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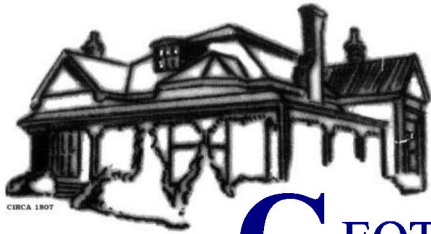


PRELIMINARY CONTAMINATION ASSESSMENT

**PROPOSED COMMERCIAL DEVELOPMENT
LOT 111 IN DP1035909
121-133 BLAIKIE ROAD, JAMISONTOWN**

REPORT NO 14130/1-AA 20 DECEMBER 2017

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Job No: 14130/1
Our Ref: 14130/1-AA
20 December 2017

Levadetes Property Group
P O Box 318
EMU PLAINS NSW 2750
Email: [REDACTED]
[REDACTED]

Dear Sir

Re: **Proposed Commercial Development**
Lot 111 in DP1035909, 121-133 Blaikie Road, Jamisontown
Preliminary Contamination Assessment

Please find herewith our preliminary contamination assessment (PCA) report for the above site. It is understood that the site is proposed for commercial development.

A brief of the outcome of the assessment was summarised in the Executive Summary.

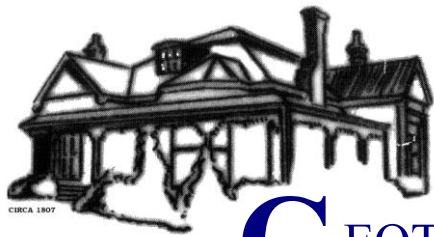
If you have any questions, please do not hesitate to contact the undersigned.

Yours faithfully
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ANWAR BARBHUYIA
Associate
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EXECUTIVE SUMMARY

This executive summary presents a synopsis of a preliminary contamination assessment (PCA) for a parcel of land currently registered as Lot 111 in DP1035909, located at 121-133 Blaikie Road, Jamisontown, in the local government area of Penrith, indicated on Figure 1 (page 1 of the report).

It is understood that the site is proposed for commercial development.

The objectives of the assessment were to ascertain whether the open area of the site potentially presents a risk of harm to human health and the environment and to determine the suitability of the site for the proposed commercial development.

The scope of work included; site reconnaissance, review of site history information and geological maps, test pit excavation, soil sampling and testing, and preparation of this report.

The findings of this PCA are summarised as follows:

- The site comprised a vacant land.
- The site is proposed for commercial development.
- Most of the site is underlain by fill materials originating from the site/region, underlain by natural clayey soil. Topsoil, underlain by natural clayey soil was also encountered at many locations. At a few locations, natural clayey soil was encountered from the surface layer. The test pits did not reveal any visual evidence of asbestos or other indicators of significant contamination, such as staining, odours or significant foreign matter.
- All the laboratory test results satisfied the criteria for stating that the analytes selected are either not present i.e. concentrations less than laboratory limits of reporting, or present in the sampled soil at concentrations that do not pose a risk of hazard to human health or the environment under a "commercial/industrial" form of development.
- The data quality objectives outlined in the report have been satisfied.

Based on this preliminary contamination assessment, it is concluded that the site does not present a risk of harm to human health or the environment and in our opinion, the site is therefore environmentally suitable for the proposed commercial development.

If any suspect materials (identified by unusual staining, odour, discolouration or inclusions such as building rubble, asbestos sheets/pieces/pipes, ash material, etc.) are encountered during any stage of future earthworks/site preparation, between the sampling locations, Unexpected Finds Management Protocol (Appendix I) should be implemented. In the event of contamination, detailed assessment, remediation and validation will be necessary.

14130/1-AA
Executive Summary continued

For any materials to be excavated and removed from the site, it is recommended that waste classification of the materials, in accordance with the "Waste Classification Guidelines Part 1: Classifying Waste" (NSW EPA 2014), NSW EPA resource recovery exemptions and orders under the Protection of the Environment Operations (Waste) Regulation 2014, or NSW EPA Certification: Virgin excavated natural material is undertaken prior to disposal at an appropriately licensed landfill or potential re-use at other sites.

Any imported soil (fill) must be assessed by a qualified environmental consultant, prior to importation, to ensure suitability for the proposed use. In addition, the imported fill must not contain asbestos and ash, be free of unusual odour, not be discoloured and not acid sulphate soil or potential acid sulphate soil. The imported fill should either be virgin excavated natural material (VENM) or excavated natural material (ENM).

Reference should be made to Section 16.0 of the report and Appendix J, which set out details of the limitations of the assessment.

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TABLE OF CONTENTS

	Page
1.0 INTRODUCTION	1
2.0 SCOPE OF WORK	2
3.0 SITE IDENTIFICATION	2
4.0 SITE HISTORY	3
4.1 Aerial Photographs	3
4.2 Department of Lands Records	3
4.3 Section 149 (2 & 5) Planning Certificate	4
4.4 NSW EPA Record of Notices	4
4.5 Penrith City Council Records	5
4.6 Previous Contamination Assessment	5
5.0 SITE CONDITION AND SURROUNDING ENVIRONMENT	6
5.1 Site Condition	6
5.2 Surrounding Environment	6
6.0 TOPOGRAPHY, GEOLOGY & HYDROGEOLOGY	6
7.0 POTENTIAL FOR CONTAMINATION / CONCEPTUAL SITE MODEL	7
7.1 Potential Areas of Environmental Concern	7
7.2 Potentially Contaminated Media	8
7.3 Potential Migration	8
8.0 DATA QUALITY OBJECTIVES	9
9.0 SAMPLING & ANALYSIS PLAN AND SAMPLING METHODOLOGY	12
10.0 FIELD QUALITY ASSURANCE AND QUALITY CONTROL	14
10.1 Sampling Personnel	14
10.2 Decontamination Procedures	14
10.3 Rinsate Sample	15
10.4 Trip Spike Sample	15
10.5 Duplicate Sample	15
10.6 Inter-laboratory Duplicate (Split) Samples	16
11.0 LABORATORY QUALITY ASSURANCE AND QUALITY CONTROL	17
12.0 QA/QC DATA EVALUATION	18
13.0 ASSESSMENT CRITERIA	19
14.0 FIELD & LABORATORY TEST RESULTS, ASSESSMENT & DISCUSSION	20
14.1 Field Results	20
14.2 Analytical Results	20
14.2.1 Metals (As, Cd, Cr, Cu, Pb, Hg, Ni & Zn)	20
14.2.2 TPH and BTEX	21
14.2.3 Polycyclic Aromatic Hydrocarbons (PAH)	21
14.2.4 Organochlorine Pesticides (OCP)	21
14.2.5 Polychlorinated Biphenyls (PCB)	21
14.2.6 Asbestos	21
15.0 CONCLUSION AND RECOMMENDATIONS	21
16.0 LIMITATIONS	22

14130/1-AA
Table of Contents continued

LIST OF REFERENCES

DRAWING

Drawing No 14130/1-AA1 Site Features & Test Pit Locations

TABLES

Table A	Rinsate Sample
Table B	Trip Spike Sample
Table C	Duplicate Sample
Table D	Split Sample
Table E	Metals, Cation Exchange Capacity (CEC) & pH Test Results – Discrete Samples
Table F	Cation Exchange Capacity (CEC) and pH Test Results – Sub-samples
Tables G1 to G3	Metals, Cation Exchange Capacity (CEC) & pH Test Results – Composited Samples
Table H	Nickel Test Results – Sub-samples
Table I	Total Petroleum Hydrocarbons (TPH) & BTEX Test Results – Discrete Sample
Table J	Polycyclic Aromatic Hydrocarbons (PAH) Test Results – Discrete Sample
Table K	Organochlorine Pesticides (OCP) & Polychlorinated Biphenyls (PCB) Test Results – Discrete Samples
Table L	Organochlorine Pesticides (OCP) Test Results – Composited Samples
Table M	Asbestos Test Results – Discrete Samples

APPENDICES

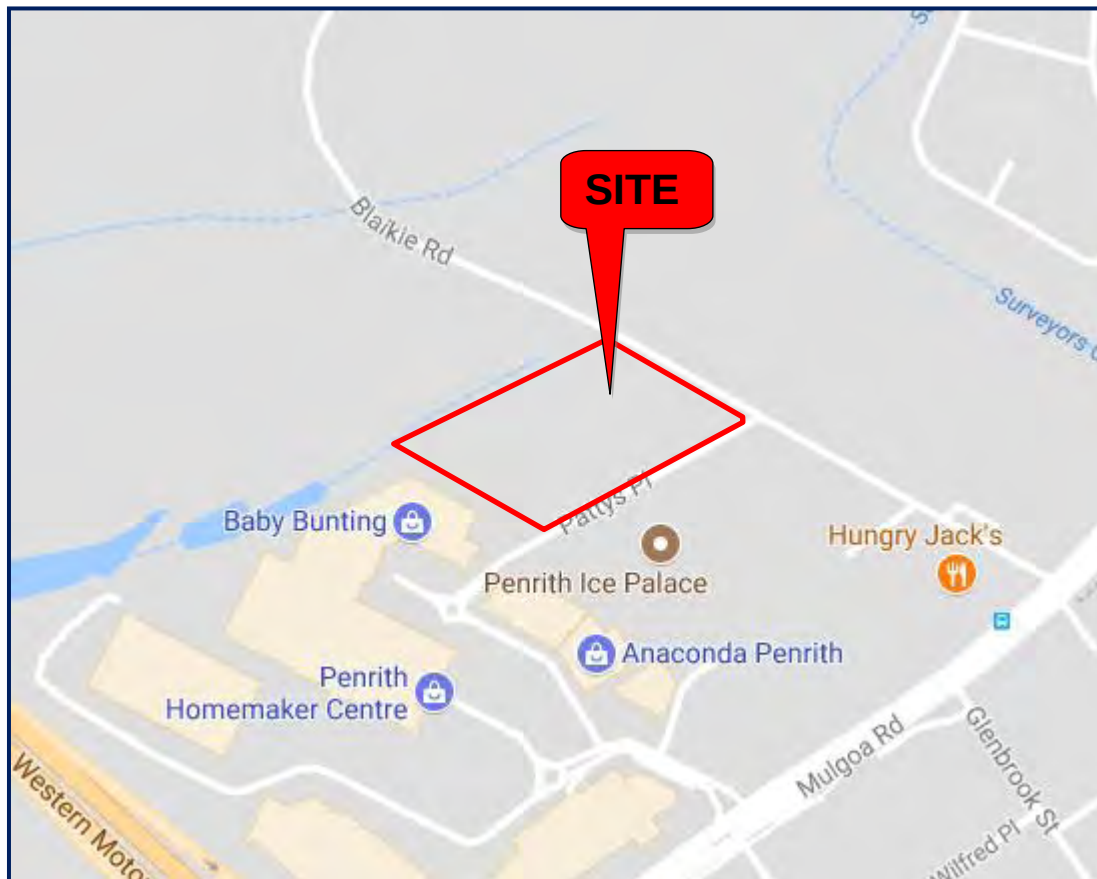
APPENDIX A	Aerial Photographs
APPENDIX B	Department of Lands Records
APPENDIX C	Section 149 (2 & 5) Planning Certificate
APPENDIX D	NSW EPA Record of Notices & Environment Protection Licences
APPENDIX E	Council Records
APPENDIX F	Table 1 - Test Pit Logs
APPENDIX G	Groundwater Map
APPENDIX H	Laboratory Test Results Reports/Certificates
APPENDIX I	Unexpected Finds Management Protocol
APPENDIX J	Environmental Notes

14130/1-AA
Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

1.0 INTRODUCTION

This report presents the results of a preliminary contamination assessment (PCA) for a parcel of land currently registered as Lot 111 in DP1035909, located at 121-133 Blaikie Road, Jamisontown, in the local government area of Penrith, as indicated on Figure 1 below:

FIGURE 1



Map Data ©2017 Google

It is understood that the site is proposed for commercial development.

The objectives of the assessment were to ascertain whether the open area of the site potentially presents a risk of harm to human health and the environment and to determine the suitability of the site for the proposed commercial development.

This report was prepared generally in accordance with the NSW Environment Protection Authority (EPA), "Guidelines for Consultants Reporting on Contaminated Sites" – 2011, and to satisfy Managing Land Contamination: Planning Guidelines, State Environmental Planning Policy No. 55 – Remediation of Land.

14130/1-AA

Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

2.0 SCOPE OF WORK

In order to achieve the objective of this assessment, the following scope of work was conducted in accordance with our fee proposal (Ref: Q8285) dated 8 October 2017:

- A desktop study of;
 - Historical aerial photographs
 - NSW Department of Lands records
 - Section 149 (2 & 5) planning certificate
 - Environment Protection Authority (EPA) records of notices
 - Council records
 - Groundwater bore records of Department of Primary Industries, Office of Water
 - Soil and geological maps
- Inspection by an Environmental Scientist from Geotechnique Pty Ltd (Geotechnique) to identify the site conditions and any areas of potential environmental concern based on visual and olfactory indicators of potential contamination.
- Soil sampling by the Environmental Scientist in accordance with a pre-determined sampling plan developed with reference to the NSW EPA *Sampling Design Guidelines*, aimed at ascertaining the presence or otherwise of soil contaminants in the open area of the site.
- Chemical analysis by National Association of Testing Authorities (NATA) accredited testing laboratories, in accordance with chains of custody (COC) prepared by Geotechnique.
- Implementation of industry standard quality assurance (QA) and quality control (QC) measures. QC samples were also forwarded to the testing laboratories.
- Assessment of the laboratory analytical results against current applicable guidelines.
- Assessment of field and laboratory QA and QC.
- Assessment of the contamination status of soil within the site.
- Preparation of this report.

3.0 SITE IDENTIFICATION

The site is located at 121-133 Blaikie Road, Jamisontown, in the local government area of Penrith and is registered as Lot 111 in DP1035909.

As shown on Drawing No 14130/1-AA1, the site is diamond in shape and covers an area of approximately 2.244 hectares (ha).

Reference may be made to the cadastral and deposited plans in Appendix B for details of the location and dimensions of the site.

14130/1-AA
Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

4.0 SITE HISTORY

In order to formulate a picture of the site history and to assist in identification of any potential contamination, Geotechnique obtained and/or reviewed information including historical aerial photographs, certificates of land titles (past and present), Planning Certificates issued by Council under Section 149 of the Environmental Planning and Assessment Act 1979, NSW EPA records regarding notices for contaminated land and Council records. The results of the information review are presented in the following sub-sections.

4.1 Aerial Photographs

Aerial photographs taken in 1947, 1961, 1970, 1978, 1986, 1998, 2005 and September 2017 were examined. Copies of the aerial photographs are attached in Appendix A.

1947	The site and adjoining properties appear to be vacant land. A tributary of a creek is observed along the western boundary of the site. Orchard activities are evident in the distant southern property.
1961	It appears the site and adjoining properties remain unchanged since 1947, with the exception of presence of a dirt track traverse within the site and adjoining southern property, and a road (Blaikie Road) which borders the site to the north.
1970	The south western portion of the site and adjoining southern property appear to be disturbed. Instead of orchard, market garden activities are evident in the distant southern property. Poultry farming is also noted in the distant southern property. Market garden activities are also evident in the distant western property.
1978	The western portion of the site appears to be disturbed. More poultry farming activities are noted in the distant southern properties.
1986	It appears the site and adjoining properties remain unchanged since 1978, with the exception of cessation of market garden and poultry farming activities in the distant properties.
1998	Commercial developments are noted in the distant northern, eastern and southern properties. A road (Pattys Place) borders the site to the east. Dirt track is no longer visible.
2005	Commercial developments are noted in the adjoining eastern and southern properties. A batter is noted within western portion of the site and disturbance in the remainder of the site.
September 2017	The site and adjoining properties appears unchanged since 2005, with the exception of disturbed areas within the site is no longer apparent.

4.2 Department of Lands Records

The chronological list of proprietors for the site is presented in Appendix B.

NSW Department of Lands records indicate that private proprietors owned the site since 1960s to date. Based on the occupation of the private proprietors, the site might have been used for orchard activities between 1961 and 1964.

14130/1-AA

Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

4.3 Section 149 (2 & 5) Planning Certificate

The Planning Certificates (Certificate No: 17/05802) under Section 149 Environmental Planning and Assessment Act 1979 for Lot 111 in DP1035909, issued by Penrith City Council on 23 October 2017, indicated the following:

- The site is zoned B5 Business Development, under the Penrith Local Environmental Plan 2010.
- The site does not include or comprise a critical habitat.
- The site is not located in a conservation area.
- An item of environmental heritage is not situated on the site.
- The site is not affected by the operation of section 38 or 39 of the *Coastal Protection Act 1979*. To the extent that council has been so notified by the Department of Public Works.
- The site is not proclaimed a mine subsidence district within the meaning of Section 15 of the *Mine Subsidence Compensation Act, 1961*.
- The site is not affected by road widening or road realignment under Division 2 of Part 3 of the Roads Act 1993, any environmental planning instrument or any resolution of the Council.
- The site is affected by the Asbestos Policy adopted by Council. The site is not affected by any other policy adopted by the council that restricts the development of the site because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulphated soils or any other risk (other than flooding and the item noted below).

Note: Council has adopted by resolution a policy of contaminated land which may restrict the development of the land. This policy, Chapter C4 of Penrith Development Control Plan 2014, is implemented when zoning or land use changes are proposed on lands which have previously been used for certain purposes. Consideration of council's policy and the application of provisions under relevant State legislation are warranted.

- No matters arising under the Contaminated Land Management Amendment Act 1997.
- Council holds environmental report(s) relating to the subject property. A copy of the report by GeoEnviro Consultancy Pty Ltd, dated February 2002 (Council Ref: DA02/0518) is held by Council. Copies of the report(s) are available from Council for inspection by interested persons. Interested persons should satisfy themselves as to the state of the land and in relation to any matter of thing, including any documents referred to in, or disclosed by, this notation.

Reference may be made to Appendix C for the Section 149 (2 & 5) Certificate.

4.4 NSW EPA Record of Notices

The NSW EPA publishes record of notices for contaminated lands under Section 58 of the Contaminated Land Management (CLM) Act 1997. The notices relate to investigation and/or remediation of site contamination considered to pose a significant risk of harm under the definition in the CLM Act.

A search of the EPA records on 23 October 2017 revealed no notices issued for the site.

It should be noted that the EPA record of notices for Contaminated Land does not provide a record of all contaminated lands in NSW. At the time of searching the records, 353 sites in NSW were registered in the database.

14130/1-AA
Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

The EPA issues environment protection licences to owners or operators of various industrial premises under the Protection of the Environment Operations (POEO) Act to control the air, noise, water and waste impacts of an activity.

A search of the POEO Public Register on 23 October 2017 found no records for the site.

NSW EPA and the POEO Public Register records are detailed in Appendix D of this report.

4.5 Penrith City Council Records

A request was made to Penrith City Council under Schedule 5 of the Government Information (Public Access) Regulation 2009 for access to any relevant information pertaining to the site. The request included information pertaining to development and building applications and approvals, complaints, notices issued, council inspection records, registered activities, chemical storage and waste disposal.

Penrith City Council emailed available Council records on 2 November 2017. A summary of the available records of is listed below:

- Council serve notice (Ref: JC:TA:778893 dated 14 January 2005) to provide information that fill activities comply with certain DA conditions.
- Council approved development application (DA) number DA02/0518 for regrading and land filling, on 20 May 2003 which would expire on 20 May 2005.
- Delegate's report, prepared by Environmental Planner of Council dated 22 April 2003 recommends for approval of regrading and landfilling with conditions. The report also referred the a preliminary contamination assessment and geotechnical investigation report prepared by GeoEnviro Consultancy, which found unsuitable fill materials existed on the site included bricks, concrete and bonded asbestos pieces. Moreover, the delegate's report also mentioned that additional fill has been place on the property since the preliminary contamination assessment was undertaken and it was understood that the source of the additional materials was the basement of excavation of adjoining Homemaker Centre development.

Reference may be made to Appendix E for the council records.

4.6 Previous Contamination Assessment

A preliminary contamination assessment and geotechnical investigation report (Ref: JC01021B dated February 2002) prepared by GeoEnviro Consultancy was reviewed as a part of the assessment. At the time of assessment, (January 2002), the site was a vacant land where numerous small stockpiles were placed in the western portion of the site. Building rubble, rubbish and also bonded asbestos pieces were observed in the fill stockpiles. Up to 1.4m deep fill was encountered at the western portion of the site, out of which in few locations inclusions of demolition waste was encountered in the fill profile. Apart from some minor elevated metal concentrations, all other laboratory test results were within the Threshold Levels.

During the current preliminary contamination assessment, by Geotechnique, no stockpiles were observed within the site. 200mm to 1m thick fill materials were encountered within part of the site. Apart from one location where inclusions of car tyre, bricks and concrete, in all test pit locations no inclusions of the demolition waste was encountered in the soil profile. No fibro-cement pieces were found in the test pits.

14130/1-AA
Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

5.0 SITE CONDITION AND SURROUNDING ENVIRONMENT

5.1 Site Condition

The site was inspected by an Environmental Scientist from Geotechnique on 5 December 2017. At the time of site inspection the site consisted of vacant land, with grass covered ground surface that had small undulations. A batter was observed near the centre of the site situated along a north-west facing alignment which characterised a distinguished a high level platform and a lower level platform to the north-west. A shipping container was identified near the batter at the Blaikie Road frontage.

There were no obvious ash materials, fibro-cement pieces on the ground surface, odour, or discolouration that would indicate the potential for contamination. There was no obvious features (bowser, breather pipe, inlet valve and piping) associated with underground storage tanks. There were no air emissions emanating from the site.

5.2 Surrounding Environment

At the time of field work, the neighbouring properties were as follows:

To the north:	Blaikie Road and then Commercial land
To the east:	Pattys Place and then Commercial land
To the south:	Commercial land
To the west	Creek and then vacant land

6.0 TOPOGRAPHY, GEOLOGY & HYDROGEOLOGY

A batter was observed near the centre of the site situated along a north-west facing alignment. The ground to the east of the batter slope slightly towards the east, whilst the ground to west of the batter slopes slightly towards the west.

The Geological Map of Penrith (Geological Series Sheet 9030, Scale 1:100,000, Edition 1, 1991) published by the Department of Minerals and Energy indicates that the residual soils within the site to be underlain by Quaternary Age soils of the Cranebrook Formation, comprising of gravel, sand, silt and clay.

The Soil Landscape Map of Penrith (soil Landscape Series Sheet 9030, Scale 1:100,000, 1989), prepared by the Soil Conservation Service of NSW, indicates that the site is located within the Richmond landscape area and typically consists of clays, clay loams, sands and ironstone nodules.

Reference should be made to Table 1 in Appendix F for descriptions of the soils encountered during sampling for this assessment. Based on information from the test pit excavation, the sub-surface profile across the site is generalised as follows:

Fill	Silty Clay, low to medium plasticity, orange-brown with gravel and/or river rock was encountered in most of the site for depths of 200mm to 1m below the existing ground level (EGL), underlain by natural silty clay, medium plasticity. At one test pit location (TP7) inclusions of bricks, concrete and car tyres were also encountered within the fill profile. Based on the contents of the fill materials, the natural soil profiles and regional geological information, it appears that fill materials could have originated from the site or region.
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14130/1-AA
Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

Topsoil	Silty Clay, low to medium plasticity, grey-brown, brown, with or without trace of root fibres was encountered at a number of test pit locations (TP20, TP21, TP23 to TP25 and TP32) for a depth of 200mm below the below the EGL, underlain by natural silty clay, medium plasticity.
Natural Soil	Silty Clay, medium plasticity, orange, brown-orange was encountered beneath the fill or topsoil. Natural clayey soil was also encountered on ground surface at a few test pit locations (TP1, TP9 to TP13 and TP33).

