organophosphorus Pesticides

Our Reference		207144-1	207144-4	207144-6	207144-10	207144-11
Your Reference	UNITS	UA1/ 0.4-0.5	UA3/ 0-0.1	UA4/ 1.35-1.45	UA6/ 0.9-1.0	UA7/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	07/12/2018
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	128	118	125	124	90

## Organophosphorus Pesticides

Our Reference		207144-15	207144-19	207144-21	207144-23	207144-26
Your Reference	UNITS	UA10/0.2-0.3	UA13/0-0.15	UA14/ 0.4-0.5	UA15/ 0-0.1	UA17/ 0-0.15
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	07/12/2018	07/12/2018	07/12/2018	07/12/2018	07/12/2018
Azinphos-methyl (Guthion)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Bromophos-ethyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos-methyl	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorvos	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethoate	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ethion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fenitrothion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Parathion	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Ronnel	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCMX	%	92	93	94	94	109

PCBs in Soil						
Our Reference		207144-1	207144-4	207144-6	207144-10	207144-11
Your Reference	UNITS	UA1/ 0.4-0.5	UA3/ 0-0.1	UA4/ 1.35-1.45	UA6/ 0.9-1.0	UA7/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	07/12/2018
Aroclor 1016	mg/kg	<0.2	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.2	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.2	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.2	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.2	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.2	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.2	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.2	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	128	118	125	124	90

PCBs in Soil						
Our Reference		207144-15	207144-19	207144-21	207144-23	207144-26
Your Reference	UNITS	UA10/0.2-0.3	UA13/0-0.15	UA14/ 0.4-0.5	UA15/ 0-0.1	UA17/ 0-0.15
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	07/12/2018	07/12/2018	07/12/2018	07/12/2018	07/12/2018
Aroclor 1016	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1221	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1232	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1242	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1248	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1254	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Aroclor 1260	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PCBs (1016-1260)	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate TCLMX	%	92	93	94	94	109

## Acid Extractable metals in soil

Our Reference		207144-1	207144-2	207144-3	207144-4	207144-5
Your Reference	UNITS	UA1/ 0.4-0.5	UA1/ 1.1-1.2	UA2/0.4-0.5	UA3/ 0-0.1	UA4/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	26/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	13	1	2	47	28
Copper	mg/kg	12	10	6	22	17
Lead	mg/kg	16	1	3	4	11
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	14	3	2	46	29
Zinc	mg/kg	35	9	4	30	29

## Acid Extractable metals in soil

Our Reference		207144-6	207144-7	207144-8	207144-9	207144-10
Your Reference	UNITS	UA4/ 1.35-1.45	BD1/20181126	UA5/0.4-0.5	UA6/ 0-0.1	UA6/ 0.9-1.0
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	26/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	4	2	17	4	7
Copper	mg/kg	6	5	20	5	5
Lead	mg/kg	2	1	17	4	7
Mercury	mg/kg	<0.1	<0.1	0.2	<0.1	<0.1
Nickel	mg/kg	2	1	11	1	2
Zinc	mg/kg	5	3	27	8	17

## Acid Extractable metals in soil

Our Reference		207144-11	207144-12	207144-13	207144-14	207144-15
Your Reference	UNITS	UA7/ 0-0.1	UA8/ 0.4-0.5	UA9/ 0-0.1	BD2/20181127	UA10/0.2-0.3
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	10	8	4	9	16
Copper	mg/kg	17	29	14	14	17
Lead	mg/kg	17	29	17	19	25
Mercury	mg/kg	<0.1	<0.1	0.8	1	<0.1
Nickel	mg/kg	12	6	2	3	2
Zinc	mg/kg	73	63	25	23	34

## Acid Extractable metals in soil

Our Reference		207144-16	207144-17	207144-18	207144-19	207144-20
Your Reference	UNITS	UA11/0-0.2	UA12/0-0.1	BD3/20181127	UA13/0-0.15	UA13/0.7-0.8
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Arsenic	mg/kg	4	12	<4	11	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	14	14	7	24	8
Copper	mg/kg	13	27	34	25	14
Lead	mg/kg	10	19	21	24	38
Mercury	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	3	4	4	4	13
Zinc	mg/kg	50	86	100	24	40

## Acid Extractable metals in soil

Our Reference		207144-21	207144-22	207144-23	207144-24	207144-25
Your Reference	UNITS	UA14/ 0.4-0.5	UA14/0.9-1	UA15/ 0-0.1	UA15/0.7-0.8	UA16/ 0.5-0.6
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Arsenic	mg/kg	<4	<4	<4	<4	<4
Cadmium	mg/kg	<0.4	<0.4	<0.4	<0.4	<0.4
Chromium	mg/kg	4	6	9	6	17
Copper	mg/kg	35	7	29	14	49
Lead	mg/kg	7	7	25	9	14
Mercury	mg/kg	<0.1	<0.1	0.1	<0.1	<0.1
Nickel	mg/kg	3	3	6	2	62
Zinc	mg/kg	51	24	80	72	43

## Acid Extractable metals in soil

Our Reference		207144-26	207144-27
Your Reference	UNITS	UA17/ 0-0.15	UA8/ 0.4-0.5 - [TRIPLICATE]
Date Sampled		29/11/2018	27/11/2018
Type of sample		Soil	Soil
Date prepared	-	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	05/12/2018
Arsenic	mg/kg	<4	<4
Cadmium	mg/kg	<0.4	<0.4
Chromium	mg/kg	7	9
Copper	mg/kg	2	28
Lead	mg/kg	9	29
Mercury	mg/kg	<0.1	<0.1
Nickel	mg/kg	2	7
Zinc	mg/kg	13	60

Moisture						
Our Reference	UNITS	207144-1	207144-2	207144-3	207144-4	207144-5
Your Reference		UA1/ 0.4-0.5	UA1/ 1.1-1.2	UA2/0.4-0.5	UA3/ 0-0.1	UA4/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	26/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
Moisture	%	6.9	6.6	4.9	6.4	5.8

Moisture						
Our Reference	UNITS	207144-6	207144-7	207144-8	207144-9	207144-10
Your Reference		UA4/ 1.35-1.45	BD1/20181126	UA5/0.4-0.5	UA6/ 0-0.1	UA6/ 0.9-1.0
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	26/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
Moisture	%	7.8	5.9	5.2	8.8	7.2

Moisture						
Our Reference	UNITS	207144-11	207144-12	207144-13	207144-14	207144-15
Your Reference		UA7/ 0-0.1	UA8/ 0.4-0.5	UA9/ 0-0.1	BD2/20181127	UA10/0.2-0.3
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
Moisture	%	15	16	15	18	16

Moisture						
Our Reference	UNITS	207144-16	207144-17	207144-18	207144-19	207144-20
Your Reference		UA11/0-0.2	UA12/0-0.1	BD3/20181127	UA13/0-0.15	UA13/0.7-0.8
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
Moisture	%	20	27	26	15	12

Moisture						
Our Reference	UNITS	207144-21	207144-22	207144-23	207144-24	207144-25
Your Reference		UA14/ 0.4-0.5	UA14/0.9-1	UA15/ 0-0.1	UA15/0.7-0.8	UA16/ 0.5-0.6
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	06/12/2018	06/12/2018	06/12/2018	06/12/2018	06/12/2018
Moisture	%	14	23	15	5.9	14



Moisture		
Our Reference		207144-26
Your Reference	UNITS	UA17/ 0-0.15
Date Sampled		29/11/2018
Type of sample		Soil
Date prepared	-	05/12/2018
Date analysed	-	06/12/2018
Moisture	%	8.1

Asbestos ID - soils						
Our Reference	UNITS	207144-1	207144-2	207144-3	207144-4	207144-5
Your Reference		UA1/ 0.4-0.5	UA1/ 1.1-1.2	UA2/0.4-0.5	UA3/ 0-0.1	UA4/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	26/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	07/12/2018	07/12/2018	07/12/2018	07/12/2018	07/12/2018
Sample mass tested	g	Approx. 30g	Approx. 20g	Approx. 30g	Approx. 35g	Approx. 30g
Sample Description	-	Brown coarse-grained soil & rocks	Beige sandy soil & rocks	White sandy soil & rocks	Grey sandy soil & rocks	Grey sandy soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg
		Organic fibres detected	Organic fibres detected	Organic fibres detected	Organic fibres detected	Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils						
Our Reference	UNITS	207144-6	207144-8	207144-9	207144-10	207144-11
Your Reference		UA4/ 1.35-1.45	UA5/0.4-0.5	UA6/ 0-0.1	UA6/ 0.9-1.0	UA7/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	07/12/2018	07/12/2018	07/12/2018	07/12/2018	07/12/2018
Sample mass tested	g	Approx. 35g	Approx. 30g	Approx. 30g	Approx. 25g	Approx. 20g
Sample Description	-	Grey sandy soil & rocks	Grey sandy soil & rocks	Grey sandy soil & rocks	Grey sandy soil & rocks	Brown fine-grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils						
Our Reference	UNITS	207144-12	207144-13	207144-15	207144-16	207144-17
Your Reference		UA8/ 0.4-0.5	UA9/ 0-0.1	UA10/0.2-0.3	UA11/0-0.2	UA12/0-0.1
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	07/12/2018	07/12/2018	07/12/2018	07/12/2018	07/12/2018
Sample mass tested	g	Approx. 25g	Approx. 20g	Approx. 20g	Approx. 15g	Approx. 15g
Sample Description	-	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils						
Our Reference		207144-19	207144-20	207144-21	207144-22	207144-23
Your Reference	UNITS	UA13/0-0.15	UA13/0.7-0.8	UA14/ 0.4-0.5	UA14/0.9-1	UA15/ 0-0.1
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date analysed	-	07/12/2018	07/12/2018	07/12/2018	07/12/2018	07/12/2018
Sample mass tested	g	Approx. 20g	Approx. 20g	Approx. 20g	Approx. 25g	Approx. 20g
Sample Description	-	Brown coarse-grained soil & rocks	Brown sandy soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks	Brown coarse-grained soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected	No asbestos detected at reporting limit of 0.1g/kg  Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected	No asbestos detected

Asbestos ID - soils				
Our Reference		207144-24	207144-25	207144-26
Your Reference	UNITS	UA15/0.7-0.8	UA16/ 0.5-0.6	UA17/ 0-0.15
Date Sampled		27/11/2018	29/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil
Date analysed	-	07/12/2018	07/12/2018	07/12/2018
Sample mass tested	g	Approx. 30g	Approx. 20g	Approx. 30g
Sample Description	-	Brown sandy soil & rocks	Brown coarse-grained soil & rocks	Brown sandy soil & rocks
Asbestos ID in soil	-	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg	No asbestos detected at reporting limit of 0.1g/kg
		Organic fibres detected	Organic fibres detected	Organic fibres detected
Trace Analysis	-	No asbestos detected	No asbestos detected	No asbestos detected

**Misc Soil - Inorg**

Our Reference		207144-1	207144-4	207144-6	207144-10	207144-11
Your Reference	UNITS	UA1/ 0.4-0.5	UA3/ 0-0.1	UA4/ 1.35-1.45	UA6/ 0.9-1.0	UA7/ 0-0.1
Date Sampled		26/11/2018	26/11/2018	26/11/2018	26/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5

**Misc Soil - Inorg**

Our Reference		207144-15	207144-19	207144-21	207144-23	207144-26
Your Reference	UNITS	UA10/0.2-0.3	UA13/0-0.15	UA14/ 0.4-0.5	UA15/ 0-0.1	UA17/ 0-0.15
Date Sampled		27/11/2018	27/11/2018	27/11/2018	27/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Date analysed	-	05/12/2018	05/12/2018	05/12/2018	05/12/2018	05/12/2018
Total Phenolics (as Phenol)	mg/kg	<5	<5	<5	<5	<5



Misc Inorg - Soil					
Our Reference		207144-2	207144-9	207144-12	207144-15
Your Reference	UNITS	UA1/ 1.1-1.2	UA6/ 0-0.1	UA8/ 0.4-0.5	UA10/0.2-0.3
Date Sampled		26/11/2018	26/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	07/12/2018	07/12/2018	07/12/2018	07/12/2018
Date analysed	-	07/12/2018	07/12/2018	07/12/2018	07/12/2018
pH 1:5 soil:water	pH Units	7.9	9.0	6.2	6.2

CEC					
Our Reference		207144-2	207144-9	207144-12	207144-15
Your Reference	UNITS	UA1/ 1.1-1.2	UA6/ 0-0.1	UA8/ 0.4-0.5	UA10/0.2-0.3
Date Sampled		26/11/2018	26/11/2018	27/11/2018	27/11/2018
Type of sample		Soil	Soil	Soil	Soil
Date prepared	-	07/12/2018	07/12/2018	07/12/2018	07/12/2018
Date analysed	-	07/12/2018	07/12/2018	07/12/2018	07/12/2018
Exchangeable Ca	meq/100g	2.6	14	6.7	6.6
Exchangeable K	meq/100g	<0.1	0.1	0.7	0.1
Exchangeable Mg	meq/100g	0.39	0.59	1.8	0.89
Exchangeable Na	meq/100g	<0.1	<0.1	0.12	<0.1
Cation Exchange Capacity	meq/100g	3.1	15	9.3	7.6