There were no obvious ash materials, fibre-cement pieces and odour in the test pits.

A tributary of a creek borders the site to the west. Surveyors Creek is located approximately 225 metres (m) to the north east of the site. Based on observation and site topography, surface run-off would predominantly flow to the west and part of the surface run-off may eventuate in the adjoining Creek. Obvious local depressions that might capture or divert stormwater run-off were not observed within the site.

A site-specific groundwater analysis was outside the scope of this assessment. However, a search was carried out on November 2017 through the website of Department of Primary Industries Office of Water for any registered groundwater bore data within a radius of 500m of the site. The search revealed that no information available on that date. The groundwater map is included in Appendix G of this report.

Based on the previous experience in the region, groundwater in the site is anticipated to be in excess of 3.0m below existing ground surface.

7.0 POTENTIAL FOR CONTAMINATION / CONCEPTUAL SITE MODEL

7.1 Potential Areas of Environmental Concern

Based on the preceding sections, areas of environmental concern (AEC) and associated contaminants of potential concern have been identified and are presented in the following table:

Areas of Environmental Concern& Associated Contaminants of Potential Concern

Potential AEC	Rational / Details	Potential Contaminants
The site	Distant properties were used for agriculture activities in the past which indicate potential for applied agricultural chemicals and fertilisers The use of agricultural chemicals and fertilisers could lead to Metals, Organophosphate Pesticides (OPP) and persistent Organochlorine Pesticides (OCP) contamination. The predicted persistence of OCP is less than 15 years, whilst the predicted persistence of OPP is typically less than one year, which is therefore not a concern. Therefore, migration of the above potential contaminants from the distant property is possible through surface run-off.	Metals ¹ OCP

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14130/1-AA
Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

Potential AEC	Rational / Details	Potential Contaminants
Site/region originated fill	Fill materials, originated from the site/region, was encountered within the site. Fill materials could have similar potential of concern as for the remainder of the site/region.	Metals ¹ OCP
Shipping container,	There is potential for Metals contamination in the vicinity of the shipping container, resulting from degradation of the metals.	Metals ²

¹ Metals suite includes arsenic, cadmium, copper, lead, mercury and zinc

² Metals suite includes cadmium, chromium, copper, lead, nickel and zinc

7.2 Potentially Contaminated Media

Potentially contaminated media present at the site include:

- Fill material, topsoil and
- Natural soils.

Based on the potential mobility of contaminants and their associated potential leachability through the soil / fill profile, vertical migration of contaminants from the topsoil and fill material into the underlying deeper natural soils might have occurred. As a result, the deeper natural soils are also considered to be potentially contaminated media.

Groundwater or perched water was not encountered during sampling to a maximum depth of about 1.5m below EGL. If a substantial source of contamination is identified within the soil on-site, a groundwater assessment could be necessary.

Surface water could be a potentially contaminated medium as part of surface run-off may eventuate in the creek which bonds the site to the west.

7.3 Potential Migration

Contaminants generally migrate from a site via a combination of windblown dust, rainwater infiltration, groundwater migration and surface water run-off. The potential for contaminants to migrate is a combination of:

- The nature of the contaminants (solid / liquid and mobility characteristics)
- The extent of the contaminants (isolated or widespread)
- The location of the contaminants (surface soils or at depth)
- The site topography, geology, hydrology and hydrogeology

Off-site impacts of contaminants in soil are generally governed by the transport media available and likely receptors. The most common transport medium is water, whilst receptors include initially uncontaminated soils, groundwater, surface waterbodies, humans, flora and fauna.

The potential contaminants identified as part of the site history review, site inspection and field sampling were generally in a solid form (e.g. metals, OCP.).

14130/1-AA

Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

The site is grass covered across the surface. The potential for migration of contaminants via wind-blown dust is considered low as a result of the exposed soils within the site. The potential for migration of contamination via surface run-off is also expected to be minor. Some migration of contaminants via surface water may still occur in the event of heavy rain. Surface run-off would generally follow the topography and eventuate in the adjoining eastern and western properties including the Creek.

Migration of any soil contaminants to the deeper soil and/or groundwater regime would generally be via leaching from the contaminated soil, facilitated by infiltration of surface water. Given that the deeper natural soil beneath the site is relatively impermeable (refer to Section 6.0 for the regional geology information), the potential for any contaminants migrating from the contaminated soil to the groundwater table below is considered low. Furthermore, the relatively impermeable clay layer would have minimised the potential for any contaminants migrating to deeper soil.

Sensitive receptors at the site under the current site conditions and in the immediate vicinity are considered to include site visitors who may come into contact with potentially contaminated media within the site.

8.0 DATA QUALITY OBJECTIVES

The data qualitative objectives (DQO) are qualitative and quantitative statements that specify the quality of the data required for the assessment. DQO must ensure that the data obtained is sufficient to characterise the contamination of a site and enable appropriate assessment of health and environmental risks for the current or proposed use. The DQO were developed for this assessment in accordance with accordance with NEPM 2013, as well as in accordance with the Australian Standard “*Guide to the Sampling and Investigation of Potentially Contaminated Soil Part 1: Non-volatile and semi-volatile compounds*” (AS4482.1-2005) and “*Guide to the Sampling and Investigation of Potentially Contaminated Soil Part 2: Volatile substances*” (AS4482.2-1999). The DQO process adopted is outlined below:

State the Problem

The site was a vacant land. The site also contains fill materials as well as shipping container. As a result the potential exists for contamination to have occurred within the site in the past and presently.

The site is proposed for commercial development.

The following key professional personnel were involved in the assessment:

Mr Anwar Barbhuyia	Associate
Mr Justin Hofmann	Environmental Scientist

Identify the Decisions

The decisions to be made in completing the assessment are as follows:

- Does the site, or is the site, likely to present a risk of harm to human health or the environment?
- Is the site currently suitable for the proposed end use?
- Is there any potential for groundwater contamination?
- Are there any off-site migration issues to be considered?
- Is further investigation required to adequately address the abovementioned decisions?
- Is further investigation required to delineate the extent of contamination identified?
- Does the site require remediation to ensure suitability for the proposed end use?

14130/1-AA

Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

Identify Inputs to the Decisions

The inputs into the decision process are as follows:

- Historical information (presented in Section 4.0).
- Site operations and observation details (presented in Section 5.0).
- Systematic soil sampling at a density required generally to meet the NSW EPA "Sampling Design Guidelines" using a backhoe.
- Soil profile information obtained through the sampling phase.
- Chemical and/or physical test data on analysed samples.
- Assessment of test data / data sets against applicable soil investigation levels in the National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPM) and NSW Site Auditor Scheme (3rd Edition), 2017 (Section 13.0). For asbestos assessment, the assessed soil must not contain asbestos containing material (ACM) in excess of 0.01%w/w and surface soil within the site is free of visible ACM, and asbestos fines (AF) and fibrous asbestos (FA) in the soil is <0.001% w/w.

Define the Study Boundaries

The study boundary for this assessment is defined by the boundaries of the subject site, as shown on Drawing No 14130/1-AA1 and summarised in Section 3.0 of this report.

Develop a Decision Rule

The information obtained through this assessment will be used to characterise the site in terms of contamination issues and risk to human health and the environment. The decision rule in characterising the site will be as follows:

- Laboratory test results will be assessed individually.
- The assessment criteria are the NSW EPA produced and/or endorsed criteria, as specified in Section 13.0 of this report. For asbestos assessment, the assessed soil must not ACM in excess of 0.01%w/w and surface soil within the site is free of visible ACM, and AF and FA in the soil is <0.001% w/w.
- The site will be deemed to potentially contain contamination "hot spots" if any of the individual concentrations exceed the assessment criteria adopted or any presence of asbestos-cement pieces on the surface soil or presence of ACM in excess of 0.01%w/w in the assessed soil and/or detection of AF and FA in excess of 0.001%w/w in the assessed soil.
- Further investigation, remediation and/or management will be recommended if the site is found to be contaminated or containing contamination "hot spots".

Laboratory test results will only be accepted and considered useable for this assessment under the following conditions:

- All laboratories used are accredited by NATA for the analyses undertaken.
- All detection limits set by the laboratories fall below the assessment criteria adopted.
- Analyte concentrations in the rinsate water sample should be less than laboratory detection limit or should not be detected significantly.
- The recovery of spike concentrations in the trip spike sample is sufficient so as not to impact on the reported concentrations of the soil samples when the same recovery is applied (BTEX only).

14130/1-AA

Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

- The differences between the reported concentrations of analytes in the field duplicate samples and the corresponding original samples are within accepted limits (refer to Section 10.5).
- The differences between the reported concentrations of analytes in the inter-laboratory duplicate (split) samples and the corresponding original samples are within accepted limits (refer to Section 10.6).
- The QA/QC protocols and results reported by the laboratories comply with the requirements of the NEPM 1999 *"Guideline on Laboratory Analysis of Potentially Contaminated Soils"* and Australian and New Zealand Environment and Conservation Council (ANZECC)-1996 *"Guidelines for the Laboratory Analysis of Contaminated Soils"*.

Specify Limits on Decision Errors

The limits on decision errors for this assessment are as follows:

- Systematic sample numbers comply with those recommended in the NSW EPA sampling design guidelines, which have risk probabilities already incorporated. Sample numbers are therefore considered adequate for site characterisation.
- Analyte selection in the site is based on site history, site activities and the presence of fill materials and shipping container. The possibility of any other potential contaminants that would be detected through field observation (through odours, staining, and colouring) might need to be included.
- The assessment criteria adopted from the guidelines stated in Section 13.0 have risk probabilities already incorporated.
- The acceptable limits for field and inter-laboratory duplicate (split) comparisons are outlined in Sections 10.5 and 10.6 of this report.
- The acceptance limits for laboratory QA/QC parameters are based on the laboratory reported acceptance limits and those stated in the NEPM 1999 *"Guideline on Laboratory Analysis of Potentially Contaminated Soils"* and ANZECC 1996 *"Guidelines for the Laboratory Analysis of Contaminated Soils"*.

Optimise the Design for Obtaining Data

- The procedures adopted for location and collection of environmental samples were developed prior to implementation, in accordance with NSW EPA guidelines and current industry practice. The sampling program was designed to ensure integrity of data collection during the assessment, including decontamination techniques, sample labelling, storage and chain of custody protocols.
- The analytical program was developed in theory prior to undertaking the sampling (based on site history, site activities and the presence of shipping container and fill materials) and refined on the basis of field observations (both surface and sub-surface) during the sampling phase. All potential contaminants have been covered within the site.
- Only laboratories accredited by NATA for the analyses undertaken were used for this assessment. The laboratory performance is assessed through review of statistics calculated for QA samples such as blanks, spikes, duplicates and surrogates.
- The field QA/QC protocols adopted are outlined in Section 10.0 of this report. The QA/QC program incorporates preparation of traceable documentation of procedures used in the sampling and analytical program and in data validation procedures.

14130/1-AA
Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

Data Quality Indicators

The performance of the assessment in achieving the DQO will be 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 is representative of each media present on the site;
Completeness	A measure of the amount of useable data from a data collection activity;
Comparability	The confidence (expressed qualitatively) that data can be considered equivalent for each sampling and analytical event.

Assessment of the data quality indicators is presented in Section 9.0 (sampling) and Section 12.0 (analysis) of this report.

9.0 SAMPLING & ANALYSIS PLAN AND SAMPLING METHODOLOGY

Sampling and analyses was carried out within accessible areas of the site to obtain a reasonable assessment of the following:

1. Nature and location of any soil contaminant(s) within the accessible areas of the site.
2. The risk(s) that the contaminant(s) (if present) poses to human health and/or the environment under the conditions of the proposed land uses.

Soil sampling was carried out on 5 December 2017 by the Environmental Scientist from Geotechnique, who was responsible for visually assessing the site, locating the nominated test pit locations, recovery of soil samples, preparation of samples for delivery to NATA accredited laboratories, and logging the sub-surface profile encountered at each test location.

Based on the "Sampling Design Guidelines for Contaminated Sites" 1995 EPA, thirty-three (33) systematic sampling locations (TP1 to TP33) were adopted in the site, aimed at maximising coverage of the site area. A systematic test pit location (TP2) was also positioned near the shipping container. All locations were excavated by a backhoe. The test pit locations are shown on Drawing No 14130/1-AA2.

The sampling procedures adopted were as follows:

- The test pits were excavated using a backhoe, over the depth interval nominated by the Environmental Scientist. The representative soil sample was recovered directly from the backhoe bucket using a stainless steel trowel.
- The trowel was decontaminated prior to use in order to prevent cross contamination (refer to Section 10.2 for details of the procedures for decontamination of the trowel).
- To minimise the potential loss of volatiles, the laboratory soil sample was immediately transferred to a labelled, laboratory supplied, 250ml glass jar and sealed with an airtight, Teflon screw top lid. The fully filled jar was then placed in a chilled container.

Levadetes Property Group
AB.s/20.12.2017

*14130/1-AA**Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown*

- The recovered soil sample for asbestos analysis was transferred into a separate small plastic bag, which was placed in the chilled container.

In order to ensure the analytical performance of the primary laboratory, duplicate and split samples were prepared for analyses. Samples were kept in a labelled laboratory supplied glass jars (acid-washed and solvent-rinsed) and sealed with an airtight screw top Teflon lids. The fully filled jars were placed in a chilled container.

A rinsate water sample was collected and placed in a glass bottle and vial supplied by the laboratory at the completion of field work. The fully filled bottle and/or vial were labelled and placed in a chilled container.

At the completion of field sampling, the chilled container was transported to our Penrith office and transferred to a refrigerator where the temperature was maintained below 4 °C.

The chilled containers with trip spike sample were forwarded to the primary laboratory of SGS Environmental Services (SGS) and the secondary laboratory, Envirolab Services Pty Ltd (Envirolab), both NATA accredited. COC were then forwarded to the laboratories.

On receipt of the samples and COC, the laboratories returned the Sample Receipt Confirmation, verifying the integrity of all samples received.

Based on the potential for contamination mentioned in Section 7.0, discrete and composited site site/region originated fill, topsoil and surface natural soil samples, were analysed for Metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc) and/or OCP for screening purposes. One site/region originated fill sample with inclusions of demolition waste was also analysed for TPH, BTEX, PAH, OCP, PCB and asbestos for screening purposes. Another site/region originated fill sample with inclusions of demolition waste was analysed for asbestos for screening purposes.

The following table provides a list of the data quality indicators (refer to Section 8.0) for the soil sampling phase of the assessment and the methods adopted in ensuring that the data quality indicators were met.

DATA QUALITY INDICATOR	METHOD(S) OF ACHIEVEMENT
Completeness	Good sampling coverage of the site; sample numbers comply with NSW EPA sampling design guidelines. Representative coverage of potential contaminants in the open area based on site history, site activities and the presence of fill materials and shipping container. On site visual assessment of soils uncovered. Use of trained and qualified field staff (Section 10.1). Preparation of sample location plan. Preparation of soil profile logs. Preparation of chain of custody records.

14130/1-AA
Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

DATA QUALITY INDICATOR	METHOD(S) OF ACHIEVEMENT
Comparability	Using appropriate techniques for sample recovery. Appropriate industry standard decontamination procedures adopted (Section 10.2). Experienced samplers used. Using appropriate sample storage and transportation methods.
Representativeness	Good sampling coverage of the site; sample numbers comply with NSW EPA sampling design guidelines. Representative coverage of potential contaminants in the open area based on site history, site activities and the presence of fill materials and shipping container.
Precision and Accuracy	Rinsate blank water, trip spike, field duplicate, and inter-laboratory duplicate / split samples recovered or prepared (Section 10.3 to 10.6).

10.0 FIELD QUALITY ASSURANCE AND QUALITY CONTROL

10.1 Sampling Personnel

Geotechnique undertook all the sampling associated with this assessment. An Environmental Scientist from Geotechnique (Justin Hofmann), nominated sampling positions based on the project brief prepared by the Project Manager, supervised (full time) the excavation of test pits, logged the soil profile encountered, recovered soil samples at a frequency determined by the sampling plan (project brief), and packed the samples (refer to Section 9.0).

Mr Hofmann has a Bachelor of Science degree and has been employed by Geotechnique as an Environmental Scientist since 2015. At commencement of employment, Mr Hofmann underwent supervised training in Geotechnique procedures for sampling and logging.

10.2 Decontamination Procedures

As stated in Section 9.0 of this report, soil sampling was carried out using a backhoe. The stainless steel trowel was used to transfer the soil sample from the backhoe bulk sample to the laboratory supplied glass jar. The stainless steel trowel was decontaminated prior to use. As stated in Sections 10.5 and 10.6, a trowel was used to divide the soil sample into two portions to prepare duplicate/split samples. Decontamination of the trowel involved the following:

- Removal of soils adhering to the trowel by scrubbing with a brush;
- Washing the trowel thoroughly in a solution of phosphate free detergent (Decon 90) using brushes and disposable towels;
- Rinsing the trowel thoroughly with distilled water;
- Repeating the washing / rinsing steps and rinsing with water;
- Drying the trowel with a clean cloth.

A sample of the final rinsate water sample was recovered at completion of sampling.

14130/1-AA
Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

10.3 Rinsate Sample

One rinsate water sample (R1) was recovered on completion of field work in order to identify possible cross contamination between the sampling locations.

The rinsate water sample was analysed for Metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc). The test results for the rinsate water sample are summarised in Table A. The test results for the rinsate water sample are summarised in Table A. The laboratory test results certificates are included in Appendix H.

As indicated in Table A concentrations of Metals in the rinsate blank sample were less than the laboratory detection limits, which indicates that adequate decontamination had been carried out in the field.

10.4 Trip Spike Sample

Trip spike sample was obtained from the laboratory on a regular basis, prior to conducting field sampling where volatile substances are suspected. The samples are held in the Penrith office of Geotechnique, at less than 4°C, for a period of not more than seven days. During the field work, the trip spike sample was kept in the chilled container with soil samples recovered from the site. The trip spike sample was then forwarded to the primary laboratory together with the soil samples recovered from the site.

The laboratory prepares the trip spike by adding a known amount of pure petrol standard to a clean sand sample. The sample is mixed thoroughly to ensure a relatively homogenous distribution of the spike throughout the sample. When the sample is submitted for analysis, the same procedure is adopted for testing as for the soil samples being analysed from the site.

The purpose of the trip spike is to detect any loss or potential loss of volatiles from the soil samples during field work, transportation, sample extraction or testing.

Trip spike sample (TS1) was forwarded to the primary analytical laboratory with the samples collected from the site and were tested for BTEX. The test results for the trip spike sample, reported as a percentage recovery of the applied and known spike concentrations, are shown in Table B. The laboratory test results certificates are included in Appendix H.

As indicated in Table B the results show generally good recovery of the spike concentrations. Furthermore, all BTEX results were less than laboratory detection limits and there was no visible or olfactory indication of hydrocarbon contamination.

Based on the above it is considered that any loss of volatiles from the recovered samples that might have occurred would not affect the outcome / conclusions of this report.

10.5 Duplicate Sample

A field duplicate sample was prepared in the field through the following processes:

- A larger than normal quantity of soil was recovered from the sample location selected for duplication;
- The sample was placed in a decontaminated stainless bowl and divided into two portions using the decontaminated trowel;

*14130/1-AA**Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown*

- One portion of the sub-sample was immediately transferred using the decontaminated trowel into a labelled, laboratory supplied, 250ml glass jar and sealed with an airtight Teflon screw top lid. The fully filled jar was labelled as the duplicate sample and immediately placed in a chilled container;
- The remaining portion was stored in the same way and labelled as the original sample.

Duplicate samples were prepared on the basis of sample numbers recovered during the field work. The duplicate sample frequency was computed using the total number of samples analysed as part of this assessment. The duplicate sample frequencies computed are as follows:

Metals:	15 samples analysed;	1 duplicate;	6.7% frequency
OCP:	11 samples analysed;	1 duplicate;	9.1% frequency

The duplicate frequency adopted complies with the NEPM, which recommends a duplicate frequency of at least 5%.

The duplicate sample test results are presented with the analytical reports in Appendix H and summarised in Table C.

A comparison was made of the laboratory test results for the duplicate samples with the original samples and the Relative Percentage Differences (RPD) was computed to assess the accuracy of the laboratory test procedures. RPD within 30% are generally considered acceptable. However, this variation can be higher for organic analysis than for inorganics and for low concentrations of analytes.

As shown in Table C, the comparisons between the duplicate and corresponding original sample indicated generally acceptable RPD, with the exception of higher RPD for a few metals, mainly due to heterogeneity of fill samples analysed. Therefore, the variations are not considered critical, and the laboratory test data provided by SGS are of adequate accuracy and reliability for this assessment.

Therefore, the laboratory test data provided by SGS are of adequate accuracy and reliability for this assessment.

10.6 Inter-laboratory Duplicate (Split) Samples

The inter-laboratory duplicate (split) sample provides a check on the analytical performance of the primary laboratory. The split sample was prepared on the basis of sample numbers recovered during field work and the analyses undertaken by the primary laboratory.

The split sample was prepared in the same manner as the duplicate sample. Reference should be made to Section 10.5.

The split sample frequency was computed using the total number of samples analysed as part of this assessment. The split sample frequencies computed are as follows:

Metals:	15 samples analysed;	1 split;	6.7% frequency
OCP:	11 samples analysed;	1 split;	9.1% frequency

The split sample frequency adopted complies with the NEPM, which recommends a frequency of 5%.

14130/1-AA
Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

The laboratory certificates of analysis from Envirolab are included in Appendix H of this report. The results are also summarised in Table D.

Based on Schedule B (3) of the NEPM the difference in the results between the split samples should generally be within 30% of the mean concentration determined by both laboratories, i.e., RPD should be within 30%. However, this variation can be higher for organic analysis than for inorganics and for low concentrations of analytes.

As shown in Table D, the comparisons between the split and corresponding original sample indicated generally acceptable RPD, with the exception of higher RPD of zinc, mainly due to heterogeneity of fill samples analysed. Therefore, the variation is not considered critical and the test results provided by the primary laboratory are deemed reliable for this assessment.

11.0 LABORATORY QUALITY ASSURANCE AND QUALITY CONTROL

Geotechnique uses only laboratories accredited by the NATA for chemical analyses. The laboratories also incorporate quality laboratory management systems to ensure that trained analysts using validated methods and suitably calibrated equipment produce reliable results.

In addition to the quality control samples, the laboratories also ensure that all analysts receive certification as to their competence in carrying out the analysis and participate in national and international proficiency studies.

SGS and Envirolab are accredited by NATA and operate a Quality System designed to comply with ISO / IEC 17025.

Within the allowable holding times, detailed in Schedule B(3) of The *National Environment Protection (Assessment of Site Contamination) Measure NEPM 1999 (April 2013)*, the discrete and composited soil samples were analysed. It should be noted that there is no specific holding time for asbestos analysis. Within the allowable holding times for water detailed in Standard Methods for the Examination of Water and Wastewater (APHA) the rinsate sample was analysed.