Method ID	Methodology Summary
<b>ASB-001</b>	Asbestos ID - Qualitative identification of asbestos in bulk samples using Polarised Light Microscopy and Dispersion Staining Techniques including Synthetic Mineral Fibre and Organic Fibre as per Australian Standard 4964-2004.
<b>Inorg-001</b>	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
<b>Inorg-008</b>	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
<b>Inorg-031</b>	Total Phenolics by segmented flow analyser (in line distillation with colourimetric finish). Solids are extracted in a caustic media prior to analysis.
<b>Metals-009</b>	Determination of exchangeable cations and cation exchange capacity in soils using 1M Ammonium Chloride exchange and ICP-AES analytical finish.
<b>Metals-020</b>	Determination of various metals by ICP-AES.
<b>Metals-021</b>	Determination of Mercury by Cold Vapour AAS.
<b>Org-003</b>	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
<b>Org-003</b>	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID.  F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.  Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
<b>Org-005</b>	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
<b>Org-005</b>	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's. Note, the Total +ve reported DDD+DDE+DDT PQL is reflective of the lowest individual PQL and is therefore simply a sum of the positive individually report DDD+DDE+DDT.
<b>Org-006</b>	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD.
<b>Org-006</b>	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC-ECD. Note, the Total +ve PCBs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PCBs" is simply a sum of the positive individual PCBs.
<b>Org-008</b>	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.

Method ID	Methodology Summary
<b>Org-012</b>	<p>Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013.</p> <p>For soil results:-</p> <ol style="list-style-type: none"> <li>1. 'EQ PQL' values are assuming all contributing PAHs reported as &lt;PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present.</li> <li>2. 'EQ zero' values are assuming all contributing PAHs reported as &lt;PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL.</li> <li>3. 'EQ half PQL' values are assuming all contributing PAHs reported as &lt;PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above.</li> </ol> <p>Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.</p>
<b>Org-014</b>	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.
<b>Org-016</b>	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
<b>Org-016</b>	<p>Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.</p> <p>Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.</p>

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	207144-4
Date extracted	-			05/12/2018	1	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Date analysed	-			06/12/2018	1	06/12/2018	06/12/2018		06/12/2018	06/12/2018
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	25	Org-016	<25	1	<25	<25	0	99	105
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	25	Org-016	<25	1	<25	<25	0	99	105
Benzene	mg/kg	0.2	Org-016	<0.2	1	<0.2	<0.2	0	100	106
Toluene	mg/kg	0.5	Org-016	<0.5	1	<0.5	<0.5	0	96	103
Ethylbenzene	mg/kg	1	Org-016	<1	1	<1	<1	0	99	105
m+p-xylene	mg/kg	2	Org-016	<2	1	<2	<2	0	99	105
o-Xylene	mg/kg	1	Org-016	<1	1	<1	<1	0	101	108
naphthalene	mg/kg	1	Org-014	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	106	1	110	105	5	103	107

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	207144-24
Date extracted	-			[NT]	12	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Date analysed	-			[NT]	12	06/12/2018	06/12/2018		06/12/2018	06/12/2018
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	25	Org-016	[NT]	12	<25	<25	0	110	103
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	25	Org-016	[NT]	12	<25	<25	0	110	103
Benzene	mg/kg	0.2	Org-016	[NT]	12	<0.2	<0.2	0	111	103
Toluene	mg/kg	0.5	Org-016	[NT]	12	<0.5	<0.5	0	108	100
Ethylbenzene	mg/kg	1	Org-016	[NT]	12	<1	<1	0	110	104
m+p-xylene	mg/kg	2	Org-016	[NT]	12	<2	<2	0	110	103
o-Xylene	mg/kg	1	Org-016	[NT]	12	<1	<1	0	113	107
naphthalene	mg/kg	1	Org-014	[NT]	12	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	[NT]	12	102	111	8	116	106

QUALITY CONTROL: VTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	05/12/2018	05/12/2018		[NT]	[NT]
Date analysed	-			[NT]	22	06/12/2018	06/12/2018		[NT]	[NT]
TRH C <sub>6</sub> - C <sub>9</sub>	mg/kg	25	Org-016	[NT]	22	<25	<25	0	[NT]	[NT]
TRH C <sub>6</sub> - C <sub>10</sub>	mg/kg	25	Org-016	[NT]	22	<25	<25	0	[NT]	[NT]
Benzene	mg/kg	0.2	Org-016	[NT]	22	<0.2	<0.2	0	[NT]	[NT]
Toluene	mg/kg	0.5	Org-016	[NT]	22	<0.5	<0.5	0	[NT]	[NT]
Ethylbenzene	mg/kg	1	Org-016	[NT]	22	<1	<1	0	[NT]	[NT]
m+p-xylene	mg/kg	2	Org-016	[NT]	22	<2	<2	0	[NT]	[NT]
o-Xylene	mg/kg	1	Org-016	[NT]	22	<1	<1	0	[NT]	[NT]
naphthalene	mg/kg	1	Org-014	[NT]	22	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-016	[NT]	22	98	99	1	[NT]	[NT]

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	207144-4
Date extracted	-			05/12/2018	1	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Date analysed	-			05/12/2018	1	05/12/2018	05/12/2018		05/12/2018	05/12/2018
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	50	Org-003	<50	1	<50	<50	0	111	96
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	100	Org-003	<100	1	<100	<100	0	110	96
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	100	Org-003	<100	1	<100	<100	0	111	97
TRH >C <sub>10</sub> -C <sub>16</sub>	mg/kg	50	Org-003	<50	1	<50	<50	0	111	96
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	100	Org-003	<100	1	<100	<100	0	110	96
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	100	Org-003	<100	1	<100	<100	0	111	97
Surrogate o-Terphenyl	%		Org-003	93	1	101	98	3	118	97

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	207144-24
Date extracted	-			[NT]	12	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Date analysed	-			[NT]	12	05/12/2018	05/12/2018		05/12/2018	06/12/2018
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	50	Org-003	[NT]	12	<50	<50	0	104	88
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	100	Org-003	[NT]	12	<100	<100	0	95	77
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	100	Org-003	[NT]	12	<100	<100	0	93	97
TRH >C <sub>10</sub> -C <sub>16</sub>	mg/kg	50	Org-003	[NT]	12	<50	<50	0	104	88
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	100	Org-003	[NT]	12	<100	<100	0	95	77
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	100	Org-003	[NT]	12	<100	<100	0	93	97
Surrogate o-Terphenyl	%		Org-003	[NT]	12	94	94	0	100	93

QUALITY CONTROL: svTRH (C10-C40) in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	05/12/2018	05/12/2018		[NT]	[NT]
Date analysed	-			[NT]	22	05/12/2018	05/12/2018		[NT]	[NT]
TRH C <sub>10</sub> - C <sub>14</sub>	mg/kg	50	Org-003	[NT]	22	<50	<50	0	[NT]	[NT]
TRH C <sub>15</sub> - C <sub>28</sub>	mg/kg	100	Org-003	[NT]	22	<100	<100	0	[NT]	[NT]
TRH C <sub>29</sub> - C <sub>36</sub>	mg/kg	100	Org-003	[NT]	22	<100	<100	0	[NT]	[NT]
TRH >C <sub>10</sub> -C <sub>16</sub>	mg/kg	50	Org-003	[NT]	22	<50	<50	0	[NT]	[NT]
TRH >C <sub>16</sub> -C <sub>34</sub>	mg/kg	100	Org-003	[NT]	22	<100	<100	0	[NT]	[NT]
TRH >C <sub>34</sub> -C <sub>40</sub>	mg/kg	100	Org-003	[NT]	22	<100	<100	0	[NT]	[NT]
Surrogate o-Terphenyl	%		Org-003	[NT]	22	95	96	1	[NT]	[NT]



QUALITY CONTROL: PAHs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	207144-4
Date extracted	-			05/12/2018	1	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Date analysed	-			06/12/2018	1	06/12/2018	06/12/2018		06/12/2018	06/12/2018
Naphthalene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	116	111
Acenaphthylene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	108	104
Phenanthrene	mg/kg	0.1	Org-012	<0.1	1	0.1	0.1	0	125	122
Anthracene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012	<0.1	1	0.5	0.3	50	107	112
Pyrene	mg/kg	0.1	Org-012	<0.1	1	0.6	0.3	67	101	106
Benzo(a)anthracene	mg/kg	0.1	Org-012	<0.1	1	0.4	0.2	67	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012	<0.1	1	0.4	0.2	67	118	114
Benzo(b,j,k)fluoranthene	mg/kg	0.2	Org-012	<0.2	1	0.8	0.4	67	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012	<0.05	1	0.4	0.3	29	112	108
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	<0.1	1	0.2	0.1	67	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	<0.1	1	0.3	0.2	40	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012	100	1	112	97	14	92	100

QUALITY CONTROL: PAHs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	207144-24
Date extracted	-			[NT]	12	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Date analysed	-			[NT]	12	06/12/2018	06/12/2018		06/12/2018	06/12/2018
Naphthalene	mg/kg	0.1	Org-012	[NT]	12	<0.1	<0.1	0	115	114
Acenaphthylene	mg/kg	0.1	Org-012	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012	[NT]	12	<0.1	<0.1	0	109	108
Phenanthrene	mg/kg	0.1	Org-012	[NT]	12	<0.1	<0.1	0	127	122
Anthracene	mg/kg	0.1	Org-012	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012	[NT]	12	0.1	0.2	67	113	101
Pyrene	mg/kg	0.1	Org-012	[NT]	12	0.1	0.2	67	106	95
Benzo(a)anthracene	mg/kg	0.1	Org-012	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012	[NT]	12	<0.1	0.1	0	118	122
Benzo(b,j,k)fluoranthene	mg/kg	0.2	Org-012	[NT]	12	<0.2	0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012	[NT]	12	<0.05	0.1	67	108	98
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	[NT]	12	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012	[NT]	12	97	103	6	97	96

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date extracted	-			[NT]	22	05/12/2018	05/12/2018		[NT]	[NT]
Date analysed	-			[NT]	22	06/12/2018	06/12/2018		[NT]	[NT]
Naphthalene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Acenaphthylene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Fluorene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Phenanthrene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Anthracene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Pyrene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Benzo(a)anthracene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-012	[NT]	22	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-012	[NT]	22	<0.05	<0.05	0	[NT]	[NT]
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-012	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-012	[NT]	22	102	104	2	[NT]	[NT]

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	207144-4
Date extracted	-			05/12/2018	1	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Date analysed	-			06/12/2018	1	06/12/2018	06/12/2018		06/12/2018	06/12/2018
HCB	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	92	102
gamma-BHC	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	91	105
Heptachlor	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	84	92
delta-BHC	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	87	101
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	91	106
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	97	117
Dieldrin	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	106	124
Endrin	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	85	95
pp-DDD	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	94	109
Endosulfan II	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	92	78
Methoxychlor	mg/kg	0.1	Org-005	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate TCMX	%		Org-005	116	1	128	116	10	118	131

QUALITY CONTROL: Organophosphorus Pesticides					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	207144-4
Date extracted	-			05/12/2018	1	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Date analysed	-			06/12/2018	1	06/12/2018	06/12/2018		06/12/2018	06/12/2018
Azinphos-methyl (Guthion)	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Bromophos-ethyl	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chlorpyrifos	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	87	106
Chlorpyrifos-methyl	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Diazinon	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dichlorvos	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	85	89
Dimethoate	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Ethion	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	96	97
Fenitrothion	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	97	100
Malathion	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	84	78
Parathion	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	96	102
Ronnel	mg/kg	0.1	Org-008	<0.1	1	<0.1	<0.1	0	98	117
Surrogate TCMX	%		Org-008	116	1	128	116	10	98	133

QUALITY CONTROL: PCBs in Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	207144-4
Date extracted	-			05/12/2018	1	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Date analysed	-			06/12/2018	1	06/12/2018	06/12/2018		06/12/2018	06/12/2018
Aroclor 1016	mg/kg	0.1	Org-006	<0.1	1	<0.2	<0.2	0	[NT]	[NT]
Aroclor 1221	mg/kg	0.1	Org-006	<0.1	1	<0.2	<0.2	0	[NT]	[NT]
Aroclor 1232	mg/kg	0.1	Org-006	<0.1	1	<0.2	<0.2	0	[NT]	[NT]
Aroclor 1242	mg/kg	0.1	Org-006	<0.1	1	<0.2	<0.2	0	[NT]	[NT]
Aroclor 1248	mg/kg	0.1	Org-006	<0.1	1	<0.2	<0.2	0	[NT]	[NT]
Aroclor 1254	mg/kg	0.1	Org-006	<0.1	1	<0.2	<0.2	0	107	103
Aroclor 1260	mg/kg	0.1	Org-006	<0.1	1	<0.2	<0.2	0	[NT]	[NT]
Surrogate TCLMX	%		Org-006	116	1	128	116	10	98	117

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	207144-4
Date prepared	-			05/12/2018	1	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Date analysed	-			05/12/2018	1	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Arsenic	mg/kg	4	Metals-020	<4	1	<4	<4	0	107	89
Cadmium	mg/kg	0.4	Metals-020	<0.4	1	<0.4	<0.4	0	106	84
Chromium	mg/kg	1	Metals-020	<1	1	13	11	17	106	105
Copper	mg/kg	1	Metals-020	<1	1	12	14	15	105	112
Lead	mg/kg	1	Metals-020	<1	1	16	19	17	108	84
Mercury	mg/kg	0.1	Metals-021	<0.1	1	<0.1	<0.1	0	107	111
Nickel	mg/kg	1	Metals-020	<1	1	14	16	13	101	106
Zinc	mg/kg	1	Metals-020	<1	1	35	34	3	103	93