The test methods adopted by the laboratories are indicated with the laboratory test results certificates. As part of the analytical run for the project, the laboratories included laboratory blanks, duplicate samples, laboratory control samples, matrix spikes, matrix spike duplicates and/or surrogate spikes.

We have checked the QA/QC procedures and results adopted by the laboratories against the appropriate guidelines. The quality control sample numbers adopted by SGS and Envirolab are considered adequate for the analyses undertaken.

The methods used by SGS and Envirolab have been validated and endorsed by NATA.

The samples analysed for TPH (C₆–C₉) and/or BTEX were extracted by the purge and trap method recommended by the NSW EPA.

All reported laboratory Limits of Reporting (LOR) / Practical Quantitation Limit (PQL) were less than the assessment criteria adopted for each analyte.

14130/1-AA
Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

Overall, the quality control elements adopted by SGS and Envirolab indicate that the analytical data falls within acceptable levels of accuracy and precision for the analysis of soils. The analytical data provided is therefore considered to be reliable and useable for this assessment.

12.0 QA/QC DATA EVALUATION

The following table provides a list of the data quality indicators for the analytical phase of the assessment and the methods adopted in ensuring that the data quality indicators were met:

DATA QUALITY INDICATOR	METHOD(S) OF ACHIEVEMENT
Data Completeness	Laboratory sample receipt information received confirming receipt of samples intact and appropriate chain of custody. Analysis for all potential contaminants of concern. NATA registered laboratory analytical reports / certificates of analysis provided.
Data Comparability	Use of NATA registered laboratories. Test methods consistent for each sample. Test methods comparable between primary and secondary laboratory. Acceptable Relative Percentage Differences between original samples and field duplicates and inter-laboratory duplicate / split samples.
Data Representativeness	Representative coverage of potential contaminants in the open area based on site history, site activities and the presence of fill materials and shipping container. Adequate duplicate, split, trip spike and rinsate sample numbers. Adequate laboratory internal quality control and quality assurance methods, complying with the NEPM.
Data Precision and Accuracy	Acceptable concentrations in rinsate blank water sample. Acceptable recoveries of spike concentrations in trip spike sample. Acceptable RPD for duplicate comparison overall. Acceptable RPD for inter-laboratory duplicate / split sample comparison overall. Appropriate and validated laboratory test methods used. Adequate laboratory performance based on results of the blank samples, duplicates, surrogate spike samples, control samples and/or matrix spike samples.

Based on the above, it is considered that both laboratories complied with the quality assurance and quality control data quality indicators. As such, it is concluded that the laboratory test data obtained are reliable and useable for this assessment.

14130/1-AA

Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

13.0 ASSESSMENT CRITERIA

Investigation levels and screening levels developed in the NEPM 2013 were used in this assessment, as follows:

- Risk-based Health Investigation Levels (HIL) for a broad range of metals and organic substances. The HIL are applicable for assessing human health risk via all relevant pathways of exposure. The HIL as listed in Table 1A (1) of Schedule B1 "Guideline on Investigation Levels for Soil and Groundwater" are provided for different land uses.

The site is proposed for commercial development and as such the analytical results for this assessment are assessed against the available HIL for *commercial / industrial* (HIL D).

- Health Screening Levels (HSL) for selected petroleum compounds and fractions are applicable for assessing human health risk via inhalation and direct contact pathways. The HSL depend on specific soil physicochemical properties, land use scenarios and the characteristics of building structures. The HSL listed in Table 1A(3) of Schedule B1 "Guideline on Investigation Levels for Soil and Groundwater" apply to different soil types and depths below surface to >4 m.

For this assessment, the analytical results are assessed against the available HSL for *commercial / industrial* (HSL D) for clay to depth of 0m to <1m.

- Ecological Screening Levels (ESL) for selected petroleum hydrocarbon compounds, TPH fractions and Benzo(a)Pyrene are applicable for assessing the risk to terrestrial ecosystems. ESL listed in Table 1B(6) of Schedule B1 "Guideline on Investigation Levels for Soil and Groundwater" broadly apply to coarse and fine-grained soils and various land uses and are generally applicable to the top 2m of soil.

The analytical results are assessed against the available ESL for *commercial / industrial* for fine-grained soil (clay).

- Ecological Investigation Levels (EIL), a specific type of Soil Quality Guidelines (SQG) for selected metals, is applicable for assessing the risk to terrestrial ecosystems. EIL listed in Table 1B(1-5) of Schedule B1 "Guideline on Investigation Levels for Soil and Groundwater" depend on specific soil physicochemical properties and land use scenarios and generally apply to the top 2m of soil. For arsenic and lead, generic EIL are adopted, for *commercial / industrial* land use for aged contamination. For other metals, where available, EIL are calculated using the EIL calculator developed by CSIRO for NEPC. Otherwise, where available, EIL are calculated using 30% effect concentration (EC30) or lowest observed effect concentrations (LOEC) toxicity data. EIL are the sum of the added contaminant limit (ACL) and the ambient background concentration (ABC).

For this assessment, the analytical results were assessed against the available SQG / EIL *commercial / industrial* land use for aged contamination in soil for low traffic volume.

For DDT and Naphthalene, generic EIL are adopted, for *commercial / industrial* land use for fresh contaminants.

In order to detect any potential "hot spots" of contamination within an individual composite soil sample, an Adjusted HIL D / EIL is recommended for assessment of results for individual composite samples, based on Method 1, Section 6 of the EPA "Sampling Design Guidelines" 1995. The Adjusted HIL D / EIL presented in the applicable tables were calculated by dividing the HIL D / EIL by three (i.e. three sub-samples comprised the composite). Individual composite samples were assessed against the Adjusted HIL D / EIL.

*14130/1-AA**Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown*

If the concentration of an analyte for a composite soil sample is in excess of the Adjusted EIL / HIL D, then all sub-samples of the failed composite samples will be analysed individually. The purpose of this is to detect potentially contaminated sub-samples within the failed composite sample.

For discrete soil samples, the individual concentrations of analytes were assessed against the HIL D / HSL D / ESL / EIL.

For asbestos, the assessed soil must not contain ACM in excess of 0.04%w/w and surface soil within the site is free of visible ACM, and AF and FA in the soil is <0.001% w/w.

The site will be deemed contaminated or containing contamination “hot spots” if the above criteria are unfulfilled. Further investigation, remediation and/or management will be recommended if the area of concern is found to be contaminated or containing contamination “hot spots”.

The adopted assessment criteria for the soil samples are detailed in Tables E, G1, G2, G3 and H to M.

14.0 FIELD & LABORATORY TEST RESULTS, ASSESSMENT & DISCUSSION

14.1 Field Results

Details of the sub-surface conditions encountered during field work for this assessment are presented in Table 1 in Appendix F of this report. As discussed in Section 6.0 the general soil profile comprised fill materials originating from the site/region, underlain by natural clayey soil. Topsoil, underlain by natural clayey soil was also encountered at many locations. At a few locations, natural clayey soil was encountered from the surface layer.

The test pits did not reveal any visual evidence of asbestos or other indicators of significant contamination, such as staining, odours or significant foreign matter.

14.2 Analytical Results

Reference may be made to Appendix H for the actual laboratory analytical reports from SGS. The test results are also presented in Tables E, F, G1 to G3 and H to M together with the assessment criteria adopted. A discussion of the test data is presented in the following sub-sections.

14.2.1 Metals (As, Cd, Cr, Cu, Pb, Hg, Ni & Zn)

The Metals test results for selected discrete samples for selected site/region originated fill, topsoil and surface natural soil samples are presented in Table E, and as shown, all concentrations of Metals were below the available relevant Ecological Investigation Level (EIL) and Health Investigation Levels (HIL) for commercial/industrial development (HIL D).

Test results of CEC and pH were adopted from Table F to calculate EIL in Tables G1 to G3.

The Metals test results for composited samples are presented in Tables G1 to G3 and as indicated, all concentrations of Metals were below the relevant available Adjusted EIL and Adjusted HIL D, with the exception of highlighted nickel (Ni) concentration in Tables G1 to G3.

The highlighted Ni concentration exceeded the Adjusted EIL but were below the Adjusted HIL D.

*14130/1-AA**Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown*

The sub-samples of the failed composite samples were therefore analysed for Ni. The test results are summarised in Table H.

As shown in Table H, all concentrations of Ni were below the relevant EIL and the HIL D.

14.2.2 TPH and BTEX

The TPH and BTEX test results for selected discrete site/region originated fill sample with inclusion of demolition waste are presented in Table I. As shown in Table I, the concentrations of F1 (TPH C6-C10 less BTEX), F2 (TPH >C10-C16 less Naphthalene), F3 (TPH >C16-C34), F4 (TPH >C34-C40) and BTEX were below the relevant Health Screening Levels D (HSL D) and / or Ecological Screening Levels (ESL) adopted. Moreover, most of the test results were below the laboratory limits of reporting (LOR).

14.2.3 Polycyclic Aromatic Hydrocarbons (PAH)

The PAH test results for selected discrete site/region originated fill sample with inclusion of demolition waste are presented in Table J and as shown, concentrations of Benzo(a)pyrene, Benzo(a)pyrene TEQ, Naphthalene and Total PAH were well below the relevant HIL D or ESL or HSL D or EIL adopted. Moreover, all test results were below the laboratory LOR.

14.2.4 Organochlorine Pesticides (OCP)

The OCP test results for selected discrete samples for selected site/region originated fill, topsoil and surface natural soil samples are presented in Table K and as indicated, all concentrations of OCP were well below the relevant HIL D. Concentrations of DDT were also below the EIL. Moreover, all test results were below the laboratory LOR.

The OCP test results for the composited samples are presented in Table L and as indicated, the concentrations of OCP were well below the relevant Adjusted HIL D. Concentrations of DDT were also below the Adjusted EIL. Moreover, all test results were below the laboratory LOR.

14.2.5 Polychlorinated Biphenyls (PCB)

The PCB test result for selected discrete site/region originated fill sample with inclusion of demolition waste is presented in Table K and as indicated the concentration of PCB was below the relevant HIL D adopted as well as below the laboratory LOR.

14.2.6 Asbestos

The asbestos test results for the discrete site/region originated fill samples with inclusion of demolition waste are presented in Table M and as indicated, AF and FA in excess of 0.001%w/w was not found and also ACM in excess of 0.01% was not detected in the analysed fill samples.

15.0 CONCLUSION AND RECOMMENDATIONS

The data quality objectives outlined in the report have been satisfied. The findings of this preliminary contamination assessment (PCA) are summarised as follows:

- The site comprised a vacant land.
- The site is proposed for commercial development.

*14130/1-AA**Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown*

- Most of the site is underlain by fill materials originating from the site, underlain by natural clayey soil. Topsoil, underlain by natural clayey soil was also encountered at many locations. At a few locations, natural clayey soil was encountered from the surface layer. The test pits did not reveal any visual evidence of asbestos or other indicators of significant contamination, such as staining, odours or significant foreign matter.
- As presented in summary tables (Tables E, G1 to G3 and H to M) and discussed in Section 14.2, all the laboratory test results satisfied the criteria for stating that the analytes selected are either not present i.e. concentrations less than laboratory limits of reporting, or present in the sampled soil at concentrations that do not pose a risk of hazard to human health or the environment under a "commercial/industrial" form of development.

Based on this preliminary contamination assessment, it is concluded that the site does not present a risk of harm to human health or the environment and in our opinion, the site is therefore environmentally suitable for the proposed commercial development.

If any suspect materials (identified by unusual staining, odour, discolouration or inclusions such as building rubble, asbestos sheets/pieces/pipes, ash material, etc.) are encountered during any stage of future earthworks/site preparation, between the sampling locations, Unexpected Finds Management Protocol (Appendix I) should be implemented. In the event of contamination, detailed assessment, remediation and validation will be necessary.

For any materials to be excavated and removed from the site, it is recommended that waste classification of the materials, in accordance with the "Waste Classification Guidelines Part 1: Classifying Waste" (NSW EPA 2014), NSW EPA resource recovery exemptions and orders under the Protection of the Environment Operations (Waste) Regulation 2014, or NSW EPA Certification: Virgin excavated natural material is undertaken prior to disposal at an appropriately licensed landfill or potential re-use at other sites.

Any imported soil (fill) must be assessed by a qualified environmental consultant, prior to importation, to ensure suitability for the proposed use. In addition, the imported fill must not contain asbestos and ash, be free of unusual odour, not be discoloured and not acid sulphate soil or potential acid sulphate soil. The imported fill should either be virgin excavated natural material (VENM) or excavated natural material (ENM).

16.0 LIMITATIONS

Within the scope of work outlined in the fee proposals dated 8 October 2017 (Reference Q8285), the services performed by Geotechnique were conducted in a manner consistent with the level of quality and skill generally exercised by members of the profession and consulting practice.

To the best of our knowledge, all information obtained and contained in this report is true and accurate. No further investigation has been carried out to authenticate the information provided. Supporting documentation was obtained where possible, some of which is contained in this report.

This report has been prepared for Lavadetes Property Group for the purposes stated within. Penrith City Council may rely upon the report for development and/or construction application determinations. Reliance on this report by other parties shall be at such parties' sole risk as the report might not contain sufficient information for other purposes.

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AB.sf/20.12.2017*

14130/1-AA

Lot 111 in DP1035909 - 121-133 Blaikie Road, Jamisontown

This report shall only be presented in full and may not be used to support any objective other than those set out in the report, except where written approval is provided by Geotechnique Pty Ltd.

The information in this report is considered accurate at the completion of field sampling (5 December 2017). Any variations to the site form or use beyond that date will nullify the conclusion stated.

Whilst the assessment conducted at the site was carried out in accordance with current NSW guidelines, the potential always exists for contaminated soils to be present between sampled locations.

Presented in Appendix J is a document entitled "Environmental Notes", which should be read in conjunction with this report.

GEOTECHNIQUE PTY LTD

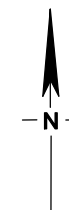
LIST OF REFERENCES

- Australian Standard "Guide to the Sampling and Investigation of Potentially Contaminated Soil Part 1: Non-volatile and semi-volatile compounds" (AS4482.1-2005)*
- Australian Standard "Guide to the Sampling and Investigation of Potentially Contaminated Soil Part 2: Volatile substances" (AS4482.2-1999)*
- Contaminated Land Management Act 1997*
- Contaminated Land Management Regulation 1998*
- Contaminated Sites: Guidelines for Consultants Reporting on Contaminated Sites – NSW Environment Protection Authority 2011*
- Contaminated Sites: Guidelines for Assessing Former Orchard and Market Garden - NSW Department of Environment and Conservation (DEC) 2005*
- Contaminated Sites: Guidelines for the NSW Site Auditor Scheme (3rd Edition) –NSW EPA 2017*
- Contaminated Sites: Sampling Design Guidelines - NSW Environment Protection Authority 1995*
- Geology of Penrith 1:100,000 Sheet (9030) – Geological Survey of New South Wales, Department of Minerals and Energy 1991*
- Guidelines for the Laboratory Analysis of Contaminated Soils - Australian and New Zealand Environment and Conservation Council (ANZECC) 1996*
- Managing Land Contamination: Planning Guidelines SEPP 55 – Remediation of Land – Department of Urban Affairs and Planning / NSW Environment Protection Authority 1998*
- National Environment Protection (Assessment of Site Contamination) Measure – National Environmental Protection Council 2013*
- Protection of the Environment Operations (Waste) Regulation 2005 – General Exemption Under Part 6, Clause 51 and 51A – The Excavated Natural Material Exemption & Order 2014*
- Soil Landscape of Penrith 1:100,000 Sheets (9030) – Soil Conservation Service Survey of NSW 1989*
- Standard Methods for the Examination of Water and Wastewater – American Public Health Association (APHA) 2005*
- Waste Classification Guidelines Part 1: Classifying Waste - NSW DECC (November 2014)*

DRAWING

Drawing No 14130/1-AA1

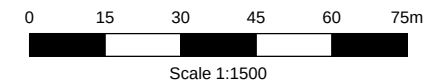
Site Features & Test Pit Locations



LEGEND

■ Test Pit

Imagery ©2017 NearMap.com



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NOTES

1. Site features are indicative and are not to scale.
2. This drawing has been produced using a base plan provided by others to which additional information e.g test pits, borehole locations or notes have been added. Some or all of the plan may not be relevant at the time of producing this drawing

Levadetes Property Group
Lot 111 in DP1035909
121-133 Blaikie Road
Jamisontown

Site Features & Test Pit Locations

Drawing No: 14130/1-AA1
Job No: 14130/1
Drawn By: MH
Date: 20 December 2017
Checked By: JH/AB

File No: 14130-1
Layers: 0, AA1

TABLES

Table A	<i>Rinsate Sample</i>
Table B	<i>Trip Spike Sample</i>
Table C	<i>Duplicate Sample</i>
Table D	<i>Split Sample</i>
Table E	<i>Metals, Cation Exchange Capacity (CEC) & pH Test Results – Discrete Samples</i>
Table F	<i>Cation Exchange Capacity (CEC) and pH Test Results – Sub-samples</i>
Tables G1 to G3	<i>Metals, Cation Exchange Capacity (CEC) & pH Test Results – Composited Samples</i>
Table H	<i>Nickel Test Results – Sub-samples</i>
Table I	<i>Total Petroleum Hydrocarbons (TPH) & BTEX Test Results – Discrete Sample</i>
Table J	<i>Polycyclic Aromatic Hydrocarbons (PAH) Test Results – Discrete Sample</i>
Table K	<i>Organochlorine Pesticides (OCP) & Polychlorinated Biphenyls (PCB) Test Results – Discrete Samples</i>
Table L	<i>Organochlorine Pesticides (OCP) Test Results – Composited Samples</i>
Table M	<i>Asbestos Test Results – Discrete Samples</i>

TABLE A
RINSATE SAMPLE
(Ref No: 14130/1-AA)

ANALYTE	R1
METAL	(mg/L)
Arsenic	<0.02
Cadmium	<0.001
Chromium	<0.005
Copper	<0.005
Lead	<0.02
Mercury	<0.0001
Nickel	<0.005
Zinc	<0.01

TABLE B
TRIP SPIKE SAMPLE
(Ref No: 14130/1-AA)

Trip Spike	Sampling Date	BTEX			
		Benzene	Toluene	Ethylbenzene	Xylenes
TS1	5/12/2017	96%	94%	97%	97%

Note : results are reported as percentage recovery of known spike concentrations

TABLE C
DUPLICATE SAMPLE
(Ref No: 14130/1-AA)

ANALYTE	D1	C1	RELATIVE PERCENTAGE DIFFERENCES (RPD)
	mg/kg	mg/kg	%
METAL			
Arsenic	4	4	0
Cadmium	<0.3	<0.3	-
Chromium	10	7.9	23
Copper	5.3	9.1	53
Lead	12	9	29
Mercury	<0.05	<0.05	-
Nickel	4.5	6.3	33
Zinc	14	23	49
ORGANOCHLORINE PESTICIDES (OCP)			
Hexachlorobenzene (HCB)	<0.1	<0.1	-
Heptachlor	<0.1	<0.1	-
Aldrin+Dieldrin	<0.15	<0.15	-
Endrin	<0.2	<0.2	-
Methoxychlor	<0.1	<0.1	-
Mirex	<0.1	<0.1	-
Endosulfan (alpha, beta & sulphate)	<0.5	<0.5	-
DDD+DDE+DDT	<0.6	<0.6	-
Chlordane (alpha & gamma)	<0.2	<0.2	-

TABLE D
SPLIT SAMPLE
(Ref No: 14130/1-AA)

ANALYTE	TP7 0.0-0.15 (m) mg/kg (SGS)	Z3 mg/kg (ENVIROLAB)	RELATIVE PERCENTAGE DIFFERENCES (RPD) %
METAL			
Arsenic	<3	<4	-
Cadmium	<0.3	<0.4	-
Chromium	11	12	9
Copper	10	11	10
Lead	17	20	16
Mercury	<0.05	<0.1	-
Nickel	4.5	4	12
Zinc	77	190	85
ORGANOCHLORINE PESTICIDES (OCP)			
Hexachlorobenzene (HCB)	<0.1	<0.1	-
Heptachlor	<0.1	<0.1	-
Aldrin+Dieldrin	<0.15	<0.15	-
Endrin	<0.2	<0.1	-
Methoxychlor	<0.1	<0.1	-
Endosulfan (alpha (I), beta (II) & sulphate)	<0.5	#N/A	-
DDD+DDE+DDT	<0.6	#N/A	-
Chlordane (alpha & gamma)	<0.2	#N/A	-

TABLE E
METALS, CATION EXCHANGE CAPACITY (CEC) & pH TEST RESULTS
DISCRETE SAMPLES
(Ref No: 14130/1-AA)

Sample Location	Depth (m)	METAL (mg/kg)								CEC (cmol/kg)	pH
		ARSENIC	CADMIUM	CHROMIUM (Total)	COPPER	LEAD	MERCURY	NICKEL	ZINC		
TP1	0.0-0.15	4	<0.3	12	3.8	7	<0.05	3.5	13	1.9	6.4
TP7	0.0-0.15	<3	<0.3	11	10	17	<0.05	4.5	77	21	8.5
TP13	0.0-0.15	<3	<0.3	9.8	5.8	6	<0.05	5.1	12	-	-
TP20	0.0-0.15	<3	<0.3	7.6	3.8	7	<0.05	3.6	14	2.6	7.1
TP21	0.0-0.15	<3	<0.3	8.3	6.4	9	<0.05	5.0	22	-	-
TP26	0.0-0.15	3	<0.3	8.7	7.0	9	<0.05	4.9	21	5.7	7.7
Limit of Reporting (LOR)		3	0.3	0.3	0.5	1	0.05	0.5	0.5	0.02	-
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)											
Health-based Investigation Levels (HIL) ^a D - Commercial / Industrial		3000	900	3600 ^c	240000	1500	180 ^d	6000	400000		
Ecological Investigation Levels (EIL) ^b Commercial and industrial		160 ^e	-	660 ^f	65	1900 ^g	-	10	250		

Notes: a: Commercial / industrial includes premises such as shops, offices, factories and industrial sites.

b: EIL of aged chromium(III), nickel & zinc were derived from calculation spreadsheet developed by CSIRO for NEPC; old NSW suburb with low traffic volume; the lowest CEC=1.9 cmolc/kg & pH=6.4; the assumed clay content=10 % were selected for derivation of EIL; a conservative approach.

EIL of aged copper was calculated as the lowest value based on the pH and the CEC of the sample analysed and background concentration.

c: Chromium (VI)

d: Methyl Mercury

e: Generic EIL for aged arsenic

f: Chromium (III)

g: Generic added contaminant limit for aged lead + ambient background concentration; old NSW suburb with low traffic volume.