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-5	207144-24
Date prepared	-			[NT]	12	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Date analysed	-			[NT]	12	05/12/2018	05/12/2018		05/12/2018	05/12/2018
Arsenic	mg/kg	4	Metals-020	[NT]	12	<4	<4	0	109	97
Cadmium	mg/kg	0.4	Metals-020	[NT]	12	<0.4	<0.4	0	103	102
Chromium	mg/kg	1	Metals-020	[NT]	12	8	8	0	105	102
Copper	mg/kg	1	Metals-020	[NT]	12	29	30	3	108	99
Lead	mg/kg	1	Metals-020	[NT]	12	29	49	51	104	104
Mercury	mg/kg	0.1	Metals-021	[NT]	12	<0.1	<0.1	0	104	105
Nickel	mg/kg	1	Metals-020	[NT]	12	6	7	15	100	97
Zinc	mg/kg	1	Metals-020	[NT]	12	63	67	6	102	107

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	[NT]	[NT]
Date prepared	-			[NT]	22	05/12/2018	05/12/2018		[NT]	[NT]
Date analysed	-			[NT]	22	05/12/2018	05/12/2018		[NT]	[NT]
Arsenic	mg/kg	4	Metals-020	[NT]	22	<4	<4	0	[NT]	[NT]
Cadmium	mg/kg	0.4	Metals-020	[NT]	22	<0.4	<0.4	0	[NT]	[NT]
Chromium	mg/kg	1	Metals-020	[NT]	22	6	6	0	[NT]	[NT]
Copper	mg/kg	1	Metals-020	[NT]	22	7	5	33	[NT]	[NT]
Lead	mg/kg	1	Metals-020	[NT]	22	7	8	13	[NT]	[NT]
Mercury	mg/kg	0.1	Metals-021	[NT]	22	<0.1	<0.1	0	[NT]	[NT]
Nickel	mg/kg	1	Metals-020	[NT]	22	3	3	0	[NT]	[NT]
Zinc	mg/kg	1	Metals-020	[NT]	22	24	18	29	[NT]	[NT]

QUALITY CONTROL: Misc Soil - Inorg					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	[NT]
Date prepared	-			05/12/2018	1	05/12/2018	05/12/2018		05/12/2018	[NT]
Date analysed	-			05/12/2018	1	05/12/2018	05/12/2018		05/12/2018	[NT]
Total Phenolics (as Phenol)	mg/kg	5	Inorg-031	<5	1	<5	<5	0	104	[NT]



QUALITY CONTROL: Misc Inorg - Soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	[NT]
Date prepared	-			07/12/2018	12	07/12/2018	07/12/2018		07/12/2018	[NT]
Date analysed	-			07/12/2018	12	07/12/2018	07/12/2018		07/12/2018	[NT]
pH 1:5 soil:water	pH Units		Inorg-001	[NT]	12	6.2	6.1	2	102	[NT]

QUALITY CONTROL: CEC						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	[NT]
Date prepared	-			07/12/2018	2	07/12/2018	07/12/2018		07/12/2018	[NT]
Date analysed	-			07/12/2018	2	07/12/2018	07/12/2018		07/12/2018	[NT]
Exchangeable Ca	meq/100g	0.1	Metals-009	<0.1	2	2.6	2.5	4	101	[NT]
Exchangeable K	meq/100g	0.1	Metals-009	<0.1	2	<0.1	<0.1	0	111	[NT]
Exchangeable Mg	meq/100g	0.1	Metals-009	<0.1	2	0.39	0.40	3	99	[NT]
Exchangeable Na	meq/100g	0.1	Metals-009	<0.1	2	<0.1	<0.1	0	106	[NT]

## Result Definitions

<b>NT</b>	Not tested
<b>NA</b>	Test not required
<b>INS</b>	Insufficient sample for this test
<b>PQL</b>	Practical Quantitation Limit
<b>&lt;</b>	Less than
<b>&gt;</b>	Greater than
<b>RPD</b>	Relative Percent Difference
<b>LCS</b>	Laboratory Control Sample
<b>NS</b>	Not specified
<b>NEPM</b>	National Environmental Protection Measure
<b>NR</b>	Not Reported

## Quality Control Definitions

<b>Blank</b>	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
<b>Duplicate</b>	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
<b>Matrix Spike</b>	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
<b>LCS (Laboratory Control Sample)</b>	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
<b>Surrogate Spike</b>	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	

## Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.

## Report Comments

Acid Extractable Metals in Soil: The laboratory RPD acceptance criteria has been exceeded for 207144-12 for Pb. Therefore a triplicate result has been issued as laboratory sample number 207144-27.

PCBs in Soil - PQL has been raised due to interference from analytes (other than those being tested) in the sample 1,1d.

Asbestos: A portion of the supplied samples were sub-sampled for asbestos analysis according to Envirolab procedures. We cannot guarantee that this sub-sample is indicative of the entire sample. Envirolab recommends supplying 40-50g of sample in its own container.

Note: Samples requested for asbestos testing were sub-sampled from jars provided by the client.

## Andrew Fitzsimons

---

**From:** Ken Nguyen  
**Sent:** Tuesday, 11 December 2018 1:24 PM  
**To:** Andrew Fitzsimons; Aileen Hie  
**Subject:** FW: Results for Registration 207144 86625.01, Mosman

Regards,

Ken Nguyen | Chemist | Envirolab Services Pty Ltd  
(Monday to Friday 1pm to 9pm)

*Great Science, Great Service.*

12 Ashley Street Chatswood NSW 2067  
T 612 9910 6200 F 612 9910 6201  
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ELS: 207144-A  
TAT: 5 days  
Dre: 18/12/18

*Fit*

**Please note that all samples submitted to the Envirolab Group laboratories will be analysed under the Envirolab Group Terms and Conditions. The Terms and Conditions are accessible by clicking this link**

---

**From:** Kurt Plambeck <kurt.plambeck@douglaspartners.com.au>  
**Sent:** Tuesday, 11 December 2018 9:40 AM  
**To:** Ken Nguyen <KNguyen@envirolab.com.au>  
**Cc:** Lisa Teng <Lisa.Teng@douglaspartners.com.au>  
**Subject:** RE: Results for Registration 207144 86625.01, Mosman

Ken,

Can you please run TCLP on the following

PAH

UA5/0.4-0.5 - 8

UA15/0.7-0.8 - 24

UA16/0.5-0.6 - 25

Ni

UA3/0-0.1 - 4

UA16/0.5-0.6 - 25

Regards

---

## **CERTIFICATE OF ANALYSIS 207144-A**

### **Client Details**

<b>Client</b>	Douglas Partners Pty Ltd
<b>Attention</b>	Kurt Plambeck
<b>Address</b>	96 Hermitage Rd, West Ryde, NSW, 2114

### **Sample Details**

<b>Your Reference</b>	<b><u>86625.01, Mosman</u></b>
<b>Number of Samples</b>	26 Soil
<b>Date samples received</b>	03/12/2018
<b>Date completed instructions received</b>	11/12/2018

### **Analysis Details**

Please refer to the following pages for results, methodology summary and quality control data.  
Samples were analysed as received from the client. Results relate specifically to the samples as received.  
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.

### **Report Details**

<b>Date results requested by</b>	18/12/2018
<b>Date of Issue</b>	18/12/2018
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. <b>Tests not covered by NATA are denoted with *</b>	

#### **Results Approved By**

Long Pham, Team Leader, Metals  
Steven Luong, Senior Chemist

#### **Authorised By**



Jacinta Hurst, Laboratory Manager



PAHs in TCLP (USEPA 1311)				
Our Reference		207144-A-8	207144-A-24	207144-A-25
Your Reference	UNITS	UA5/0.4-0.5	UA15/0.7-0.8	UA16/ 0.5-0.6
Date Sampled		26/11/2018	27/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil
Date extracted	-	12/12/2018	12/12/2018	12/12/2018
Date analysed	-	13/12/2018	13/12/2018	13/12/2018
Naphthalene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthylene in TCLP	mg/L	<0.001	<0.001	<0.001
Acenaphthene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluorene in TCLP	mg/L	<0.001	<0.001	<0.001
Phenanthrene in TCLP	mg/L	<0.001	<0.001	<0.001
Anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Fluoranthene in TCLP	mg/L	<0.001	<0.001	<0.001
Pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(a)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Chrysene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(b,j,k)fluoranthene in TCLP	mg/L	<0.002	<0.002	<0.002
Benzo(a)pyrene in TCLP	mg/L	<0.001	<0.001	<0.001
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	<0.001	<0.001	<0.001
Dibenzo(a,h)anthracene in TCLP	mg/L	<0.001	<0.001	<0.001
Benzo(g,h,i)perylene in TCLP	mg/L	<0.001	<0.001	<0.001
Total +ve PAH's	mg/L	NIL (+)VE	NIL (+)VE	NIL (+)VE
Surrogate <i>p</i> -Terphenyl-d14	%	93	97	95

Metals in TCLP USEPA1311					
Our Reference		207144-A-4	207144-A-8	207144-A-24	207144-A-25
Your Reference	UNITS	UA3/ 0-0.1	UA5/0.4-0.5	UA15/0.7-0.8	UA16/ 0.5-0.6
Date Sampled		26/11/2018	26/11/2018	27/11/2018	29/11/2018
Type of sample		Soil	Soil	Soil	Soil
Date extracted	-	17/12/2018	17/12/2018	17/12/2018	17/12/2018
Date analysed	-	17/12/2018	17/12/2018	17/12/2018	17/12/2018
pH of soil for fluid# determ.	pH units	9.4	9.7	8.4	8.1
pH of soil TCLP (after HCl)	pH units	1.5	2.8	1.4	1.4
Extraction fluid used	-	1	1	1	1
pH of final Leachate	pH units	5.3	5.5	5.0	5.0
Nickel in TCLP	mg/L	0.02	[NA]	[NA]	<0.02

Method ID	Methodology Summary
<b>EXTRACT.7</b>	Toxicity Characteristic Leaching Procedure (TCLP) using Zero Headspace Extraction (zHE) using AS4439 and USEPA 1311.
<b>Inorg-001</b>	pH - Measured using pH meter and electrode in accordance with APHA latest edition, 4500-H+. Please note that the results for water analyses are indicative only, as analysis outside of the APHA storage times.
<b>Inorg-004</b>	Toxicity Characteristic Leaching Procedure (TCLP) using in house method INORG-004. Please note that the mass used may be scaled down from the default based on sample mass available.
<b>Metals-020 ICP-AES</b>	Determination of various metals by ICP-AES.
<b>Org-012</b>	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS.
<b>Org-012</b>	Leachates are extracted with Dichloromethane and analysed by GC-MS.
<b>Org-012</b>	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013.

QUALITY CONTROL: PAHs in TCLP (USEPA 1311)					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W3	[NT]
Date extracted	-			12/12/2018	[NT]	[NT]	[NT]	[NT]	12/12/2018	[NT]
Date analysed	-			13/12/2018	[NT]	[NT]	[NT]	[NT]	13/12/2018	[NT]
Naphthalene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	78	[NT]
Acenaphthylene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Acenaphthene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluorene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	85	[NT]
Phenanthrene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	88	[NT]
Anthracene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Fluoranthene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	92	[NT]
Pyrene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	91	[NT]
Benzo(a)anthracene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Chrysene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	91	[NT]
Benzo(b)fluoranthene in TCLP	mg/L	0.002	Org-012	<0.002	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(a)pyrene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	98	[NT]
Indeno(1,2,3-c,d)pyrene - TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Dibenzo(a,h)anthracene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Benzo(g,h,i)perylene in TCLP	mg/L	0.001	Org-012	<0.001	[NT]	[NT]	[NT]	[NT]	90	[NT]
Surrogate p-Terphenyl-d14	%		Org-012	116	[NT]	[NT]	[NT]	[NT]	90	[NT]

QUALITY CONTROL: Metals in TCLP USEPA1311						Duplicate		Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-W1	[NT]
Date extracted	-			17/12/2018	4	17/12/2018	17/12/2018		17/12/2018	[NT]
Date analysed	-			17/12/2018	4	17/12/2018	17/12/2018		17/12/2018	[NT]
Nickel in TCLP	mg/L	0.02	Metals-020 ICP-AES	<0.02	4	0.02	0.03	40	103	[NT]

## Result Definitions

<b>NT</b>	Not tested
<b>NA</b>	Test not required
<b>INS</b>	Insufficient sample for this test
<b>PQL</b>	Practical Quantitation Limit
<b>&lt;</b>	Less than
<b>&gt;</b>	Greater than
<b>RPD</b>	Relative Percent Difference
<b>LCS</b>	Laboratory Control Sample
<b>NS</b>	Not specified
<b>NEPM</b>	National Environmental Protection Measure
<b>NR</b>	Not Reported

## Quality Control Definitions

<b>Blank</b>	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
<b>Duplicate</b>	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
<b>Matrix Spike</b>	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
<b>LCS (Laboratory Control Sample)</b>	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
<b>Surrogate Spike</b>	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.
Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.	

## Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals; 60-140% for organics (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra trace organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.


When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Measurement Uncertainty estimates are available for most tests upon request.