TABLE F
CATION EXCHANGE CAPACITY (CEC) & pH TEST RESULTS
SUB-SAMPLES
(Ref No: 14130/1-AA)

Composite Number	Sub-sample	Depth (m)	CEC (cmol/kg)	pH
C1	TP2	0.0-0.15	2.6	7.4
C1	TP3	0.0-0.16	2.8	-
C1	TP4	0.0-0.17	4.9	-
C2	TP6	0.0-0.15	3.6	6.7
C3	TP9	0.0-0.15	1.9	6.8
C5	TP14	0.0-0.15	7.1	7.2
C5	TP15	0.0-0.16	11	-
C6	TP17	0.0-0.15	2.2	6.7
C6	TP18	0.0-0.16	6.0	-
C4	TP22	0.0-0.15	0.85	6.3
C7	TP23	0.0-0.15	3.5	7.6
C8	TP28	0.0-0.15	2.1	6.8
C9	TP31	0.0-0.15	1.5	6.9
Limit of Reporting (LOR)			0.02	-

TABLE G1
METALS, CATION EXCHANGE CAPACITY (CEC) & pH TEST RESULTS
COMPOSITED SAMPLES
(Ref No: 14130/1-AA)

Composite Number	METAL (mg/kg)								CEC (cmol/kg) *	pH *
	ARSENIC	CADMIUM	CHROMIUM (Total)	COPPER	LEAD	MERCURY	NICKEL	ZINC		
C1	4	<0.3	7.9	9.1	9	<0.05	6.3	23	2.6	7.4
C2	5	<0.3	13	6.7	12	<0.05	3.9	17	3.6	6.7
C5	5	<0.3	10	10	11	<0.05	6.8	24	2.2	6.7
C6	<3	<0.3	9.6	8.1	10	<0.05	4.7	19	0.85	6.3
Limit of Reporting (LOR)	3	0.3	0.3	0.5	1	0.05	0.5	0.5	0.02	-
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)										
Health-based Investigation Levels (HIL) ^a D - Commercial / Industrial D	3000	900	3600 ^e	240000	1500	180 ^f	6000	400000		
Adjusted HIL ^b	1000	300	1200	80000	500	60	2000	133333		
Ecological Investigation Levels (EIL) ^c - Commercial and industrial	160 ^g	-	660 ^h	40	1900	-	6	170		
Adjusted EIL ^d	53	-	220	13	633	-	2	57		

Notes: a: Commercial / industrial includes premises such as shops, offices, factories and industrial sites.

b: Adjusted HIL=HIL/3

c: EIL of aged chromium(III), nickel & zinc were derived from calculation spreadsheet developed by CSIRO for NEPC; old NSW suburb with low traffic volume; the low est CEC=0.85 cmolc/kg and pH=6.3; the assumed clay content=10 % of the sub-sample were selected for derivation of EIL; a conservative approach.

EIL of aged copper was calculated as the low est value based on the pH and the CEC of the sample analysed and background concentration.

d: Adjusted EIL=EIL/3

e: Chromium (VI)

f: Methyl Mercury

g: Generic EIL for aged arsenic

h: Chromium (III)

i: Generic added contaminant limit for aged lead + ambient background concentration; old NSW suburb with low traffic volume.

* CEC & pH of sub-sample

TABLE G2
METALS, CATION EXCHANGE CAPACITY (CEC) & pH TEST RESULTS
COMPOSITED SAMPLES
(Ref No: 14130/1-AA)

Composite Number	METAL (mg/kg)								CEC (cmol/kg) *	pH *
	ARSENIC	CADMIUM	CHROMIUM (Total)	COPPER	LEAD	MERCURY	NICKEL	ZINC		
C3	<3	<0.3	11	3.9	6	<0.05	3.6	18	1.9	6.8
C4	<3	<0.3	9.5	3.2	5	<0.05	3.5	10	7.1	7.2
Limit of Reporting (LOR)	3	0.3	0.3	0.5	1	0.05	0.5	0.5	0.02	-
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)										
Health-based Investigation Levels (HIL) ^a - Commercial / Industrial D	3000	900	3600 ^e	240000	1500	180 ^f	6000	400000		
Adjusted HIL ^b	1000	300	1200	80000	500	60	2000	133333		
Ecological Investigation Levels (EIL) ^c - Commercial and industrial	160 ^g	-	660 ^h	65	1900 ⁱ	-	10	250		
Adjusted EIL ^d	53	-	220	22	633	-	3	83		

Notes: a: Commercial / industrial includes premises such as shops, offices, factories and industrial sites.

b: Adjusted HIL=HIL/3

c: EIL of aged chromium(III), nickel & zinc were derived from calculation spreadsheet developed by CSIRO for NEPC; old NSW suburb with low traffic volume; the low est CEC=1.9 cmolc/kg and pH=6.8; the assumed clay content=10 % of the sub-sample were selected for derivation of EIL; a conservative approach.

EIL of aged copper was calculated as the low est value based on the pH and the CEC of the sample analysed and background concentration.

d: Adjusted EIL=EIL/3

e: Chromium (VI)

f: Methyl Mercury

g: Generic EIL for aged arsenic

h: Chromium (III)

i: Generic added contaminant limit for aged lead + ambient background concentration; old NSW suburb with low traffic volume.

* CEC & pH of sub-sample

TABLE G3
METALS, CATION EXCHANGE CAPACITY (CEC) & pH TEST RESULTS
COMPOSITED SAMPLES
(Ref No: 14130/1-AA)

Composite Number	METAL (mg/kg)								CEC (cmol/kg) *	pH *
	ARSENIC	CADMIUM	CHROMIUM (Total)	COPPER	LEAD	MERCURY	NICKEL	ZINC		
C7	<3	<0.3	6.9	3.8	6	<0.05	2.9	14	3.5	7.6
C8	<3	<0.3	8.5	3.8	6	<0.05	2.9	11	2.1	6.8
C9	3	<0.3	7.2	3.8	6	<0.05	3.2	11	1.5	6.9
Limit of Reporting (LOR)	3	0.3	0.3	0.5	1	0.05	0.5	0.5	0.02	-
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)										
Health-based Investigation Levels (HIL) ^a - Commercial / Industrial D	3000	900	3600 ^e	240000	1500	180 ^f	6000	400000		
Adjusted HIL ^b	1000	300	1200	80000	500	60	2000	133333		
Ecological Investigation Levels (EIL) ^c - Commercial and industrial	160 ^g	-	660 ^h	55	1900 ⁱ	-	8	220		
Adjusted EIL ^d	53	-	220	18	633	-	2.7	73		

Notes: a: Commercial / industrial includes premises such as shops, offices, factories and industrial sites.

b: Adjusted HIL=HIL/3

c: EIL of aged chromium(III), nickel & zinc were derived from calculation spreadsheet developed by CSIRO for NEPC; old NSW suburb with low traffic volume; the lowest CEC=1.5 cmolc/kg and pH=6.8; the assumed clay content=10 % of the sub-sample were selected for derivation of EIL; a conservative approach.

EIL of aged copper was calculated as the lowest value based on the pH and the CEC of the sample analysed and background concentration.

d: Adjusted EIL=EIL/3

e: Chromium (VI)

f: Methyl Mercury

g: Generic EIL for aged arsenic

h: Chromium (III)

i: Generic added contaminant limit for aged lead + ambient background concentration; old NSW suburb with low traffic volume.

* CEC & pH of sub-sample

TABLE H
NICKEL TEST RESULTS
SUB-SAMPLES
(Ref No: 14130/1-AA)

Composite Number	Sub-Sample	Depth (m)	NICKEL (mg/kg)	NICKEL (mg/kg)
C1	TP2	0.0-0.15	3.7	-
	TP3	0.0-0.15	-	6.2
	TP4	0.0-0.15	-	7.3
C2	TP5	0.0-0.15	5.2	-
	TP6	0.0-0.15	4.2	-
	TP8	0.0-0.15	4.3	-
C3	TP9	0.0-0.15	3.3	-
	TP10	0.0-0.15	2.6	-
	TP11	0.0-0.15	3.5	-
C4	TP12	0.0-0.15	3.8	-
	TP22	0.0-0.15	3.5	-
	TP33	0.0-0.15	3.0	-
C5	TP14	0.0-0.15	4.8	-
	TP15	0.0-0.15	-	8.0
	TP16	0.0-0.15	5.0	-
C6	TP17	0.0-0.15	3.0	-
	TP18	0.0-0.15	-	9.7
	TP19	0.0-0.15	6.0	-
C7	TP23	0.0-0.15	3.5	-
	TP24	0.0-0.15	3.5	-
	TP25	0.0-0.15	1.1	-
C8	TP27	0.0-0.15	2.9	-
	TP28	0.0-0.15	3.2	-
	TP29	0.0-0.15	3.3	-
C9	TP30	0.0-0.15	4.0	-
	TP31	0.0-0.15	2.9	-
	TP32	0.0-0.15	3.4	-
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)				
Health-based Investigation Levels (HIL) D - Commercial / Industrial D ^a			6000	6000
Ecological Investigation Level (EIL)			6 ^b	20 ^c

- Notes:
- a: Commercial / industrial includes premises such as shops, offices, factories and industrial sites.
 - b: From Tables G1 to G3, low est EIL of nickel value was adopted, a conservative approach
 - c: EIL of was derived from calculation spreadsheet developed by CSIRO for NEPC; old NSW suburb with low traffic volume; the low est CEC=2.8cmolc/kg for the relevant samples was selected for derivation of EIL; a conservative approach

TABLE I
TOTAL RECOVERABLE HYDROCARBONS (TRH) AND BTEX TEST RESULTS
DISCRETE SAMPLE
(Ref No: 14130/1-AA)

										NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)																									
			TRH (mg/kg)					BTEX (mg/kg)				Health Screening Levels (HSL) D Commercial / Industrial						Ecological Screening Levels for fine-grained soil Commercial and industrial						Ecological Screening Levels for coarse-grained soil Commercial and industrial											
			F1	F2*	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2*	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES		
Sample Location	Depth (m)	Soil type	F1	F2*	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2*	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES	F1	F2**	F3	F4	BENZENE	TOLUENE	ETHYLBENZENE	XYLENES		
TP7	0.0-0.15	Clay	<25	<25	<25	<90	<120	<0.1	<0.1	<0.1	<0.3	310	NL	4	NL	NL	NL	215	170	2500	6600	95	135	185	95	-	-	-	-	-	-	-	-		
Limit of Reporting (LOR)			25	25	25	90	120	0.1	0.1	0.1	0.3																								

Notes:
F1: C6-C10 less BTEX
F2*: >C10-C16 less Naphthalene
F2**: >C10-C16
F3: >C16-C34
F4: >C34-C40
NL: Not Limiting

TABLE J
POLYCYCLIC AROMATIC HYDROCARBONS (PAH) TEST RESULTS
DISCRETE SAMPLE
(Ref No: 14130/1-AA)

(REF NO: 14130/1-AA)														
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)														
			PAH (mg/kg)				Health-based Investigation Levels (HIL) D ^a Commercial / Industrial D		Health Screening Level (HSL) D - Commercial / Industrial		Generic Ecological Investigation Level (EIL) - Commercial and industrial		Ecological Screening Level (ESL) - Commercial and industrial	
			BaP TEQ	TOTAL PAHs	NAPHTHALENE	BENZO(a)PYRENE (BaP)	BaP TEQ	TOTAL PAHs	NAPHTHALENE	NAPHTHALENE	BENZO(a)PYRENE (BaP)			
Sample Location	Depth (m)	Soil type	BaP TEQ	TOTAL PAHs	NAPHTHALENE	BENZO(a)PYRENE (BaP)	BaP TEQ	TOTAL PAHs	NAPHTHALENE	NAPHTHALENE	BENZO(a)PYRENE (BaP)			
TP7	0.0-0.15	Clay	<0.3	<0.8	<0.1	<0.1	40	4000	NL	370	1.4			
Limit of Reporting (LOR)			0.3	0.8	0.1	0.1								

Notes: a: Commercial / industrial includes premises such as shops, offices, factories and industrial sites.

NL: Not Limiting

TABLE K
ORGANOCHLORINE PESTICIDES (OCP) & POLYCHLORINATED BIPHENYLS (PCB) TEST RESULTS
DISCRETE SAMPLES
(Ref No: 14130/1-AA)

Sample Location	Depth (m)	OCP (mg/kg)										PCB (mg/kg)
		HEXACHLOROBENZENE (HCB)	HEPTACHLOR	ALDRIN+DIELDRIN	ENDRIN	METHOXYCHLOR	MIREX	ENDOSULFAN (alpha, beta & sulphate)	DDD+DDE+DDT	DDT	CHLORDANE (alpha & gamma)	
TP1	0.0-0.15	<0.1	<0.1	<0.15	<0.2	<0.1	<0.1	<0.5	<0.6	<0.2	<0.2	-
TP7	0.0-0.15	<0.1	<0.1	<0.15	<0.2	<0.1	<0.1	<0.5	<0.6	<0.2	<0.2	<1
TP13	0.0-0.15	<0.1	<0.1	<0.15	<0.2	<0.1	<0.1	<0.5	<0.6	<0.2	<0.2	-
TP20	0.0-0.15	<0.1	<0.1	<0.15	<0.2	<0.1	<0.1	<0.5	<0.6	<0.2	<0.2	-
TP21	0.0-0.15	<0.1	<0.1	<0.15	<0.2	<0.1	<0.1	<0.5	<0.6	<0.2	<0.2	-
TP26	0.0-0.15	<0.1	<0.1	<0.15	<0.2	<0.1	<0.1	<0.5	<0.6	<0.2	<0.2	-
Limit of Reporting (LOR)		0.1	0.1	0.15	0.2	0.1	0.1	0.5	0.6	0.2	0.2	1
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)												
Health-based Investigation Levels (HIL) D - Commercial / Industrial D ^a		80	50	45	100	2500	100	2000	3600		530	7
Ecological Investigation Levels (EIL) - Commercial and industrial											640 ^b	

Notes: a: Commercial / industrial includes premises such as shops, offices, factories and industrial sites.

b: Generic EIL for DDT

TABLE L
ORGANOCHLORINE PESTICIDES (OCP) TEST RESULTS
COMPOSITED SAMPLES
(Ref No: 14130/1-AA)

Composite Number	OCP (mg/kg)									
	HEXACHLOROBENZENE (HCB)	HEPTACHLOR	ALDRIN+DIELDRIN	ENDRIN	METHOXYCHLOR	MIREX	ENDOSULFAN (alpha, beta & sulphate)	DDD+DDE+DDT	DDT	CHLORDANE (alpha & gamma)
C1	<0.1	<0.1	<0.15	<0.2	<0.1	<0.1	<0.5	<0.6	<0.2	<0.2
C2	<0.1	<0.1	<0.15	<0.2	<0.1	<0.1	<0.5	<0.6	<0.2	<0.2
C5	<0.1	<0.1	<0.15	<0.2	<0.1	<0.1	<0.5	<0.6	<0.2	<0.2
C6	<0.1	<0.1	<0.15	<0.2	<0.1	<0.1	<0.5	<0.6	<0.2	<0.2
C8	<0.1	<0.1	<0.15	<0.2	<0.1	<0.1	<0.5	<0.6	<0.2	<0.2
Limits of Reporting (LOR)	0.1	0.1	0.15	0.2	0.1	0.1	0.5	0.6	0.2	0.2
NATIONAL ENVIRONMENT PROTECTION AMENDMENT MEASURE (2013)										
Health-based Investigation Levels (HIL) D ^a Commercial / Industrial	80	50	45	100	2500	100	2000	3600		530
Adjusted HIL ^b	27	17	15	33	833	33	667	1200		177
Ecological Investigation Level (EIL) - Commercial and industrial										640 ^c
Adjusted EIL ^b										213

Notes: a: Commercial / industrial includes premises such as shops, offices, factories and industrial sites.

b: Adjusted HIL=HIL/3; Adjusted EIL=EIL/3

c: Generic EIL for DDT

TABLE M
ASBESTOS TEST RESULTS
DISCRETE SAMPLES
(Ref No: 14130/1-AA)

Sample Location	Depth (m)	ASBESTOS (% w /w)	
Soil Sample		ACM (>7mm)	AF/FA (<7mm)
TP7	0.0-0.15	<0.01	<0.001
TP7	0.5-0.8	<0.01	<0.001
Limit of Reporting (LOR)		0.01	0.001

Notes: ACM: Asbestos Containing Material
AF: Asbestos Fine
FA: Fibrous Asbestos

APPENDIX A

AERIAL PHOTOGRAPHS

14130/1



September 2017



2005

*Lavadetes Property Group
mh/23.10.2017*

14130/1



1998



1986

Lavadetes Property Group
mh/23.10.2017

14130/1



1978



1970

Lavadetes Property Group
mh/23.10.2017

14130/1



1961



1947

*Lavadetes Property Group
mh/23.10.2017*

APPENDIX B

DEPARTMENT OF LANDS RECORDS

14130/1

Summary of Proprietors

Lot 111 DP1035909

Year	Proprietor
2016 - 2017	
2001 - 2016	
1968 - 2001	
1967 - 1968	
1964 - 1967	
1961 - 1964	

LAND AND PROPERTY INFORMATION NEW SOUTH WALES - TITLE SEARCH

FOLIO: 111/1035909

SEARCH DATE	TIME	EDITION NO	DATE
23/10/2017	10:48 AM	4	29/7/2016

LAND

LOT 111 IN DEPOSITED PLAN 1035909
AT JAMISON TOWN
LOCAL GOVERNMENT AREA PENRITH
PARISH OF MULGOA COUNTY OF CUMBERLAND
TITLE DIAGRAM DP1035909

FIRST SCHEDULE

[REDACTED] (ND AK633428)

SECOND SCHEDULE (3 NOTIFICATIONS)

- 1 RESERVATIONS AND CONDITIONS IN THE CROWN GRANT(S)
- 2 H724040 COVENANT
- 3 DP1121022 RIGHT OF CARRIAGEWAY 4 METRE(S) WIDE AND 7 METRE(S) WIDE APPURTENANT TO THE LAND ABOVE DESCRIBED

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

advlgeo

PRINTED ON 23/10/2017

GlobalX Information Services Pty Ltd (ABN 99 073 436 414) an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with section 96B(2) of the Real Property Act 1900.
* ANY ENTRIES PRECEDED BY AN ASTERISK DO NOT APPEAR ON THE CURRENT EDITION OF THE CERTIFICATE OF TITLE
WARNING: THE INFORMATION APPEARING UNDER **NOTATIONS** HAS NOT BEEN FORMALLY RECORDED IN THE REGISTER.

Penrith
L. Penrith
Penrith
Penrith

Crown Land Office Approval
PLAN APPROVED
Authorised Officer
Land District
Paper No
Field Book
Pages

Subdivision Certificate

I certify that the provisions of a 100% of the Environmental Planning and Assessment Act 1979 have been satisfied in relation to the proposed subdivision.

Surrey Division

(Insert Address of the Surveyor)

Consent Authority
Penrith City Council

Date of endorsement
12/11/2001

Accreditation No
10219

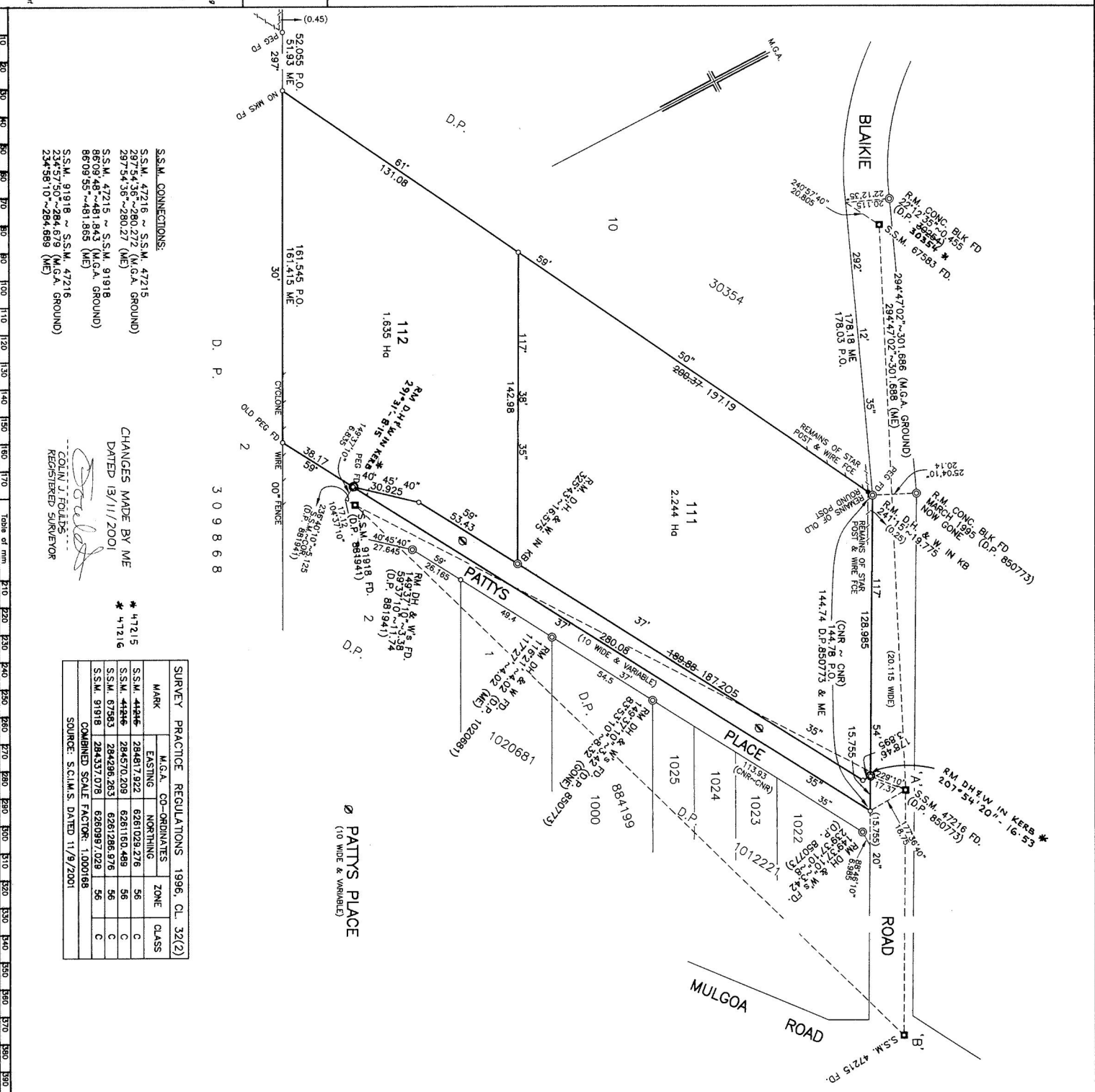
Subdivision Certificate No
10219

File No
DA019231

Notes
When the plan is to be lodged electronically in the Land Titles Office, it should include a signature in an electronic or digital format.

1. Details and/or a map is included.

SURVEYOR'S REFERENCE: 3169BDP



DP1035909

Registered: 30-11-2001

CA: SEE CERTIFICATE

Title System: TORRENS

Purpose: SUBDIVISION

Ref. Map: U6460-8

Lot Plan: DP 30354

PLAN OF SUBDIVISION OF
LOT 11 IN D.P. 30354

Lengths are in metres. Reduction Ratio 1:1250

LOCAL PENRITH

Locality: JAMISONTOWN

Parish: MULGOA

County: CUMBERLAND

This is sheet 1 of my plan in sheets.

(Delete if inapplicable)

Surveyor (Practice) Regulation 1996

I, COLIN J. FOLDS

of P.O. BOX 239, PENRITH, 2151.

do hereby certify that the survey represented in this plan is correct, has been made in accordance with the Survey Practice Regulation 1996 and was completed on 5/9/2001.