<b>Project No:</b> 86625.01		<b>Suburb:</b> Mosman		<b>To:</b>	
<b>Project Name:</b> Phase 2 Redevelopment of Upper Aust Habitat		<b>Order Number</b>			
<b>Project Manager:</b> KDP		<b>Sampler:</b> RB		<b>Attn:</b>	
<b>Emails:</b> kurt.plambeck@douglaspartners.com.au; lisa.teng@douglaspartners.com.au		<b>Phone:</b>			
<b>Date Required:</b> Standard <input type="checkbox"/>		<b>Email:</b>			
<b>Prior Storage:</b> <input type="checkbox"/> Fridge <input type="checkbox"/> Shelved		Do samples contain 'potential' HBM? Yes <input type="checkbox"/> No <input type="checkbox"/> (If YES, then handle, transport and store in accordance with FPM HAZID)			

Sample ID	Lab ID	Date Sampled	Sample Type S - soil W - water	Container Type G - glass P - plastic	Analytes						Notes/preservation	
					Combo 8a	Combo 3a	PAH	Heavy Metals	pH	CEC		
✓ UA1/ 0.4-0.5	1	26/11/18	S	G	X							 <b>EnviroLab Services</b> 12 Ashley St Chatswood NSW 2067 Ph: (02) 9910 6300 Job No: 207144 Date Received: 3/12/18 Time Received: 16:29 Received By: [Signature] Temp: 20°C Ambient Cooling: Ice/Repack Security: Intact/Broken/None
✓ UA1/ 1.1-1.2	2	26/11/18	S	G		X			X	X		
✓ UA2/ 0.4-0.5	3	26/11/18	S	G		X						
✓ UA3/ 0-0.1	4	26/11/18	S	G	X							
✓ UA4/ 0-0.1	5	26/11/18	S	G		X						
✓ UA4/ 1.35-1.45	6	26/11/18	S	G	X							
✓ BD1/20181126	7	26/11/18	S	G			X	X				
✓ UA5/ 0.4-0.5	8	26/11/18	S	G		X						
✓ UA6/ 0-0.1	9	26/11/18	S	G		X			X	X		
✓ UA6/ 0.9-1.0	10	26/11/18	S	G	X							
✓ UA7/ 0-0.1	11	27/11/18	S	G	X							
✓ UA8/ 0.4-0.5	12	27/11/18	S	G		X			X	X		
✓ UA9/ 0-0.1	13	27/11/18	S	G		X						
✓ BD2/20181127	14	27/11/18	S	G			X	X				
✓ UA10/ 0.2-0.3	15	27/11/18	S	G	X				X	X		
<b>PQL (S) mg/kg</b>												<b>ANZECC PQLs req'd for all water analytes</b> <input type="checkbox"/>
<b>PQL = practical quantitation limit. If none given, default to Laboratory Method Detection Limit</b>											<b>Lab Report/Reference No:</b>	
<b>Metals to Analyse: 8HM unless specified here:</b>												
<b>Total number of samples in container:</b>			<b>Relinquished by:</b>			<b>Transported to laboratory by:</b>						
<b>Send Results to:</b> Douglas Partners Pty Ltd			<b>Address:</b>			<b>Phone:</b>			<b>Fax:</b>			
<b>Signed:</b> NW			<b>Received by:</b> LILY NOTT ECS [Signature]			<b>Date &amp; Time:</b> 3/12/18			<b>16:29</b>			

<b>Project No:</b> 86625.01				<b>Suburb:</b> Mosman				<b>To:</b>			
<b>Project Name:</b> Phase 2 Redevelopment of Upper Aust Habitat				<b>Order Number</b>							
<b>Project Manager:</b> KDP				<b>Sampler:</b> RB				<b>Attn:</b>			
<b>Emails:</b> kurt.plambeck@douglaspartners.com.au; lisa.teng@douglaspartners.com.au								<b>Phone:</b>			
<b>Date Required:</b> Standard <input type="checkbox"/>								<b>Email:</b>			
<b>Prior Storage:</b> <input type="checkbox"/> Fridge <input type="checkbox"/> Shelved				Do samples contain 'potential' HBM? Yes <input type="checkbox"/> No <input type="checkbox"/> (If YES, then handle, transport and store in accordance with FPM HAZID)							

Sample ID	Lab ID	Sampling Date	Sample Type	Container Type	Analytes								Notes/preservation	
			S - soil W - water	G - glass P - plastic	Combo 8a	Combo 3a	PAH	Heavy Metals	pH	CEC				
✓ UA11/0-0.2	16	27/11/18	S	G		X								
✓ UA12/0-0.2	17	27/11/18	S	G		X								
✓ BD3/20181127	18	27/11/18	S	G			X	X						
✓ UA13/0-0.15	19	27/11/18	S	G	X									
✓ UA13/0.7-0.8	20	27/11/18	S	G		X								
✓ UA14/ <sup>0.4-0.5</sup> 0.2-0.3	21	27/11/18	S	G	X									
✓ UA14/0.9-1	22	27/11/18	S	G		X								
✓ UA15/ 0-0.1	23	27/11/18	S	G	X									
✓ UA15/0.7-0.8	24	27/11/18	S	G		X								
✓ UA16/ 0.5-0.6	25	29/11/18	S	G		X								
✓ UA17/ 0-0.15	26	29/11/18	S	G	X									
<b>PQL (S) mg/kg</b>										<b>ANZECC PQLs req'd for all water analytes</b> <input type="checkbox"/>				
<b>PQL' = practical quantitation limit. If none given, default to Laboratory Method Detection Limit</b>										<b>Lab Report/Reference No:</b>				
<b>Metals to Analyse: 8HM unless specified here:</b>														
<b>Total number of samples in container:</b>					<b>Relinquished by:</b>					<b>Transported to laboratory by:</b>				
<b>Send Results to:</b> Douglas Partners Pty Ltd					<b>Address:</b>					<b>Phone:</b>				
<b>Signed:</b> NW					<b>Received by:</b> LILLY NOTT <i>ECS</i>					<b>Date &amp; Time:</b> 3/12/18 16:29				

207144

## SAMPLE RECEIPT ADVICE

### Client Details

<b>Client</b>	Douglas Partners Pty Ltd
<b>Attention</b>	Kurt Plambeck

### Sample Login Details

<b>Your reference</b>	86625.01, Mosman
<b>Envirolab Reference</b>	207144-A
<b>Date Sample Received</b>	03/12/2018
<b>Date Instructions Received</b>	11/12/2018
<b>Date Results Expected to be Reported</b>	18/12/2018

### Sample Condition

<b>Samples received in appropriate condition for analysis</b>	YES
<b>No. of Samples Provided</b>	26 Soil
<b>Turnaround Time Requested</b>	Standard
<b>Temperature on Receipt (°C)</b>	12.9
<b>Cooling Method</b>	Ice Pack
<b>Sampling Date Provided</b>	YES