The survey relates to LOTS 111 & 112.

I hereby certify that the survey is correct, has been made in accordance with the Survey Practice Regulation 1996 and was completed on 5/9/2001.

In the plan that is the subject of the survey.

Zone System: /

Surveyor (Practice) Regulation 1996

Plans used in preparation of survey/ completion.

D.P. 30354 D.P. 852226

D.P. 309868 D.P. 881941

D.P. 746868 D.P. 884199

D.P. 828240 D.P. 1012221

D.P. 850773 D.P. 1020681

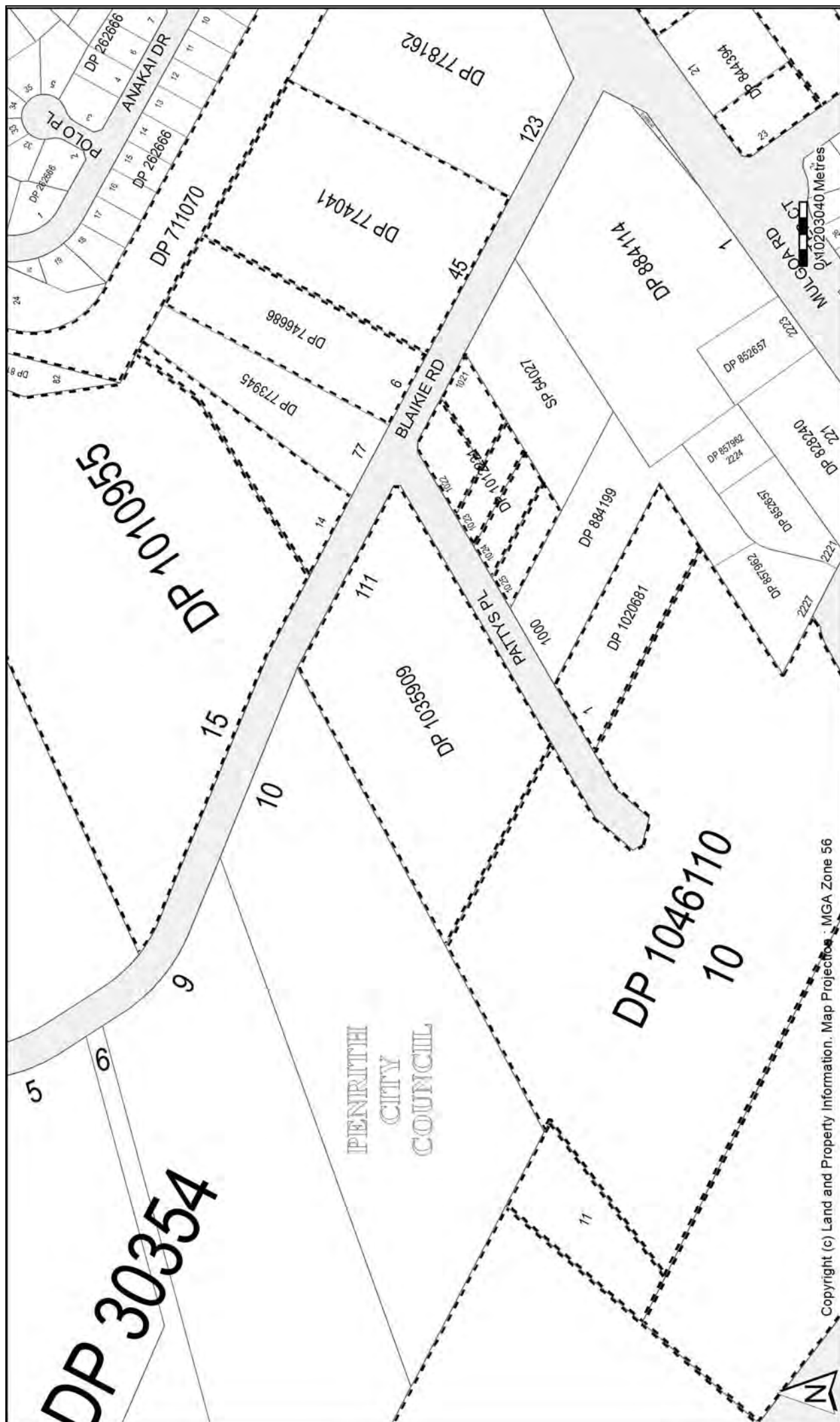
PANEL FOR USE ONLY for statements of intention to dedicate public roads to create public relations, use of land or positive covenants.

PURSUANT TO SEC. 88B OF THE CONVEYANCING ACT 1919-1964, IT IS INTENDED TO CREATE:

1. RESTRICTION ON THE USE OF LAND

IT IS INTENDED TO DEDICATE THE WIDENING OF PATY'S PLACE TO THE PUBLIC AS A ROAD.

Document Set ID: 9204869



APPENDIX C

SECTION 149 (2 & 5) PLANNING CERTIFICATE

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

Property No: 778893
Your Reference: 14130/1
Contact No:

Issue Date: 23 October 2017
Certificate No: 17/05802

Issued to: Geotechnique Pty Ltd
P O Box 880
PENRITH NSW 2750

PRECINCT 2010

DESCRIPTION OF LAND

County: CUMBERLAND

Parish: MULGOA

Location: 121-133 Blaikie Road JAMISONTOWN NSW 2750

Land Description: Lot 111 DP 1035909

- PART 1 PRESCRIBED MATTERS -

In accordance with the provisions of Section 149(2) of the Act the following information is furnished in respect of the abovementioned land:

1 NAMES OF RELEVANT PLANNING INSTRUMENTS AND DCPs

1(1) The name of each environmental planning instrument that applies to the carrying out of development on the land:

Penrith Local Environmental Plan 2010, published 22nd September 2010, as amended, applies to the land.

Sydney Regional Environmental Plan No.9 - Extractive Industry (No.2), gazetted 15 September 1995, as amended, applies to the local government area of Penrith.

Sydney Regional Environmental Plan No. 20 - Hawkesbury-Nepean River (No. 2 - 1997), gazetted 7 November 1997, as amended, applies to the local government area of Penrith (except land to which State Environmental Planning Policy (Penrith Lakes Scheme) 1989 applies).

The following State environmental planning policies apply to the land (subject to the exclusions noted below):

State Environmental Planning Policy No.1 - Development Standards. (Note: This policy does not apply to the land to which Penrith Local Environmental Plan 2010 or State Environmental Planning Policy (Western Sydney Employment Area) 2009 apply.)

State Environmental Planning Policy No.19 - Bushland in Urban Areas. (Note: This policy does not apply to certain land referred to in the National Parks and Wildlife Act 1974 and the Forestry Act 1916.)

State Environmental Planning Policy No.21 - Caravan Parks.

State Environmental Planning Policy No.30 - Intensive Agriculture.

State Environmental Planning Policy No.33 - Hazardous and Offensive Development.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

State Environmental Planning Policy No.50 - Canal Estate Development. (Note: This policy does not apply to the land to which State Environmental Planning Policy (Penrith Lakes Scheme) 1989 applies.

State Environmental Planning Policy No.55 - Remediation of Land.

State Environmental Planning Policy No.62 - Sustainable Aquaculture.

State Environmental Planning Policy No.64 - Advertising and Signage.

State Environmental Planning Policy No.65 - Design Quality of Residential Apartment Development.

State Environmental Planning Policy No.70 - Affordable Housing (Revised Schemes).

State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 (Note: This policy applies to land within New South Wales that is land zoned primarily for urban purposes or land that adjoins land zoned primarily for urban purposes, but only as detailed in clause 4 of the policy.)

State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004.

State Environmental Planning Policy (State Significant Precincts) 2005.

State Environmental Planning Policy (Mining, Petroleum Production and Extractive Industries) 2007.

State Environmental Planning Policy (Miscellaneous Consent Provisions) 2007.

State Environmental Planning Policy (Infrastructure) 2007.

State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

State Environmental Planning Policy (Affordable Rental Housing) 2009.

State Environmental Planning Policy (State and Regional Development) 2011.

State Environmental Planning Policy (Vegetation in Non-Rural Areas) 2017.

State Environmental Planning Policy (Education Establishments and Child Care Centre Facilities) 2017.

1(2) The name of each proposed environmental planning instrument that will apply to the carrying out of development on the land and that is or has been the subject of community consultation or on public exhibition under the Act:

(Information is provided in this section only if a proposed environmental planning instrument that is or has been the subject of community consultation or on public exhibition under the Act will apply to the carrying out of development on the land.)

Draft State Environmental Planning Policy (Infrastructure) Amendment (Shooting Ranges) 2013 applies to the land.

State Environmental Planning Policy (Infrastructure) Amendment (Review) 2016 applies to the land.

1(3) The name of each development control plan that applies to the carrying out of development on the land:

Penrith Development Control Plan 2014 applies to the land.

2 ZONING AND LAND USE UNDER RELEVANT LEPs

For each environmental planning instrument or proposed instrument referred to in clause 1 (other than a SEPP or proposed SEPP) that includes the land in any zone (however described):

2(a)-(d) the identity of the zone; the purposes that may be carried out without development consent; the purposes that may not be carried out except with development consent; and the purposes that are prohibited within the zone. Any zone(s) applying to the land is/are listed below and/or in annexures.

(Note: If no zoning appears in this section see section 1(1) for zoning and land use details (under the Sydney Regional Environmental Plan or State Environmental Planning Policy that zones this property).)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

Zone B5 Business Development (Penrith Local Environmental Plan 2010)

1 Objectives of zone

- To enable a mix of business and warehouse uses, and bulky goods premises that require a large floor area, in locations that are close to, and that support the viability of, centres.
- To maintain the economic strength of centres in Penrith by limiting the retailing of food, groceries and clothing.

2 Permitted without consent

Nil

3 Permitted with consent

Bulky goods premises; Car parks; Centre-based child care facilities; Environmental protection works; Flood mitigation works; Food and drink premises; Function centres; Garden centres; Hardware and building supplies; Hotel or motel accommodation; Industrial retail outlets; Landscaping material supplies; Light industries; Neighbourhood shops; Passenger transport facilities; Recreation areas; Recreation facilities (indoor); Respite day care centres; Roads; Self-storage units; Signage; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres;

4 Prohibited

Restaurants or cafes; Any other development not specified in item 2 or 3

Flood planning

All or part of the subject land is identified in Penrith Local Environmental Plan 2010 (PLEP 2010) Clause 7.2 Flood Planning. Development consent is required for any development on land to which Clause 7.2 of PLEP 2010 applies.

Additional information relating to Penrith Local Environmental Plan 2010

Note 1: Under the terms of Clause 2.4 of Penrith Local Environmental Plan 2010 development may be carried out on unzoned land only with development consent.

Note 2: Under the terms of Clause 2.6 of Penrith Local Environmental Plan 2010 land may be subdivided but only with development consent, except for the exclusions detailed in the clause.

Note 3: Under the terms of Clause 2.7 of Penrith Local Environmental Plan 2010 the demolition of a building or work may be carried out only with development consent.

Note 4: A temporary use may be permitted with development consent subject to the requirements of Clause 2.8 of Penrith Local Environmental Plan 2010.

Note 5: Under the terms of Clause 4.1A of Penrith Local Environmental Plan 2010, despite any other provision of this plan, development consent must not be granted for dual occupancy on an internal lot in Zone R2 Low Density Residential.

Note 6: Under the terms of Clause 5.1 of Penrith Local Environmental Plan 2010 development on land acquired by an authority of the State under the owner-initiated acquisition provisions may, before it is

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

used for the purpose for which it is reserved, be carried out, with development consent, for any purpose.

Note 7: Under the terms of Clause 5.3 of Penrith Local Environmental Plan 2010 development consent may be granted to development of certain land for any purpose that may be carried out in an adjoining zone.

Note 8: Clause 5.10 of Penrith Local Environmental Plan 2010 details when development consent is required/not required in relation to heritage conservation.

Note 9: Under the terms of Clause 5.11 of Penrith Local Environmental Plan 2010 bush fire hazard reduction work authorised by the *Rural Fires Act 1997* may be carried out on any land without development consent.

Note 10: Under the terms of Clause 7.1 of Penrith Local Environmental Plan 2010 (PLEP 2010) development consent is required for earthworks unless the work is exempt development under PLEP 2010 or another applicable environmental planning instrument, or the work is ancillary to other development for which development consent has been given.

Note 11: Sex services premises and restricted premises may only be permitted subject to the requirements of Clause 7.23 of Penrith Local Environmental Plan 2010.

2(e) whether any development standards applying to the land fix minimum land dimensions for the erection of a dwelling-house on the land and, if so, the minimum land dimensions so fixed:

(Information is provided in this section only if any development standards applying to the land fix minimum land dimensions for the erection of a dwelling-house on the land and, if so, the minimum land dimensions so fixed.)

2(f) whether the land includes or comprises critical habitat:

(Information is provided in this section only if the land includes or comprises critical habitat.)

2(g) whether the land is in a conservation area (however described):

(Information is provided in this section only if the land is in a conservation area (however described).)

2(h) whether an item of environmental heritage (however described) is situated on the land:

(Information is provided in this section only if an item of environmental heritage (however described) is situated on the land.)

2A ZONING AND LAND USE UNDER STATE ENVIRONMENTAL PLANNING POLICY (SYDNEY REGION GROWTH CENTRES) 2006

(Information is provided in this section only if the land is within any zone under State Environmental Planning Policy (Sydney Region Growth Centres) 2006.)

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

3 COMPLYING DEVELOPMENT

HOUSING CODE

(The Housing Code only applies if the land is within Zones R1, R2, R3, R4 or RU5 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument.)

Complying development under the Housing Code **may** be carried out on the land if the land is within one of the abovementioned zones.

RURAL HOUSING CODE

(The Rural Housing Code only applies if the land is within Zones RU1, RU2, RU3, RU4, RU6 or R5 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument.)

Complying development under the Rural Housing Code **may** be carried out on the land if the land is within one of the abovementioned zones.

HOUSING ALTERATIONS CODE

Complying development under the Housing Alterations Code **may** be carried out on the land.

GENERAL DEVELOPMENT CODE

Complying development under the General Development Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL ALTERATIONS CODE

Complying development under the Commercial and Industrial Alterations Code **may** be carried out on the land.

SUBDIVISIONS CODE

Complying development under the Subdivisions Code **may** be carried out on the land.

DEMOLITION CODE

Complying development under the Demolition Code **may** be carried out on the land.

COMMERCIAL AND INDUSTRIAL (NEW BUILDINGS AND ADDITIONS) CODE

(The Commercial and Industrial (New Buildings and Additions) Code only applies if the land is within Zones B1, B2, B3, B4, B5, B6, B7, B8, IN1, IN2, IN3, IN4 or SP3 under Penrith Local Environmental Plan 2010 or an equivalent zone in a non standard template planning instrument.)

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

Complying development under the Commercial and Industrial (New Buildings and Alterations) Code **may** be carried out on the land if the land is within one of the abovementioned zones.

FIRE SAFETY CODE

Complying development under the Fire Safety Code **may** be carried out on the land.

(NOTE: (1) Council has relied on Planning and Infrastructure Circulars and Fact Sheets in the preparation of this information. Applicants should seek their own legal advice in relation to this matter with particular reference to State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.

(2) Penrith Local Environmental Plan 2010 (if it applies to the land) contains additional complying development not specified in State Environmental Planning Policy (Exempt and Complying Development Codes) 2008.)

4 COASTAL PROTECTION

The land is not affected by the operation of sections 38 or 39 of the Coastal Protection Act 1979, to the extent that council has been so notified by the Department of Public Works.

5 MINE SUBSIDENCE

The land is not proclaimed to be a mine subsidence district within the meaning of section 15 of the Mine Subsidence Compensation Act 1961.

6 ROAD WIDENING AND ROAD REALIGNMENT

The land is not affected by any road widening or road realignment under:

- (a) Division 2 of Part 3 of the Roads Act 1993, or
- (b) an environmental planning instrument, or
- (c) a resolution of council.

7 COUNCIL AND OTHER PUBLIC AUTHORITY POLICIES ON HAZARD RISK RESTRICTIONS

(a) Council Policies

The land is affected by the Asbestos Policy adopted by Council.

The land is not affected by any other policy adopted by the council that restricts the development of the land because of the likelihood of land slip, bushfire, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding and the item Noted below).

Note: Council has adopted by resolution a policy on contaminated land which may restrict the development of the land. This policy, Chapter C4 of Penrith Development Control Plan 2014, is implemented when zoning or land use changes are proposed on lands which have previously been used for certain purposes. Consideration of council's adopted policy and the application of provisions under relevant State legislation is warranted.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

(b) Other Public Authority Policies

The Bush Fire Co-ordinating Committee has adopted a Bush Fire Risk Management Plan that covers the local government area of Penrith City Council, and includes public, private and Commonwealth lands.

The land is not affected by a policy adopted by any other public authority and notified to the council for the express purpose of its adoption by that authority being referred to in planning certificates issued by the council, that restricts the development of the land because of the likelihood of land slip, tidal inundation, subsidence, acid sulphate soils or any other risk (other than flooding).

7A FLOOD RELATED DEVELOPMENT CONTROLS INFORMATION

(1) Development on the land or part of the land for the purposes of dwelling houses, dual occupancies, multi dwelling housing or residential flat buildings (not including development for the purposes of group homes or seniors housing) (if such uses are permissible on the land) is subject to flood related development controls.

(2) Development on the land or part of the land for industrial or commercial purposes (if such uses are permissible on the land) is subject to flood related development controls.

Development on the land or part of the land for purposes other than industrial or commercial, or for purposes other than those referred to in (1) above, will be considered on a merits based approach and flood related development controls may apply.

Note: The land is subject to Penrith Development Control Plan 2014 Section C3.5 Flood Planning. On application and payment of the prescribed fee Council may be able to provide in writing a range of advice in regard to the extent of flooding affecting the property.

8 LAND RESERVED FOR ACQUISITION

No environmental planning instrument or proposed environmental planning instrument referred to in clause 1 makes provision in relation to the acquisition of the land by a public authority, as referred to in section 27 of the Act.

9 CONTRIBUTIONS PLANS

The Cultural Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith.

The Penrith City Local Open Space Development Contributions Plan 2007 applies anywhere residential development is permitted within the City of Penrith, excluding industrial areas and the release areas identified in Appendix B of the Plan (Penrith Lakes, Cranebrook, Sydney Regional Environmental Plan No. 30 - St Marys, Waterside, Thornton, the WELL Precinct, Glenmore Park and Erskine Park). See

[<http://www.penrithcity.nsw.gov.au/uploadedFiles/Content/Website/Our_Services/Planning_and_Development/Planning_Zoning_Information/Local_Planning_Documents/LocalOpenSpaceDCP\(1\).pdf>](http://www.penrithcity.nsw.gov.au/uploadedFiles/Content/Website/Our_Services/Planning_and_Development/Planning_Zoning_Information/Local_Planning_Documents/LocalOpenSpaceDCP(1).pdf)

The Penrith City District Open Space Facilities Development Contributions Plan applies anywhere residential development is permitted within the City of Penrith, with the exclusion of industrial lands and the Penrith Lakes development site.

PLANNING CERTIFICATE UNDER SECTION 149Environmental Planning and Assessment Act, 1979

9A BIODIVERSITY CERTIFIED LAND

(Information is provided in this section only if the land is biodiversity certified land under Part 8 of the *Biodiversity Conservation Act 2016*. (Note. biodiversity certified land includes land certified under Part 7AA of the *Threatened Species Conservation Act 1995* that is taken to be certified under Part 8 of the *Biodiversity Conservation Act 2016*.)

10 BIODIVERSITY STEWARDSHIP SITES

(Information is provided in this section only if Council has been notified by the Chief Executive of the Office of Environment and Heritage that the land is land to which a biobanking stewardship agreement under Part 5 of the *Biodiversity Conservation Act 2016* relates. Note. Biodiversity stewardship agreements include biobanking agreements under Part 7A of the *Threatened Species Conservation Act 1995* that are taken to be biodiversity stewardships agreements under Part 5 of the *Biodiversity Conservation Act 2016*)

11 BUSH FIRE PRONE LAND

Some of the land is identified as bush fire prone land according to Council records. Guidance as to restrictions that may be placed on the land as a result of the land being bush fire prone can be obtained by contacting Council. Such advice would be subject to further requirements of the NSW Rural Fire Services.

12 PROPERTY VEGETATION PLANS

(Information is provided in this section only if Council has been notified that the land is land to which a property vegetation plan approved under the *Native Vegetation Act 2003* applies and continues in force.)

13 ORDERS UNDER TREES (DISPUTES BETWEEN NEIGHBOURS) ACT 2006

(Information is provided in this section only if Council has been notified that an order has been made under the *Trees (Disputes Between Neighbours) Act 2006* to carry out work in relation to a tree on the land.)

14 DIRECTIONS UNDER PART 3A

(Information is provided in this section only if there is a direction by the Minister in force under section 75P(2)(c1) of the Act that a provision of an environmental planning instrument prohibiting or restricting the carrying out of a project or a stage of a project on the land under Part 4 of the Act does not have effect.)

PLANNING CERTIFICATE UNDER SECTION 149
Environmental Planning and Assessment Act, 1979

15 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS AFFECTING SENIORS HOUSING

(Information is provided in this section only if:

- (a) there is a current site compatibility certificate (seniors housing), of which the council is aware, issued under State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 in respect of proposed development on the land; and/or
- (b) any terms of a kind referred to in clause 18(2) of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 have been imposed as a condition of consent to a development application granted after 11 October 2007 in respect of the land.)

16 SITE COMPATIBILITY CERTIFICATES FOR INFRASTRUCTURE

(Information is provided in this section only if there is a valid site compatibility certificate (infrastructure), of which council is aware, in respect of proposed development on the land.)

17 SITE COMPATIBILITY CERTIFICATES AND CONDITIONS FOR AFFORDABLE RENTAL HOUSING

(Information is provided in this section only if:

- (a) there is a current site compatibility certificate (affordable rental housing), of which the council is aware, in respect of proposed development on the land; and/or
- (b) any terms of a kind referred to in clause 17(1) or 37(1) of State Environmental Planning Policy (Affordable Rental Housing) 2009 have been imposed as a condition of consent to a development application in respect of the land.)

18 PAPER SUBDIVISION INFORMATION

(Information is provided in this section only if a development plan adopted by a relevant authority applies to the land or is proposed to be subject to a consent ballot, or a subdivision order applies to the land.)

19 SITE VERIFICATION CERTIFICATES

(Information is provided in this section only if there is a current site verification certificate, of which council is aware, in respect of the land.)

NOTE: The following matters are prescribed by section 59(2) of the Contaminated Land Management Act 1997 as additional matters to be specified in a planning certificate

(a) (Information is provided in this section only if, as at the date of this certificate, the land (or part of the land) is significantly contaminated land within the meaning of the Contaminated Land Management Act 1997.)

(b) (Information is provided in this section only if, as at the date of this certificate, the land is subject to a management order within the meaning of the Contaminated Land Management Act 1997.)

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

(c) (Information is provided in this section only if, as at the date of this certificate, the land is the subject of an approved voluntary management proposal within the meaning of the Contaminated Land Management Act 1997.)

(d) (Information is provided in this section only if, at the date of this certificate, the land subject to an ongoing maintenance order within the meaning of the Contaminated Land Management Act 1997.)

(e) (Information is provided in this section only if the land is the subject of a site audit statement within the meaning of the Contaminated Land Management Act 1997 - a copy of which has been provided to Council.)

Note: Section 149(5) information for this property may contain additional information regarding contamination issues.

Note: The Environmental Planning and Assessment Amendment Act 1997 commenced operation on the 1 July 1998. As a consequence of this Act the information contained in this certificate needs to be read in conjunction with the provisions of the Environmental Planning and Assessment (Amendment) Regulation 1998, Environmental Planning and Assessment (Further Amendment) Regulation 1998 and Environmental Planning and Assessment (Savings and Transitional) Regulation 1998 and Environmental Planning and Assessment Regulation 2000.

Information is provided only to the extent that Council has been notified by relevant government departments.

149(5) Certificate

This Certificate is directed to the following relevant matters affecting the land

When information pursuant to section 149(5) is requested the Council is under no obligation to furnish any of the information supplied herein pursuant to that section. Council draws your attention to section 149(6) which states that a council shall not incur any liability in respect of any advice provided in good faith pursuant to sub-section (5). The absence of any reference to any matter affecting the land shall not imply that the land is not affected by any matter not referred to in this certificate.

Note:

- Council's 149(5) information does not include development consent or easement information. Details of development consents may be obtained by making enquiries with Council's Development Services Department pursuant to section 12 of the Local Government Act 1993 or (for development applications lodged after January 2007) by viewing the Online Services area at www.penrithcity.nsw.gov.au. Details of any easements may be obtained from a Title Search at Land and Property Information New South Wales.
- This certificate does not contain information relating to Complying Development Certificates.
- This certificate may not provide full details of development rights over the land.

*** Threatened Species Conservation Act 1995**

When considering any development application Council must have regard to the Threatened Species Conservation Act 1995. Please note that this legislation may have application to any land throughout the city. Interested persons should make their own enquiries in regard to the impact that this legislation could have on this land.

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

*** Scenic and Landscape Values**

The land is identified as “Land with Scenic and Landscape Values” on the Penrith Local Environmental Plan 2010 Scenic and Landscape Values Map. See Clause 7.5 of Penrith Local Environmental Plan 2010 and Chapter C1 Site Planning and Design of Penrith Development Control Plan 2014.

*** Preservation of Trees and Vegetation**

See Chapter C2 of Penrith Development Control Plan 2014 for specific controls relating to the preservation of trees and vegetation.

*** Development Control Plan General Information**

Penrith Development Control Plan 2014 which applies to the land, sets out requirements for a range of issues that apply across the Penrith Local Government Area, including:

- Site Planning and Design Principles
- Vegetation Management
- Water Management
- Land Management
- Waste Management
- Landscape Design
- Culture and Heritage
- Public Domain
- Advertising and Signage
- Transport, Access and Parking
- Subdivision
- Noise and Vibration, and
- Infrastructure and Services.

The Development Control Plan also specifies requirements relating to various types of land uses including:

- Rural Land Uses
- Residential Development
- Commercial and Retail Development, and
- Industrial Development

as well as for a number of specific activities, including child care centres; health consulting rooms; educational establishments; parent friendly amenities; places of public worship; vehicle repair stations; cemeteries, crematoria and funeral homes; extractive industries; and telecommunication facilities.

The Development Control Plan also details requirements relating to key precincts within the Penrith Local Government Area, including:

- Caddens
- Claremont Meadows Stage 2
- Cranebrook
- Emu Heights
- Emu Plains
- Erskine Business Park
- Glenmore Park

PLANNING CERTIFICATE UNDER SECTION 149

Environmental Planning and Assessment Act, 1979

- Kingswood
- Mulgoa Valley
- Orchard Hills
- Penrith
- Penrith Health and Education Precinct
- Riverlink Precinct
- St Clair,
- St Marys / St Marys North, and
- Sydney Science Park.

Penrith Development Control Plan 2014 may be accessed at
<https://www.penrithcity.nsw.gov.au/Building-and-Development/Planning-and-Zoning/Planning-Controls/Development-Control-Plans/>

* Council holds environmental report(s) relating to the subject property. Copies of the report(s) are available from Council for inspection by interested persons. Interested persons should satisfy themselves as to the state of the land and in relation to any matter or thing, including any documents referred to in, or disclosed by, this notation.

Report Details:

Report title: Preliminary Contamination Assessment and Geotechnical
Investigation - Proposed Filling of Land
Lot 11 Blaikie Road and Pattys Place
Jamisontown

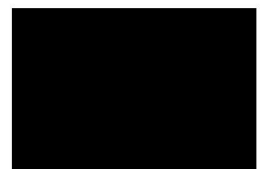
Prepared by: GeoEnviro Consultancy Pty Ltd

Dated: February 2002

Council ref: DA02/0518

Alan Stoneham
General Manager

PER



APPENDIX D

NSW EPA RECORD OF NOTICES & ENVIRONMENT PROTECTION LICENCES

Contaminated land - record of notices

Record under section 58 of the Contaminated Land Management Act 1997

This record is maintained by OEH in accordance with Part 5 of the [Contaminated Land Management Act 1997](#) (CLM Act).

The record **does** provide

- ✓ a record of written notices issued by OEH under the CLM Act, including preliminary investigation orders.
- ✓ the names of the sites, owners or occupiers **at the time of OEH action** in relation to the site
- ✓ copies of site audit statements (SAS) provided to OEH under section 52 of the CLM Act and relating to significantly contaminated land.

The record **does not** provide

- ✗ a record of all contaminated land in NSW. [See frequently asked questions](#)
- ✗ a list of [notifications of contamination](#) that OEH receives.
- ✗ the names of the sites, owners or occupiers if it changes **after OEH action** in relation to the site.
- ✗ some [personal information](#).

... [more about the CLM record of notices](#)

From 1 July 2009 there were changes to the terminology of certain OEH actions under the CLM Act. See the [list of these changes](#).

The record includes notices issued under sections 35 and 36 of the Environmentally Hazardous Chemicals Act 1985. These sections have been repealed. These notices are treated by the CLM Act as management orders.

Before using the record of notices see the [Disclaimer and terms of use](#).

As at Monday, 23 October 2017 there are 1442 notices in the record relating to 353 sites.

[Show me the entire record](#) or [Search the record](#)

23 October 2017

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Search results

Your search for: LGA: Penrith City Council

Matched 23 notices
relating to 7 sites.

[Search Again](#)

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Suburb	Address	Site Name	Notices related to this site
BERKSHIRE PARK	(Northern end of Compartment 5) The Northern ROAD	Castlereagh State Forest	6 former
COLYTON	88 Great Western HIGHWAY	Ampol Service Station	1 current
JAMISONTOWN	92 Mulgoa ROAD	7-Eleven Service Station	2 current
LUDDENHAM	Lot 4 The Northern ROAD	Elura Liquid Waste Disposal Site	1 current
MULGOA	Mulgoa ROAD	Penrith Waste Services	2 former
PENRITH	Castlereagh ROAD	Crane Enfield Metals	3 current and 3 former
ST MARYS	Vallance STREET	Drum Recycler	5 former

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23 October 2017

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Find us on



Matched 2 notices relating
to 1 site.

Refine Search

23 October 2017

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(<https://twitter.com/INFORM>,
<https://www.linkedin.com/company/inform/>,
<https://www.youtube.com/channel/UCvTjDkUgWwYtXGKdRQmFzA>)

Search results

Your search for: FULL REGISTER

Matched 1442 notices
relating to 353 sites.

[Search Again](#)

[Refine Search](#)

Suburb	Address	Site Name	Notices related to this site
HUNTERS HILL	Pulpit Point, Wybalena ROAD	Mobil Oil Terminal Pulpit Point	4 former
HURLSTONE PARK	610 - 618 New Canterbury ROAD	Former Speedway Petroleum Service Station	3 former
HURSTVILLE GROVE	Morshead DRIVE	Moore Reserve	1 current
JAMISONTOWN	92 Mulgoa ROAD	7-Eleven Service Station	2 current
JOADJA	Joadja Creek OTHER OTHER	Former Shale Oil Refinery	1 former
KATOOMBA	Megalong STREET	Former Katoomba/Leura Gasworks	1 current and 2 former
KENTHURST	137 Annangrove ROAD	Annangrove Climbers	5 former
KILLARA	496 Pacific HIGHWAY	7-Eleven Service Station (Former Mobil)	3 current
KILLARA	478 Pacific HIGHWAY	Former BP Service Station Lindfield	3 current
KILLARA	692B-694 Pacific HIGHWAY	Former Caltex Service Station	1 former
KILLARA	684-684a, 690, 692 and 696 Pacific HIGHWAY	Land Adjacent to Former Service Station Site	22 former
KINGS PARK	21 Tattersall ROAD	Former Dow Corning Factory	1 current and 4 former
KOOLKHAN	Summerland WAY	Former Koolkhan Power Station	6 former
KOORAGANG	Cormorant ROAD	BHP Kooragang	1 current and 1 former
KOORAGANG	15 Greenleaf ROAD	Orica Kooragang Island	3 current and 6 former
KURMOND	501 Bells Line of road ROAD	BP Service Station	1 former
KURNELL	Captain Cook DRIVE	Abbott Australasia	2 former
KURNELL	2 Solander STREET	Caltex Refinery	1 current and 3 former
KURRI KURRI	279-281 Lang STREET	Caltex Service Station	3 current
LANE COVE	Sirius ROAD	Pacific Power	1 current and 8 former

[1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) ...

Page 8 of 18

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List of NSW Contaminated Sites Notified to EPA as of 4 September 2017

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 the nominated site is causing actual harm to the environment or an unacceptable offsite impact (i.e. it is a "significantly contaminated site"), the EPA would apply the regulatory provisions of the CLM Act to have the responsible polluter and/or landowner investigate and remediate the site.

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 2008.
- 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 finalised	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> . 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 Contaminated Land Public Record .
Contamination currently regulated under POEO Act	The EPA has completed an assessment of the contamination and decided that the contamination is significant enough to warrant regulation. Management of the contamination is regulated under the <i>Protection of the Environment Operations Act 1997</i> (POEO Act). The EPA's regulatory actions under the POEO Act are available on the POEO public register .
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 (EP&A Act)	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 <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 Contaminated Land Public Record .

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
ABBOTSFORD	Former Gasworks	43 St Albans STREET	Gasworks	Contamination formerly regulated under the CLM Act	-33.85270604	151.126976
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	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	83 Wymston PARADE	Gasworks	Contamination formerly regulated under the CLM Act	-33.85288351	151.1265979
ABBOTSFORD	Former Gasworks	85 Wymston PARADE	Gasworks	Regulation under CLM Act not required	-33.85265214	151.1266277
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	Former Thales Australia site, Albury	161 Fallon STREET	Other Industry	Contamination currently regulated under CLM Act	-36.064966	146.9434831
ALBURY	Former Gasworks and surrounding commercial land.	441 Kiewa STREET	Gasworks	Contamination currently regulated under CLM Act	-36.08357983	146.9137004
ALBURY	SRA Land	448 and 452 Young STREET	Unclassified	Regulation under CLM Act not required	-36.08438605	146.9235454
ALBURY	Coles Express Albury	465 Guinea STREET	Service Station	Regulation under CLM Act not required	-36.07513665	146.9213077
ALBURY	SRA Land, 514 to 526 Young Street	514 to 526 Young STREET	Other Petroleum	Under assessment	-36.08084123	146.9241682
ALBURY	Woolworths Petrol	515 Young STREET	Service Station	Regulation under CLM Act not required	-36.08073723	146.92351
ALBURY	Former Caltex Service Station	624 Young STREET	Service Station	Contamination formerly regulated under the CLM Act	-36.07555262	146.9256466
ALBURY	Caltex Service Station	79 Union ROAD	Service Station	Regulation under CLM Act not required	-36.05496713	146.9487635
ALBURY	Former Caltex Service Station	842 David STREET	Service Station	Regulation under CLM Act not required	-36.06398743	146.9252143
ALBURY	Albury Plaza	Cnr Smollett Street and Townsend STREET	Other Industry	Regulation under CLM Act not required	-36.08112933	146.9135719
ALBURY	Caltex Service Station	Dean Street, Corner Creek STREET	Service Station	Regulation under CLM Act not required	-36.07978937	146.9110825
ALBURY	Mobil Albury Aviation Fuel Depot	Hangar 8 (Albury Airport), Ogden PLACE	Other Petroleum	Regulation under CLM Act not required	-36.07178139	146.9530165

Suburb	Site Name	Site Address	Contamination Activity Type	EPA 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	Contamination currently regulated under CLM Act	-33.895363	151.198779
ALEXANDRIA	Australia Post	10-24 Ralph STREET	Other Industry	Contamination being managed via the planning process (EP&A Act)	-33.91583041	151.197997
ALEXANDRIA	Caltex Alexandria Service Station	133 Wyndham St, cnr McEvoy STREET	Service Station	Regulation under CLM Act not required	-33.90220927	151.2000425
ALEXANDRIA	Alexandria Gardens	146-156 Wyndham St & 146-156 Botany Rd	Unclassified	Regulation under CLM Act not required	-33.89956961	151.1997377
ALEXANDRIA	Former Industrial Site	16 O'Riordan STREET	Other Industry	Under assessment	-33.9069796	151.201902
ALEXANDRIA	Perry Park	18 Maddox STREET		Regulation under CLM Act not required	-33.90809949	151.1962945
ALEXANDRIA	Former Mobil Service Station	20 O'Riordan STREET	Service Station	Regulation under CLM Act not required	-33.9075539	151.2014811
ALEXANDRIA	Australian Refined Alloys	202-212 Euston ROAD	Metal Industry	Regulation under CLM Act not required	-33.91505136	151.185872
ALEXANDRIA	Mascot Developments	494-504 Gardeners ROAD	Other Industry	Regulation under CLM Act not required	-33.9198218	151.191282
ALEXANDRIA	Former Cadbury Schweppes	49-59 O'Riordan STREET	Other Industry	Contamination formerly regulated under the CLM Act	-33.91406619	151.195067
ALEXANDRIA	Alexandria GoGas	562 Botany ROAD	Service Station	Regulation under CLM Act not required	-33.91577222	151.2000753
ALEXANDRIA	Alexandra Canal Sediments	Off Huntley STREET	Unclassified	Contamination currently regulated under CLM Act	-33.92204213	151.1770009
ALEXANDRIA	Sydney Park	Sydney Park, Alexandria ROAD	Landfill	Under assessment	-33.91163421	151.1840827
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	Shell Coles Express Service Station	124-126 Johnston STREET	Service Station	Regulation under CLM Act not required	-33.88085651	151.1704805
ANNANDALE	7-Eleven (former Mobil) Annandale Service Station	198 Parramatta ROAD	Service Station	Regulation under CLM Act not required	-33.88706434	151.1741135
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	24-26 Arah STREET	Chemical Industry	Under assessment	-34.35696645	146.9007084
ARGENTON	NSW Mines Rescue Services - Argenton	533 Lake ROAD	Other Industry	Under assessment	-32.93807208	151.6269664
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	Former Mobil Depot	132 Niagara STREET	Other Petroleum	Contamination formerly regulated under the CLM Act	-30.51115918	151.6490343

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
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 Service Station	146 Miller STREET	Service Station	Under assessment	-30.51362759	151.6481123
ARMIDALE	Armidaile Dumaresq Council Grafton Road Depot	15-25 Grafton ROAD	Other Petroleum	Under assessment	-30.52058076	151.6815261
ARMIDALE	Caltex Service Station	19/10541 New England HIGHWAY	Service Station	Regulation under CLM Act not required	-30.53210764	151.6160492
ARMIDALE	Caltex North Hill Service Station	2-4 Marsh STREET	Service Station	Regulation under CLM Act not required	-30.50320439	151.6727051
ARMIDALE	Caltex Armidaile Girraween Service Station	6-8 Queen Elizabeth DRIVE	Service Station	Regulation under CLM Act not required	-30.50348872	151.6510748
ARMIDALE	Shell Service Station	93 Marsh STREET	Service Station	Regulation under CLM Act not required	-30.51299824	151.6697557
ARMIDALE	RTA land adjoining Martin Street estate	adjoining Martin STREET	Other Industry	Contamination formerly regulated under the CLM Act	-30.5045	151.6433
ARMIDALE	Parklands near the former gasworks	Beardy Street and Allingham STREET	Gasworks	Regulation under CLM Act not required	-30.51013465	151.6652722
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 , Crown Land	Martin STREET	Other Industry	Contamination formerly regulated under the CLM Act	-30.50414076	151.6429516
ARMIDALE	Martin Street Estate	Martin STREET	Other Industry	Regulation under CLM Act not required	-30.50559024	151.6431854
ARNCLIFFE	7-Eleven Arncliffe	28 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.93428397	151.1525438
ARTARMON	BP Artamon	432 Pacific HIGHWAY	Service Station	Under assessment	-33.81132193	151.1755358
ARTARMON	7-Eleven (former Mobil) Artamon Service Station	477 Pacific HIGHWAY	Service Station	Under assessment	-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	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

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
AUBURN	Janyon	Manchester ROAD	Other Industry	Regulation under CLM Act not required	-33.84467826	151.020745
AUBURN	Maintrain Facility - Sydney Trains	Manchester ROAD	Other Industry	Regulation under CLM Act not required	-33.84410947	151.0242502
AWABA	Awaba Colliery	Wilton ROAD	Other Industry	Under assessment	-33.02098186	151.5383612
BALGOWLAH	Part of Manly Council Maintenance Depot	8-10 Roseberry STREET	Other Petroleum	Regulation under CLM Act not required	-33.78928907	151.2679557
BALGOWLAH	BP Service Station	Cnr Sydney Road and Maretimo STREET	Service Station	Regulation under CLM Act not required	-33.79546175	151.2559309
BALGOWNIE	Fuel Power Plus	99 Balgownie ROAD		Under assessment	-34.38925632	150.8808544
BALLINA	Ballina Shell	273 River STREET	Service Station	Under assessment	-28.86809272	153.5552789
BALLINA	Former Mobil Service Station	37-41 Cherry STREET	Service Station	Regulation under CLM Act not required	-28.87022308	153.5620713
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
BANKSMEADOW	Caltex Terminal	1-3 Penrhyn ROAD	Other Petroleum	Contamination currently regulated under POEO Act	-33.96333528	151.2171062
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	Pacific National Rail Siding	Beauchamp ROAD	Unclassified	Contamination currently regulated under CLM Act	-33.95757712	151.2204974
BANKSMEADOW	Orica Former Chlor Alkali Plant	Botany Industrial PARK	Chemical Industry	Contamination currently regulated under CLM Act	-33.95664283	151.221685
BANKSMEADOW	Former Mobil Banksmeadow Terminal	Coal Pier ROAD	Other Petroleum	Under assessment	-33.95405624	151.2142048
BANKSMEADOW	Orica Car Park Waste Encapsulation	Corish CIRCLE	Landfill	Contamination currently regulated under POEO Act	-33.94703665	151.22083
BANKSMEADOW	Former Pipeline	Corish CIRCLE	Other Petroleum	Regulation being finalised	-33.94705787	151.2209919
BANKSMEADOW	Orica Botany (Pre-2003 Regulation)	Port Feeder ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-33.9516159	151.2195804
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
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	Under assessment	-34.56489171	150.8597814
BATEAU BAY	Former landfill	The Entrance ROAD	Landfill	Contamination currently regulated under CLM Act	-33.3938305	151.4699046
BATEHAVEN	Caltex Service Station	264 Beach ROAD	Service Station	Regulation under CLM Act not required	-35.73255166	150.1997536

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BATEMANS BAY	Caltex Service Station	87-89 Princes HIGHWAY (Cnr Stewart and Rocket Street)	Service Station	Regulation under CLM Act not required	-35.71940701	150.1762788
BATHURST	Shell Coles Express Service Station	298 Stewart STREET	Service Station	Regulation under CLM Act not required	-33.41910999	149.5677773
BATHURST	Former Mobil Depot	1 Lambert STREET	Other Petroleum	Regulation under CLM Act not required	-33.42875534	149.5806344
BATHURST	Bathurst - Former Caltex Depot	114 Howick STREET	Other Petroleum	Regulation under CLM Act not required	-33.42296963	149.5862574
BATHURST	Bathurst Rail Fabrication Centre	34 Alpha STREET	Other Industry	Regulation under CLM Act not required	-33.43037796	149.5821533
BATHURST	Devro Cattle Hide Processing Plant	46 Vale ROAD	Other Industry	Regulation under CLM Act not required	-33.43926137	149.5803563
BATHURST	Caltex Bathurst Service Station	53 Durham STREET	Service Station	Regulation under CLM Act not required	-33.41689545	149.5848527
BATHURST	Former Shell Depot Bathurst	56 Bant STREET	Other Petroleum	Regulation under CLM Act not required	-33.43471575	149.5774595
BATHURST	Shell Coles Express Bathurst Service Station	59 Durham STREET	Service Station	Under assessment	-33.41639415	149.5843243
BATHURST	Former Gasworks	71 Russell STREET	Gasworks	Contamination formerly regulated under the CLM Act	-33.42420302	149.5864517
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	Lower Russell STREET	Other Petroleum	Regulation under CLM Act not required	-33.42497876	149.585128
BATHURST	Crango Mill site	Piper STREET	Other Industry	Regulation under CLM Act not required	-33.42777602	149.5809428
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	130-132 Seven Hills ROAD	Service Station	Under assessment	-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
BEACONSFIELD	63-85 Victoria St, Beaconsfield	63-85 Victoria STREET	Other Industry	Regulation under CLM Act not required	-33.9102929	151.2016275
BEGA	Former BP Service Station	100 - 102 Gipps STREET	Service Station	Regulation under CLM Act not required	-36.67563094	149.8433291
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	Bega Gasworks	27 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
BELMONT	Belmont Bus Depot	2 Floraville ROAD	Other Petroleum	Under assessment	-33.02476269	151.6606657
BELMONT	Former Ampol Service Station	467-469 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.0299728	151.6613301
BELMONT	Coles Express Belmont Service Station	502 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.03317155	151.6605194

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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
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	Caltex Service Station	157 Forest WAY	Service Station	Under assessment	-33.7347675	151.2212004
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
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	Under assessment	-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	42 Berowra Waters Road	42 Berowra Waters ROAD	Unclassified	Regulation under CLM Act not required	-33.6203211	151.1482454
BEROWRA	Shell Coles Express Berowra	955 Pacific (Cnr Yallambee Rd) HIGHWAY	Service Station	Regulation under CLM Act not required	-33.62818015	151.1475736
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
BERRIGAN	Caltex Service Station Berrigan	155-165 Chanter STREET	Service Station	Regulation under CLM Act not required	-35.6557616	145.8015557
BERRY	Shell Berry - Now BP branded	79 Queen STREET	Service Station	Under assessment	-34.77500516	150.695167
BERRY	Berry Service Centre - Shell Branded	88 Queen STREET	Service Station	Regulation under CLM Act not required	-34.77571634	150.6961713
BEXLEY	7-Eleven Bexley	474 Forest ROAD	Service Station	Under assessment	-33.95160096	151.1252355
BEXLEY	7-Eleven (former Mobil) Service Station Bexley	613 Forest ROAD	Service Station	Under assessment	-33.95539246	151.118447
BILLINUDGEL	CSR Readymix	Mogo PLACE	Other Industry	Regulation under CLM Act not required	-28.50210255	153.5278161
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	Under assessment	-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	7-Eleven Service Station	62 Walters ROAD	Service Station	Under assessment	-33.77599783	150.8948926