### Comments

Nil

Please direct any queries to:

#### Aileen Hie

**Phone:** 02 9910 6200  
**Fax:** 02 9910 6201  
**Email:** ahie@envirolab.com.au

#### Jacinta Hurst

**Phone:** 02 9910 6200  
**Fax:** 02 9910 6201  
**Email:** jhurst@envirolab.com.au

*Analysis Underway, details on the following page:*



Sample ID	Naphthalene in TCLP	Acenaphthylene in TCLP	Acenaphthene in TCLP	Fluorene in TCLP	Phenanthrene in TCLP	Anthracene in TCLP	Fluoranthene in TCLP	Pyrene in TCLP	Benzo(a)anthracene in TCLP	Chrysene in TCLP	Benzo(b)fluoranthene in TCLP	Benzo(a)pyrene in TCLP	Indeno(1,2,3-c,d)pyrene - TCLP	Dibenzo(a,h)anthracene in TCLP	Benzo(g,h,i)perylene in TCLP	Total +vePAH's	Surrogate p-Terphenyl-d14	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Nickel in TCLP	On Hold
UA1/ 0.4-0.5																							✓
UA1/ 1.1-1.2																							✓
UA2/0.4-0.5																							✓
UA3/ 0-0.1																		✓	✓	✓	✓	✓	
UA4/ 0-0.1																							✓
UA4/ 1.35-1.45																							✓
BD1/20181126																							✓
UA5/0.4-0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
UA6/ 0-0.1																							✓
UA6/ 0.9-1.0																							✓
UA7/ 0-0.1																							✓
UA8/ 0.4-0.5																							✓
UA9/ 0-0.1																							✓
BD2/20181127																							✓
UA10/0.2-0.3																							✓
UA11/0-0.2																							✓
UA12/0-0.1																							✓
BD3/20181127																							✓
UA13/0-0.15																							✓
UA13/0.7-0.8																							✓



**Envirolab Services Pty Ltd**

ABN 37 112 535 645

12 Ashley St Chatswood NSW 2067

ph 02 9910 6200 fax 02 9910 6201

customerservice@envirolab.com.au

www.envirolab.com.au

Sample ID	Naphthalene in TCLP	Acenaphthylene in TCLP	Acenaphthene in TCLP	Fluorene in TCLP	Phenanthrene in TCLP	Anthracene in TCLP	Fluoranthene in TCLP	Pyrene in TCLP	Benzo(a)anthracene in TCLP	Chrysene in TCLP	Benzo(b)fluoranthene in TCLP	Benzo(a)pyrene in TCLP	Indeno(1,2,3-c,d)pyrene - TCLP	Dibenzo(a,h)anthracene in TCLP	Benzo(g,h,i)perylene in TCLP	Total +vePAH's	Surrogate p-Terphenyl-d14	pH of soil for fluid#determ.	pH of soil TCLP (after HCl)	Extraction fluid used	pH of final Leachate	Nickel in TCLP	On Hold
UA14/ 0.4-0.5																							✓
UA14/0.9-1																							✓
UA15/ 0-0.1																							✓
UA15/0.7-0.8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
UA16/ 0.5-0.6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
UA17/ 0-0.15																							✓
UA8/ 0.4-0.5 - [TRIPLICATE]																							✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

### Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.

## SAMPLE RECEIPT ADVICE

### Client Details

<b>Client</b>	Douglas Partners Pty Ltd
<b>Attention</b>	Kurt Plambeck, Lisa Teng

### Sample Login Details

<b>Your reference</b>	86625.01, Mosman
<b>Envirolab Reference</b>	207144
<b>Date Sample Received</b>	03/12/2018
<b>Date Instructions Received</b>	03/12/2018
<b>Date Results Expected to be Reported</b>	11/12/2018

### Sample Condition

<b>Samples received in appropriate condition for analysis</b>	YES
<b>No. of Samples Provided</b>	26 Soil
<b>Turnaround Time Requested</b>	Standard
<b>Temperature on Receipt (°C)</b>	12.9
<b>Cooling Method</b>	Ice Pack
<b>Sampling Date Provided</b>	YES

### Comments

Nil

Please direct any queries to:

<b>Aileen Hie</b>	<b>Jacinta Hurst</b>
<b>Phone:</b> 02 9910 6200	<b>Phone:</b> 02 9910 6200
<b>Fax:</b> 02 9910 6201	<b>Fax:</b> 02 9910 6201
<b>Email:</b> ahie@envirolab.com.au	<b>Email:</b> jhurst@envirolab.com.au

Analysis Underway, details on the following page:

Sample ID	VTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Organochlorine Pesticides in soil	Organophosphorus Pesticides	PCBs in Soil	Acid Extractable metals in soil	Asbestos ID - soils	Misc Soil - Inorg	Misc Inorg - Soil	CEC
UA1/ 0.4-0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓		
UA1/ 1.1-1.2	✓	✓	✓				✓	✓		✓	✓
UA2/0.4-0.5	✓	✓	✓				✓	✓			
UA3/ 0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓		
UA4/ 0-0.1	✓	✓	✓				✓	✓			
UA4/ 1.35-1.45	✓	✓	✓	✓	✓	✓	✓	✓	✓		
BD1/20181126			✓				✓				
UA5/0.4-0.5	✓	✓	✓				✓	✓			
UA6/ 0-0.1	✓	✓	✓				✓	✓		✓	✓
UA6/ 0.9-1.0	✓	✓	✓	✓	✓	✓	✓	✓	✓		
UA7/ 0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓		
UA8/ 0.4-0.5	✓	✓	✓				✓	✓		✓	✓
UA9/ 0-0.1	✓	✓	✓				✓	✓			
BD2/20181127			✓				✓				
UA10/0.2-0.3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
UA11/0-0.2	✓	✓	✓				✓	✓			
UA12/0-0.1	✓	✓	✓				✓	✓			
BD3/20181127			✓				✓				
UA13/0-0.15	✓	✓	✓	✓	✓	✓	✓	✓	✓		
UA13/0.7-0.8	✓	✓	✓				✓	✓			
UA14/ 0.4-0.5	✓	✓	✓	✓	✓	✓	✓	✓	✓		
UA14/0.9-1	✓	✓	✓				✓	✓			
UA15/ 0-0.1	✓	✓	✓	✓	✓	✓	✓	✓	✓		
UA15/0.7-0.8	✓	✓	✓				✓	✓			
UA16/ 0.5-0.6	✓	✓	✓				✓	✓			
UA17/ 0-0.15	✓	✓	✓	✓	✓	✓	✓	✓	✓		

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

### Additional Info

Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.

Requests for longer term sample storage must be received in writing.