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BLACKTOWN	Land at Reservoir Road	Reservoir ROAD	Unclassified	Regulation under CLM Act not required	-33.79119448	150.8967838
BLAKEHURST	Woolworths Service Station	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/7-Eleven) Service Station	601 Pacific HIGHWAY	Service Station	Under assessment	-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	Bomaderry Works Depot	10 McIntyre WAY	Other Petroleum	Under assessment	-34.84576748	150.6131411
BOMADERRY	Caltex Service Station	246 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.83833824	150.5958799
BOMADERRY	Commercial Land	320 Princes Highway HIGHWAY	Other Industry	Under assessment	-34.84424073	150.5958149
BOMADERRY	Caltex Service Station	341 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.84561952	150.5946978
BOMADERRY	Former Shell Depot	44 Railway STREET	Other Petroleum	Regulation under CLM Act not required	-34.85193621	150.6117038
BOMADERRY	Former Mobil Emoleum Depot	7 Victa WAY	Other Petroleum	Regulation under CLM Act not required	-34.84454618	150.6139462
BOMADERRY	SRA Land	Lot 2 Merroo STREET	Unclassified	Regulation under CLM Act not required	-34.85314813	150.6099573
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
BOMBALA	Caltex Bombala Service Station	High Street corner Stephen STREET	Service Station	Under assessment	-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	51 Bondi ROAD	Service Station	Under assessment	-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

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BONNYRIGG	United Bonnyrigg (Formerly AP SAVER)	709 Cabramatta ROAD	Service Station	Contamination currently regulated under POEO Act	-33.893058	150.892476
BONNYRIGG	Caltex Service Station	Smithfield Rd Cnr Elizabeth DRIVE	Service Station	Under assessment	-33.88840816	150.8822609
BONNYRIGG HEIGHTS	BP-Branded Service Station Bonnyrigg	451 North Liverpool ROAD	Service Station	Regulation under CLM Act not required	-33.89416327	150.8578378
BOOLAROO	Incitec Pivot	13 Main STREET	Other Industry	Contamination formerly regulated under the CLM Act	-32.94803538	151.6302187
BOOLAROO	Bunnings Site - Pasmenco Cockle Creek	13a Main ROAD	Metal Industry	Contamination formerly regulated under the CLM Act	-32.94364503	151.6252316
BOOLAROO	Cardiff West Estate - Pasmenco Cockle Creek	Adjacent to PCC Smelter at 13A Main ROAD	Metal Industry	Regulation under CLM Act not required	-32.93950137	151.6349183
BOOLAROO	Pasmenco Cockle Creek Smelter	Lake ROAD	Metal Industry	Contamination currently regulated under CLM Act	-32.94434593	151.6307345
BOOLAROO	Cockle Creek and Cockle Bay Sediments	Off Creek Reserve ROAD	Metal Industry	Contamination currently regulated under CLM Act	-32.96079541	151.6141327
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	Botany, Underwood	14a Underwood AVENUE	Unclassified	Contamination being managed via the planning process (EP&A Act)	-33.94508532	151.1947626
BOTANY	Former Aerosols of Australia	1617 Botany ROAD	Chemical Industry	Under assessment	-33.9529386	151.2037468
BOTANY	Former Tannery	2 Daniel STREET	Other Industry	Regulation under CLM Act not required	-33.94126194	151.1991087
BOTANY	Former Industrial Site	28 Folkestone PARADE	Unclassified	Contamination being managed via the planning process (EP&A Act)	-33.95187539	151.1960537
BOTANY	Nuplex Resins	49-61 Stephen ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-33.952588	151.21101
BOTANY	Roads and Maritime Service	5 - 9 Lord STREET	Other Industry	Regulation under CLM Act not required	-33.94100279	151.1968763
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 Cooverwill 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	Under assessment	-33.64868299	150.8816163
BRANXTON	Former Service Station	70 Matland STREET	Service Station	Under assessment	-32.65647051	151.3516199
BREWARRINA	Dowell's Fuel	39 Doyle STREET	Service Station	Under assessment	-29.96152786	146.8612561

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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	Under assessment	-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 Service Station	167-173 Argent STREET	Service Station	Regulation under CLM Act not required	-31.96066663	141.4624175
BROKEN HILL	Former Caltex Depot	3 Kanandah ROAD	Service Station	Regulation under CLM Act not required	-31.98341823	141.4332211
BROKEN HILL	Tasco Petroleum (Former Mobil) Depot	5 Kanandah ROAD	Other Petroleum	Regulation under CLM Act not required	-31.9843986	141.4329127
BROKEN HILL	Caltex Service Station	535 Argent STREET	Service Station	Regulation under CLM Act not required	-31.95311924	141.4745274
BROKEN HILL	Caltex Service Station	73-87 Oxide STREET	Service Station	Contamination currently regulated under CLM Act	-31.95519591	141.4658647
BROKEN HILL	Broken Hill Airport Mobil Refuelling Facility	Bonanza STREET	Other Petroleum	Under assessment	-31.99928312	141.4685759
BROKEN HILL	Former Mobil Depot	Corner Of Talc Street and Gossan STREET	Other Petroleum	Regulation under CLM Act not required	-31.96018102	141.4514752
BROKEN HILL	Former Gasworks	Cornish STREET	Gasworks	Contamination formerly regulated under the CLM Act	-31.96330562	141.4470611
BROOKLYN	Former Oyster Farm	Off Government ROAD	Unclassified	Under assessment	-33.54716867	151.2229744
BROOKVALE	Littles Dry Cleaning	123 Old Pittwater ROAD	Other Industry	Regulation under CLM Act not required	-33.76759121	151.2625932
BROOKVALE	Coles Express Service Station Brookvale	198 Harbord ROAD	Service Station	Regulation under CLM Act not required	-33.76332299	151.2794028
BROOKVALE	Brookvale Depot	630-636 Pittwater ROAD	Other Petroleum	Under assessment	-33.76641698	151.2705659
BROOKVALE	Caltex Service Station Brookvale	740-742 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.76146721	151.2745358
BROOKVALE	Harrison Manufacturing Co Pty Ltd	75 Old Pittwater ROAD	Unclassified	Under assessment	-33.76498388	151.2638048
BROOKVALE	Woolworths Petrol Brookvale	756 Pittwater ROAD	Service Station	Under assessment	-33.76170587	151.2762411
BROOKVALE	AMP Warringah Mail	Cnr Condamine Street, Old Pittwater Rd & Cross STREET	Other Industry	Regulation under CLM Act not required	-33.76729923	151.2657272
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	Former Caltex Service Station BP-branded (former Mobil)	53-59 Bulahdelah WAY	Service Station	Under assessment	-32.40721638	152.2110291
BULAHDELAH	Service Station	73-75 Bulahdelah WAY	Service Station	Under assessment	-32.40971018	152.2105785

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
BULAHDELAH	Caltex Service Station	8 Red Gum Road, Corner Mahogany STREET	Service Station	Regulation under CLM Act not required	-32.39837094	152.2106015
BULLABURRA	Former Burmah Bullaburra Service Station	367 - 369 Great Western HIGHWAY	Service Station	Under assessment	-33.72482995	150.4124537
BULLI	Scrap Yard	7 Molloy STREET	Other Industry	Contamination currently regulated under CLM Act	-34.33663195	150.9131154
BULLI	Bulli Brickworks	Quilkey PLACE		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
CABARITA	Cabarita Wellcome	33 Phillips STREET	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.85250251	151.1176366
CABARITA	Dulux (Orica Australia)	Cabarita ROAD	Chemical Industry	Contamination formerly regulated under the CLM Act	-33.84643972	151.1157115
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 (formerly 1 Quay Rd) 114A Quay ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.37592138	151.2254951
CALLALA BEACH	Callala Beach General Store		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	Caltex Camden Service Station	21 Barsden STREET	Service Station	Regulation under CLM Act not required	-34.05808413	150.6914744
CAMDEN	Camden High School (former)	John STREET	Gasworks	Regulation under CLM Act not required	-34.05114079	150.6951285
CAMDEN SOUTH	Coles Express Service Station	273 Old Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-34.08660995	150.6945444
CAMELLIA	Camden South	1 Grand AVENUE	Other Industry	Contamination currently regulated under CLM Act	-33.8182384	151.0261019
CAMELLIA	James Hardie Factory (former, eastern portion)			Regulation under CLM Act not required	-33.81850502	151.0302425
CAMELLIA	Council Reserve	11B Grand AVENUE	Metal Industry	Contamination currently regulated under CLM Act	-33.82189695	151.0429251
CAMELLIA	Bitumen Manufacturer	12 Grand AVENUE	Other Industry	Under assessment	-33.81971361	151.0321525
CAMELLIA	Wrigg	13 Grand AVENUE	Metal Industry	Contamination currently regulated under CLM Act	-33.82243454	151.044789
CAMELLIA	Hymix Concrete	14 Grand AVENUE	Metal Industry	Regulation under CLM Act not required	-33.81920482	151.0419394
CAMELLIA	Hambeare	14 Thackeray STREET	Metal Industry	Regulation being finalised	-33.81996985	151.0335725
CAMELLIA	Mauri Foods	15 Grand AVENUE	Other Industry			

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CAMELLIA	Railway Land	27 Grand AVENUE	Other Industry	Regulation under CLM Act not required	-33.81910822	151.0382483
CAMELLIA	Maritime Services Board	33A Grand AVENUE	Metal Industry	Regulation under CLM Act not required	-33.81836086	151.0401249
CAMELLIA	Veolia	37 Grand AVENUE	Chemical Industry	Contamination currently regulated under CLM Act	-33.81980027	151.0430689
CAMELLIA	Former Asciano Properties	39 Grand AVENUE	Chemical Industry	Contamination currently regulated under CLM Act	-33.82056014	151.0443331
CAMELLIA	Sydney Water	41 Grand AVENUE	Chemical Industry	Contamination formerly regulated under the CLM Act	-33.8217493	151.0453367
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		Contamination currently regulated under POEO Act	-33.82804924	151.0378966
CAMMERAY	Coles Express Cammeray	477-483 Miller STREET	Service Station	Under assessment	-33.82141124	151.2108658
CAMMERAY	Tunks Park	Brothers AVENUE	Landfill	Contamination formerly regulated under the CLM Act	-33.81734704	151.2113338
CAMPBELLTOWN	Former vehicle wrecking yard	38 Blaxland ROAD	Other Industry	Regulation under CLM Act not required	-34.06055735	150.8130598
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
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
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	Caltex Canley Heights Service Station	280-286 Canley Vale ROAD	Service Station	Regulation under CLM Act not required	-33.88393501	150.9241656
CANLEY HEIGHTS	Former Caltex Canley Heights	368 Canley Vale ROAD	Service Station	Regulation under CLM Act not required	-33.88271081	150.9154176
CANLEY VALE	Former Mobil Service Station	96 Canley Vale ROAD	Service Station	Regulation under CLM Act not required	-33.88591573	150.9369801
CANOWINDRA	BP Service Station (Reliance Petroleum)	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	Former Caltex Service Station	367 Main ROAD	Service Station	Regulation under CLM Act not required	-32.93761223	151.6577781
CARDIFF	7-Eleven Service Station	399 Main ROAD	Service Station	Regulation under CLM Act not required	-32.93391137	151.6562111
CARDIFF	Former Mobil Service Station	43 Macquarie ROAD	Service Station	Under assessment	-32.94118246	151.6578195
CARDIFF	Former Mobil Depot	7 Ranton STREET	Other Petroleum	Regulation under CLM Act not required	-32.94516764	151.6470387

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CARDIFF	BP Service Station (Reliance Petroleum)	Corner Sturt and Main ROADS	Service Station	Under assessment	-32.93792229	151.6569905
CARDIFF	Maneela Oval	Main ROAD	Other Industry	Regulation under CLM Act not required	-32.93018443	151.6435559
CARINGBAH	Adjacent to Spirent Australia	101-103 Cawarra ROAD	Other Industry	Contamination currently regulated under CLM Act	-34.03360747	151.1245577
CARINGBAH	Spirent Australia	105 Cawarra ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-34.03425343	151.1245092
CARINGBAH	Former Consumer Health Products Manufacturer	32-40 Cawarra ROAD	Other Industry	Regulation under CLM Act not required	-34.03024369	151.1277755
CARINGBAH	7-Eleven Service Station	367 The Kingsway	Service Station	Under assessment	-34.03948677	151.1203268
CARINGBAH	Caltex Lilli Pilli Service Station	477-481 Port Hacking ROAD	Service Station	Regulation under CLM Act not required	-34.05243807	151.1216353
CARLINGTON	Caltex Service Station Carlingford	131 Pennant Hills ROAD	Service Station	Under assessment	-33.78762398	151.0279422
CARLINGTON	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	Under assessment	-33.9748579	151.1272732
CARRINGTON	Carrington redevelopment site	11 Howden STREET	Other Industry	Regulation under CLM Act not required	-32.91309509	151.7625341
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	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	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
CARRINGTON	Dyke Point Containment Cell	Dyke ROAD	Other Industry	Under assessment	-32.9169089	151.772423
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	Under assessment	-32.85413742	149.923172
CASINO	Woolworths Service Station Casino	130 Canterbury STREET	Service Station	Regulation under CLM Act not required	-28.86231341	153.0464642
CASINO	Former Gasworks	134-136 North STREET	Gasworks	Regulation under CLM Act not required	-28.86080712	153.0526043
CASINO	Caltex Service Station and Depot Casino	28 & 32 Dyraba 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
CASULA	Caltex Casula Service Station	646 Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-33.95641262	150.8934783

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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	Former Mobil Service Station	102 Wollombi ROAD	Service Station	Under assessment	-32.83844074	151.3436022
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 Service Station	2-4 Allandale ROAD	Service Station	Under assessment	-32.83118911	151.3560677
CHARBON	Charbon Colliery	Charbon ROAD	Other Industry	Under assessment	-32.92390131	149.9839098
CHARLESTOWN	7-Eleven Charlestown (Formerly BP Charlestown)	273 Charlestown. ROAD	Service Station	Under assessment	-32.95802555	151.6897931
CHARLESTOWN	Ausgrid Powell Street Depot	8 Powell STREET	Other Industry	Regulation under CLM Act not required	-32.95912375	151.6944136
CHARLESTOWN	Caltex Service Station	81 Pacific HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-32.96708479	151.6955919
CHARLESTOWN	BP Service Station	91-93 Pacific HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-32.96633569	151.6959051
CHARMHAVEN	Caltex Charmhaven Service Station	13-15 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.21655768	151.5091452
CHATSWOOD	Auto Repairs	2 Devonshire STREET	Service Station	Regulation under CLM Act not required	-33.8015482	151.1859632
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	Former Caltex Chatswood Service Station	607 Pacific HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-33.80396472	151.1795766
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	Under assessment	-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	Fraser's Development	Wellington STREET	Unclassified	Under assessment	-33.88669108	151.2015805
CHIPPING NORTON	Former Solchem (Mobil) Depot Chipping Norton	49-51 Riverside ROAD	Other Petroleum	Under assessment	-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	Under assessment	-33.88639388	151.0598201
CLARENCE	Clarence Colliery	Chifley ROAD	Other Industry	Under assessment	-33.46450217	150.2522729
CLARENDON	Coles Express Clarendon Service Station	244 Hawkesbury Valley WAY	Service Station	Under assessment	-33.6083729	150.7890956
CLEARFIELD	Former Pamplings Dip Site	Off Clearfield ROAD	Cattle Dip	Regulation under CLM Act not required	-29.16287185	152.882974

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CLYBUCCA	BP Service Station	2171 Pacific HIGHWAY 3 Parramatta (Cnr Harbord Street) ROAD	Service Station	Regulation under CLM Act not required	-30.93913118	152.9417395
CLYDE	7-Eleven Clyde Former Caltex (Bogas) Service Station Cobar	56-58 Marshall STREET	Service Station	Under assessment Regulation under CLM Act not required	-33.83494433	151.0222628
COBAR		99 Marshall (formerly Cnr Barrier Highway and Bathurst Street) STREET Cobar ROAD	Service Station	Regulation under CLM Act not required	-31.49793339	145.8346684
COBAR	Caltex Service Station Cobar		Service Station	Regulation under CLM Act not required	-31.49631924	145.8275727
COBAR	McKinnons Gold Mine		Metal Industry	Under assessment	-31.78179755	145.693
COBAR	Caltex Service Station	Lot 10 Railway PARADE	Service Station	Regulation under CLM Act not required	-31.49350124	145.8442372
COFFS HARBOUR	Dan Murphy's Coffs Harbour	10 Elbow STREET	Service Station	Regulation under CLM Act not required	-30.29439262	153.115069
COFFS HARBOUR	BP Service Station	134-136 Pacific HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-30.29187037	153.1182106
COFFS HARBOUR	Caltex Service Station	157 Orlando STREET	Service Station	Regulation under CLM Act not required	-30.28975334	153.1306354
COFFS HARBOUR	Aussitel Backpackers Hostel	312 Harbour DRIVE	Service Station	Contamination formerly regulated under the CLM Act	-30.3057	153.132
COFFS HARBOUR	Mobil Service Station	314-316 Harbour DRIVE	Service Station	Contamination formerly regulated under the CLM Act	-30.3056983	153.131966
COFFS HARBOUR	Coffs Harbour Slipway	38 Marina DRIVE	Other Industry	Under assessment	-30.30325637	153.1441437
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
COLEAMBALLY	Former Mobil Coleambally Depot	19 Bencubbin AVENUE	Other Petroleum	Regulation under CLM Act not required	-34.80279552	145.8945239
COLLAENEHRI	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	Under assessment	-33.21297737	151.5416882
COLYTON	Ampol Service Station	88 Great Western HIGHWAY	Service Station	Under assessment	-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	Under assessment	-33.08058612	147.164225

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CONSTITUTION HILL	Sydney Water Land	Caloola ROAD 146-148 Coogee Bay (Cnr Mount St) ROAD	Unclassified	Regulation under CLM Act not required	-33.79776636	150.9697715
COOGEE	Caltex Coogee Service Station	152 Bruce Street and 115 Corlette STREET	Service Station	Regulation under CLM Act not required	-33.91989232	151.2517454
COOKS HILL	Former Council depot	Corner Hume Highway and Coleman STREET	Other Industry	Under assessment	-32.93525537	151.7641074
COOLAC	Coolac Service Station	72 (formerly 17-23) Cunningham STREET	Service Station	Regulation under CLM Act not required	-34.95435052	148.1595525
COOLAH	BP Depot (Reliance Petroleum)	Pacific HIGHWAY 2 Commissioner STREET	Other Petroleum	Regulation under CLM Act not required	-31.82275896	149.7243171
COOLONGLOOK	Caltex Service Station	2 Short STREET	Service Station	Regulation under CLM Act not required	-32.21648325	152.322813
COOMA	Former Mobil Cooma Depot	2 Short STREET	Other Petroleum	Under assessment	-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	Caltex Cooma Service Station	44 Sharp (Cnr Baron St) STREET	Service Station	Regulation under CLM Act not required	-36.23323489	149.1304134
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
COOMA	Woolworths Caltex Cooma Service Station	Bombala Street Cnr Massie STREET	Service Station	Under assessment	-36.23364626	149.1267469
COONABARABRAN	Shell Coles Express Service Station	2-6 John STREET	Service Station	Under assessment	-31.27706775	149.27836
COONABARABRAN	Former Mobil Depot	49 Cowper STREET	Other Petroleum	Regulation under CLM Act not required	-31.27096226	149.2818461
COONABARABRAN	Caltex Service Station	85-87 John STREET	Service Station	Regulation under CLM Act not required	-31.27231215	149.2771297
COONABARABRAN	Caltex Service Station	Cnr Dawson & Drummond STREET	Service Station	Under assessment	-31.26994941	149.28183
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
COONAMBLE	Former Shell Coonamble Depot	Quambone ROAD	Other Petroleum	Regulation under CLM Act not required	-30.95349182	148.3793432
COONAMBLE	Caltex Service Station	Quambone ROAD	Service Station	Under assessment	-30.95410067	148.3792167
COORANBONG	Former Poultry Farm	64 - 98 Alton ROAD	Unclassified	Regulation under CLM Act not required	-33.06860138	151.4512156
COOTAMUNDRA	Cootamundra Gasworks	140-146 Hovell STREET	Gasworks	Contamination currently regulated under CLM Act	-34.64572841	148.0255049
COOTAMUNDRA	Former BP Depot	1-5 Murray STREET	Other Petroleum	Under assessment	-34.62915841	148.0306962
COOTAMUNDRA	Former Caltex Depot	219 Sutton STREET	Other Petroleum	Regulation under CLM Act not required	-34.65126548	148.0145283

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COOTAMUNDRA	Caltex Service Station	26-34 Hovell STREET	Service Station	Regulation under CLM Act not required	-34.63624703	148.0347479
COOTAMUNDRA	Former Amoco Depot	68-72 Hovell STREET	Other Petroleum	Contamination currently regulated under CLM Act	-34.63871124	148.0321134
COOTAMUNDRA	Former Ampol Service Station	72 Parker STREET	Service Station	Regulation under CLM Act not required	-34.63471008	148.0296112
COOTAMUNDRA	Former Ampol Cootamundra Rail Siding	Back Brawlin ROAD	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 (CLM Act)	-30.22125208	153.0156997
COROWA	Former Ampol Corowa	10 Bow STREET	Service Station	Regulation under CLM Act not required	-35.99364786	146.3901259
COROWA	Corowa Shire Council Works Depot	12 - 18 Poseidon ROAD	Other Petroleum	Under assessment	-35.98807923	146.3652266
COROWA	Cignall Corowa	280 Hume STREET	Service Station	Under assessment	-36.00996015	146.3760437
CORRIMAL	7-Eleven Corrimal	138-146 Princes HIGHWAY	Service Station	Under assessment	-34.36986923	150.8978271
CORRIMAL	Woolworths Petrol	275-277 Princes HIGHWAY	Service Station	Under assessment	-34.37527426	150.8962637
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
COWRA	Landmark Fertiliser Storage	Corner Young Road & Waratah STREET	Chemical Industry	Under assessment	-33.84321832	148.6722578
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
CRINGILA	Cringila Public School	Sheffield STREET	Landfill	Regulation under CLM Act not required	-34.4719665	150.8695522
CROA	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	Under assessment	-33.82868236	151.2060317
CROYDON	Caltex Service Station	404-410 Liverpool ROAD	Service Station	Under assessment	-33.88853994	151.115879
CROYDON	BP Ashfield	582-586 Parramatta ROAD	Service Station	Under assessment	-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	Under assessment	-33.27193875	150.0587194
CUNDLETTOWN	Caltex Service Station (1 Manning River Drive)	Old Pacific HIGHWAY	Service Station	Under assessment	-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
DACEVILLE	Astrolabe Park	Cook AVENUE	Landfill	Regulation being finalised	-33.92963704	151.221773

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
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
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	Roche Products Dee Why Facility	Inman ROAD	Other Industry	Contamination currently regulated under CLM Act	-33.73834964	151.2876392
DEE WHY	Dee Why Town Centre	Pittwater ROAD	Other Industry	Under assessment	-33.753169	151.2875805
DENHAM COURT	Service Station, Denham Court	505 Campbelltown ROAD	Service Station	Under assessment	-33.98208395	150.8459471
DENILQUIN	Former Denilquin Caltex Depot	116-118 Hardinge (Cnr Wood St) STREET	Service Station	Regulation under CLM Act not required	-35.53196985	144.9544597
DENILQUIN	BP Depot (Reliance Petroleum)	125 - 127 Hardinge STREET	Service Station	Regulation under CLM Act not required	-35.53222124	144.9517397
DENILQUIN	Former Shell Depot	143-147 Napier STREET	Other Petroleum	Regulation under CLM Act not required	-35.5342355	144.953169
DENILQUIN	Shell Coles Express Service Station	336 Victoria STREET	Service Station	Contamination formerly regulated under the CLM Act	-35.52373613	144.9807345
DENILQUIN	Denilquin Gasworks	365 and 369 George St and 380 Charlotte STREET	Gasworks	Under assessment	-35.52663248	144.9634981
DENILQUIN	Landmark Chemicals Storage	90-101 Davidson STREET	Chemical Industry	Under assessment	-35.52534735	144.975142
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
DOYALSON	Munmorah Power Station	(Central Coast Highway) Scenic DRIVE	Unclassified	Regulation under CLM Act not required	-33.20678347	151.540795
DOYALSON	Part Lot 3 DP 259306	Off David STREET	Other Industry	Regulation under CLM Act not required	-33.20436131	151.5232558
DOYALSON	Mannerling Colliery (formerly Wye)	Rutleys ROAD	Other Industry	Under assessment	-33.17179576	151.5419248
DOYALSON	Munmorah Colliery	Scenic DRIVE	Other Industry	Under assessment	-33.21297737	151.5416882
DOYALSON NORTH	Shell Coles Express Service Station	260-270 Pacific HIGHWAY	Service Station	Under assessment	-33.18636608	151.5482399
DRUMMOYNE	Caltex Service Station	191-195 Lyons ROAD	Service Station	Under assessment	-33.85699216	151.1460356
DRUMMOYNE	Former Dry Cleaners	225 Victoria ROAD	Chemical Industry	Under assessment	-33.8507152	151.1537113
DRUMMOYNE	Coles Express Service Station	36-46 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.85576628	151.1593519
DRUMMOYNE	Coles Express Service Station					
DRUMMOYNE	Drummoyne South (Westbound)	39-45 Victoria ROAD	Service Station	Under assessment	-33.85606575	151.1589061
DUBBO	Lowes Petroleum (BP-Branded) Depot, Dubbo	105 Erskine STREET	Service Station	Regulation under CLM Act not required	-32.24423247	148.6101676

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
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	Inland Petroleum (Former Shell) Depot	109 Erskine STREET	Other Petroleum	Regulation under CLM Act not required	-32.24470512	148.6124108
DUBBO	Caltex Service Station	119 Bourke STREET	Service Station	Regulation under CLM Act not required	-32.24336464	148.6091931
DUBBO	Shell Coles Express Service Station	131-133 Cobra STREET	Service Station	Under assessment	-32.25511317	148.6126147
DUBBO	Dubbo Police Station	143 Brisbane STREET	Other Petroleum	Under assessment	-32.24652288	148.6034702
DUBBO	Former Ambulance Station	165 Brisbane STREET	Other Petroleum	Contamination formerly regulated under the CLM Act	-32.24850755	148.6031749
DUBBO	United Service Station at Harvey	219-233 Cobra STREET	Service Station	Under assessment	-32.2565155	148.6228586
DUBBO	Norman Centre	40-44 Morgan STREET	Other Petroleum	Regulation under CLM Act not required	-32.23912277	148.6182711
DUBBO	Former Mobil depot	45-49 Whylandra STREET	Service Station	Regulation under CLM Act not required	-32.2474598	148.5932769
DUBBO	Shell Coles Express Service Station	51-63 Whylandra STREET	Service Station	Regulation under CLM Act not required	-32.24827657	148.5927084
DUBBO	BP-Branded Service Station Dubbo West	60 Windsor PARADE	Service Station	Regulation under CLM Act not required	-32.25459322	148.6318
DUBBO	Caltex Service Station, Dubbo	Cnr Brisbane Street and Cobra STREET	Service Station	Contamination currently regulated under CLM Act	-32.25322183	148.603164
DUBBO	Caltex Service Station, Dubbo	Phillip Street, corner Fitzroy STREET	Service Station	Under assessment	-32.24534863	148.6150144
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 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
DURAL	BP Dural Service Station	580 Old Northern ROAD	Service Station	Regulation under CLM Act not required	-33.69569985	151.0283357
DURAL	Caltex Dural Service Station	917-923 Old Northern ROAD	Service Station	Regulation under CLM Act not required	-33.68312075	151.0287519

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
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	Mobil Service Station	44 Victoria STREET	Service Station	Contamination formerly regulated under the CLM Act	-33.43804781	151.353303
EAST GOSFORD	Presbyterian Aged Care Facility United (Former Mobil) Service Station East Maitland	8-18 Enid CRESCENT 164 (also known as 250) Newcastle STREET	Landfill	Regulation under CLM Act not required	-33.4376675	151.3577947
EAST MAITLAND			Service Station	Under assessment	-32.7530641	151.5871179
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	358 New England HIGHWAY	Service Station	Under assessment	-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	Pioneer Road Services	Old Walgrove ROAD	Other Industry	Under assessment	-33.81190491	150.8392181
EASTLAKES	Budget Petroleum Eastlakes	102 Maloney STREET	Service Station	Regulation being finalised	-33.93096702	151.2056606
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	73 Gardeners Road	73 Gardeners ROAD	Unclassified	Regulation under CLM Act not required	-33.92541594	151.2182856
EASTLAKES	Eastlakes Reserve	Evans AVENUE	Service Station	Contamination formerly regulated under the CLM Act	-33.92497291	151.2102725
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 Inlay STREET	Service Station	Under assessment	-37.06324099	149.9044022
EDEN	Caltex Service Station	80-86 Inlay STREET	Service Station	Under assessment	-37.0570984	149.9038538
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	67 New South Head ROAD	Service Station	Under assessment	-33.8769602	151.2311617
EDGEWORTH	Caltex Service Station	662 Main ROAD	Service Station	Regulation under CLM Act not required	-32.92566329	151.6278888
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

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
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	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
ENGADINE	Former Caltex Service Station	995 Old Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.06413459	151.0155734
EPPING	7-Eleven (former Mobil) Service Station	246 Beecroft ROAD	Service Station	Regulation under CLM Act not required	-33.77073552	151.080581
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
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
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	36/1A Coulson STREET	Other Industry	Under assessment	-33.90325501	151.1855668
ERSKINEVILLE	Department of Housing	52 John STREET	Other Industry	Regulation under CLM Act not required	-33.8982925	151.1840284
ERSKINEVILLE	Lots 21-34 / 1A Coulson Street	Coulson STREET	Other Industry	Under assessment	-33.90316549	151.1867963
ERSKINEVILLE	RailCorp land	Coulson STREET	Other Industry	Under assessment	-33.90279502	151.1846827
EUABALONG WEST	BP Euabalong West Depot (Reliance Petroleum)	Corner Illawong Street and Murrin STREET	Other Petroleum	Under assessment	-33.05720426	146.3946386
EVANS HEAD	Evans Head Residential subdivision	Bounded by Currajong, Woodburn, Carrabeen Streets and Tuckeroo CRESCENT	Unclassified	Regulation under CLM Act not required	-29.1080969	153.4243577
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	Under assessment	-29.24433977	153.3626472
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	Speedway Petroleum	251 The Horsley DRIVE	Service Station	Under assessment	-33.8711661	150.9630077

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
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	Caltex Fuel Depot and adjoining land	46 Montague STREET	Service Station	Contamination formerly regulated under the CLM Act	-34.40050499	150.8953125
FAIRY MEADOW	Woolworths Petrol Service Station	49 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.39399705	150.8925369
FAIRY MEADOW	Deynal (Seeman)	51-59 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.39437085	150.8924666
FARLEY	Farley Waste Water Treatment Works	Owl Pen LANE	Other Industry	Under assessment	-32.74431314	151.5194217
FASSIFERN	Former Arsenic Smelter	Fassifern ROAD	Other Industry	Under assessment	-32.99649819	151.5618283
FASSIFERN	Newstan Colliery	Fassifern ROAD	Other Industry	Under assessment	-32.97942521	151.5660046
FEDERAL	Federal General Store	3-6 Federal DRIVE	Service Station	Contamination currently regulated under CLM Act	-28.65190728	153.4552976
FERN BAY	Former service station	37 Fullerton (1006 Nelson Bay Road) STREET	Service Station	Under assessment	-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	Former Gasworks	24-26 Union STREET	Gasworks	Under assessment	-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	BP (Former Mobil) Depot Forbes	3-15 Union STREET	Other Petroleum	Regulation under CLM Act not required	-33.37751977	148.0101422
FORBES	Caltex Service Station Forbes	Parkes ROAD	Service Station	Regulation under CLM Act not required	-33.36333714	148.0223727
FORBES	Former Shell Depot	Stephen STREET	Other Petroleum	Regulation under CLM Act not required	-33.37704755	148.0103001
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
FORRESTERS 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	United (Former Mobil) Service Station	86-88 Macintosh STREET	Service Station	Under assessment	-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 7-Eleven / Mobil Beacon Hill Service Station, Frenchs Forest	312 Warringah ROAD	Service Station	Under assessment	-33.75129647	151.2469656

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FRENCHS FOREST	Former BP Service Station	Russell AVENUE	Service Station	Regulation being finalised	-33.75018093	151.2245005
FRESHWATER	Prime (former Mobil) Service Station Freshwater	117 Harbord ROAD	Service Station	Regulation under CLM Act not required	-33.77286748	151.2794354
GEORGETOWN	Caltex Service Station	4 Georgetown ROAD	Service Station	Under assessment	-32.91121105	151.7319693
GERRINGONG	Gerringong Cooperative	18 Belinda STREET	Other Petroleum	Regulation under CLM Act not required	-34.74518835	150.8181054
GILGANDRA	Mobil Service Station	15 Castlereagh STREET	Service Station	Under assessment	-31.71715641	148.6581574
GILGANDRA	Former Mobil Depot	2 Federation STREET	Other Petroleum	Under assessment	-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
GIRRAWEE	Industrial Galvanizers site	20-22 Anax AVENUE	Metal Industry	Contamination currently regulated under POEO Act	-33.80500693	150.9396743
GLADESVILLE	Caltex Service Station	116 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.83575319	151.1277863
GLADESVILLE	Caltex Service Station	287-295 Victoria ROAD	Service Station	Under assessment	-33.8285374	151.1268639
GLADESVILLE	Glade View Business Park	436-484 Victoria ROAD	Other Industry	Under assessment	-33.82382382	151.1223941
GLADESVILLE	Road Reserve	Pittwater ROAD	Other Industry	Regulation under CLM Act not required	-33.81603924	151.1355085
GLEBE	The Hill and Jubilee Embankment	12 Maxwell ROAD	Other Industry	Regulation under CLM Act not required	-33.87573032	151.1776027
GLEN INNES	Ambulance Station	106 Bourke STREET	Unclassified	Regulation under CLM Act not required	-29.73805854	151.7313138
GLEN INNES	Teistra Depot Glen Innes	126 Lambeth STREET	Unclassified	Regulation under CLM Act not required	-29.73565341	151.7278271
GLEN INNES	Caltex Glen Innes Paddock	9979 New England HIGHWAY	Service Station	Regulation under CLM Act not required	-29.75608853	151.7344106
GLEN INNES	Caltex Service Station	Cnr Taylor Street & Church STREET	Service Station	Regulation under CLM Act not required	-29.73289036	151.739653
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 Glen Innes Service Station	Meade Street, corner Church STREET	Service Station	Regulation under CLM Act not required	-29.73699014	151.7379335
GLENBROOK	Caltex Service Station Glenbrook	78 Great Western HIGHWAY	Service Station	Under assessment	-33.76545234	150.6215447
GLENDALÉ	Former Service Station	334-342 Lake ROAD	Unclassified	Regulation under CLM Act not required	-32.92775076	151.6433463
GLENDALÉ	Coles Express Glendale	593 Main ROAD	Service Station	Under assessment	-32.92709242	151.637946
GLENDALÉ	Cardiff Settlement Pond	Off Main ROAD	Unclassified	Under assessment	-32.93411399	151.6483695
GLENDALÉ	Woolworths Service Station	Stockland DRIVE	Service Station	Regulation under CLM Act not required	-32.93250548	151.6404097
GLEN DENNING	7-Eleven Plumpton Service Station Glendenning	1 Dublin (Cnr Richmond Rd) STREET	Service Station	Regulation under CLM Act not required	-33.73988232	150.8603323

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GLENORIE	Caltex Glenorie Service Station	912 Old Northern ROAD	Service Station	Regulation under CLM Act not required	-33.60550946	151.0126731
GLOUCESTER	Caltex Service Station	141 Church STREET	Service Station	Under assessment	-32.01222514	151.9579521
GOOLMANGAR	Goolmangar General Store	851 Nimbin ROAD	Service Station	Under assessment	-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	Mobil Service Station	129 Lagoon STREET	Service Station	Contamination currently regulated under CLM Act	-34.74618793	149.7330484
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	Under assessment	-34.76217302	149.7170897
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	422-426 Auburn STREET	Service Station	Regulation under CLM Act not required	-34.74869879	149.7229392
GOULBURN	Caltex Service Station	68 Goldsmith STREET	Service Station	Under assessment	-34.75054432	149.7192098
GOULBURN	Caltex Service Station	72-74 Clinton STREET	Service Station	Regulation under CLM Act not required	-34.75728157	149.7135824
GOULBURN	Coles Express Service Station	90 Cowper (Corner Clinton STREET) STREET	Service Station	Regulation under CLM Act not required	-34.75566648	149.7107831
GOULBURN	Former Shell Autoport Service Station	Corner Bruce Street and Lagoon STREET	Service Station	Regulation under CLM Act not required	-34.74807885	149.7266246
GRAFTON	Lowes Petroleum (BP-Branded) Depot, Grafton	13 Orara STREET	Other Petroleum	Regulation under CLM Act not required	-29.67016421	152.918161
GRAFTON	BP Service Station (Reliance Petroleum)	14 Villiers (Cnr Fitzroy) STREET	Service Station	Under assessment	-29.69345456	152.9373123
GRAFTON	Turf Street Shop	161 Turf STREET	Service Station	Under assessment	-29.67412811	152.9336609
GRAFTON	Caltex Service Station	179 Prince STREET	Service Station	Regulation under CLM Act not required	-29.68600117	152.9371093
GRAFTON	Former Shell Depot	2 Milton STREET	Other Petroleum	Regulation under CLM Act not required	-29.67723019	152.9205374
GRAFTON	Former BP Service Station (Reliance Petroleum)	202 Queen STREET	Service Station	Regulation under CLM Act not required	-29.67645469	152.9423977
GRAFTON	Former Mobil Depot Grafton	2-16 Bruce STREET	Other Petroleum	Regulation under CLM Act not required	-29.68093591	152.9231289
GRAFTON	Grafton Works Depot	26-28 Bruce STREET	Other Petroleum	Regulation under CLM Act not required	-29.67975507	152.9249357
GRAFTON	Caltex Service Station	72 Swallow ROAD	Service Station	Under assessment	-29.73168549	152.944024
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

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
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	7-Eleven Service Station	154-160 Parramatta ROAD	Service Station	Regulation under CLM Act not required	-33.83022685	151.0101322
GRANVILLE	Woolworths Granville	158 Clyde STREET	Service Station	Under assessment	-33.84623338	151.0124885
GRANVILLE	Old Granville Depot	23 Elizabeth STREET	Unclassified	Regulation under CLM Act not required	-33.83765925	151.008528
GRANVILLE	Evans Deacon Ind	28 Factory STREET	Other Industry	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.84173556	151.0165687
GRANVILLE	A'Becketts Creek	Albert STREET	Unclassified	Under assessment	-33.82735997	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
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	Grenfell Gasworks	Corner Gooloogong Road & Bourke STREET	Gasworks	Regulation under CLM Act not required	-33.89006016	148.1615443
GRENFELL	Former SRA Fuel Depot	Grafton STREET	Other Petroleum	Regulation under CLM Act not required	-33.89351237	148.1560188
GRETA	redevelopment site	112-114 High STREET	Other Industry	Regulation under CLM Act not required	-32.67706709	151.3876682
GRETA	Coles Express Greta	122 New England HIGHWAY	Service Station	Regulation under CLM Act not required	-32.6756357	151.3872818
GRETA	Former landfill	Hollingshed ROAD	Landfill	Regulation under CLM Act not required	-32.66705287	151.3923474
GREYSTANES	Metro (former Mobil) Service Station	73 Ettalong ROAD	Service Station	Under assessment	-33.81822648	150.9513946
GRIFFITH	Landmark Fertiliser Storage	2 - 8 Jensen ROAD	Chemical Industry	Regulation under CLM Act not required	-34.29365599	146.0536413
GRIFFITH	Caltex Service Station	2-4 Mackay AVENUE	Service Station	Regulation under CLM Act not required	-34.2908766	146.0630815
GRIFFITH	Belford Petroleum (former Mobil) Depot	30 Banna AVENUE	Service Station	Regulation under CLM Act not required	-34.29042827	146.0595497
GRIFFITH	Caltex Service Station	32-34 Mackay AVENUE	Service Station	Under assessment	-34.29333331	146.0679503
GRIFFITH	Former Murrumbidgee Irrigation Depot	55-77 Banna AVENUE	Other Industry	Regulation under CLM Act not required	-34.28858242	146.0567509
GRIFFITH	Shell Griffith CVRO	6-10 Mackay AVENUE	Other Petroleum	Under assessment	-34.2910045	146.063824
GRIFFITH	BP Service Station (Reliance Petroleum)	81 Banna AVENUE	Service Station	Regulation under CLM Act not required	-34.28851251	146.0540815
GRIFFITH	Mobil Depot - Griffith Airport	Off Remembrance DRIVE	Other Petroleum	Regulation under CLM Act not required	-34.25618872	146.0620449

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
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	Under assessment	-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	Mobil Gunnedah Depot	16-24 Wentworth STREET	Other Petroleum	Regulation under CLM Act not required	-30.98428725	150.260609
GUNNEDAH	Caltex Service Station	21 Abbott STREET	Service Station	Under assessment	-30.98021001	150.2561856
GUNNEDAH	Mobil Service Station	341 Conadilly STREET	Service Station	Contamination currently regulated under CLM Act	-30.9807394	150.2578428
GUNNEDAH	State Property Authority Site	35-37 Abbott STREET	Other Petroleum	Under assessment	-30.9789841	150.25737
GUNNEDAH	Former Caltex Depot	61 Railway AVENUE	Other Petroleum	Contamination formerly regulated under the CLM Act	-30.97953242	150.2494457
GUNNEDAH	Former Telstra Line Depot	81 Barber STREET	Other Petroleum	Regulation under CLM Act not required	-30.97933809	150.2503121
GUNNEDAH	Former Shell Depot Gunnedah	85-89 Barber STREET	Other Petroleum	Regulation under CLM Act not required	-30.97949284	150.2507401
GUNNEDAH	BP Service Station	Corner Conadilly Street & Henry STREET	Service Station	Contamination currently regulated under CLM Act	-30.98116266	150.2583066
GUNNEDAH	Adjacent to Service Station	Intersection of Henry Street and Conadilly STREET	Service Station	Contamination currently regulated under CLM Act	-30.98072588	150.2582802
GUNNING	Gunning Motors	56 Yass STREET	Service Station	Under assessment	-34.78159326	149.2684791
GUYRA	Caltex-branded Service Station	4352 New England HIGHWAY	Service Station	Under assessment	-30.20601937	151.6757291
GUYRA	Guyra Fourways Service Centre	87-89 Bradley STREET	Service Station	Under assessment	-30.24580085	151.6701156
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	Under assessment	-33.13632941	151.5813396
GWANDALAN	Former Gwandalan Landfill	Kanandra 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 BAY	Former Shell Gynea Bay Service Station	Gynea Bay ROAD	Service Station	Under assessment	-34.04129676	151.0841328

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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 Matland 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	Under assessment	-32.925171	151.7504048
HAMILTON	Hamilton Gasworks	Clyde STREET	Gasworks	Contamination currently regulated under CLM Act	-32.91362741	151.7406241
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	ELMA	54 Clyde STREET	Other Industry	Contamination currently regulated under CLM Act	-32.91145768	151.7367691
HAMILTON NORTH	Black and Decker	56 Clyde STREET	Metal Industry	Contamination currently regulated under CLM Act	-32.91080413	151.7358236
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
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	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	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 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	Shell Coles Express Service Station	1355 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.08780042	151.0069741

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
HEATHCOTE	Caltex Service Station	1403 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-34.09059834	151.003752
HEATHERBRAE	Shell Coles Express Motto Farm Service Station	2137 Pacific HIGHWAY	Service Station	Under assessment	-32.79835449	151.7176284
HEATHERBRAE	Bogas (Former Caltex) Service Station	3 Speedy Lock LANE	Service Station	Regulation under CLM Act not required	-32.78057822	151.7372135
HEXHAM	QR National - Hexham Precinct	179 & 3/67 Maitland ROAD	Other Industry	Regulation under CLM Act not required	-32.83474038	151.6821895
HEXHAM	Cummins Newcastle Facility Hexham	21 Gallegan STREET	Other Industry	Regulation under CLM Act not required	-32.83186739	151.686709
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
HEXHAM	Caltex Diesel Stop	360 Maitland ROAD	Service Station	Regulation under CLM Act not required	-32.82844873	151.6851063
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
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	Under assessment	-35.71332625	147.3207237
HOMEBUSH	Ausgrid Mason Park Substation	1 Underwood ROAD	Other Industry	Regulation under CLM Act not required	-33.85674677	151.0747044
HOMEBUSH BAY	WSN Auburn Waste and Recycling Centre	Corner Pondage Link and Hill ROAD	Landfill	Under assessment	-33.84359299	151.0593656
HOMEBUSH WEST	Former Ford Landfill	22 Mandemar AVENUE	Landfill	Under assessment	-33.86180526	151.0635664
HOMEBUSH WEST	Caltex Service Station Homebush West	334-336 Parramatta ROAD	Service Station	Regulation under CLM Act not required	-33.8581543	151.0681261
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	Under assessment	-33.69342449	151.1035295
HORNSBY	Midas Car Care Centre Hornsby	2A Linda STREET	Unclassified	Regulation under CLM Act not required	-33.70052215	151.1004786
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	Former Radium Factory	7-9 Nelson PARADE	Other Industry	Under assessment	-33.84218911	151.164968
HUNTERS HILL	Foreshore Land	Rear of 7, 9 & 11 Nelson PARADE	Unclassified	Contamination currently regulated under CLM Act	-33.84248362	151.1649249
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

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
HURLSTONE PARK	Former Telstra Depot	82 Canterbury ROAD	Service Station	Regulation under CLM Act not required	-33.90803171	151.1258121
HURSTVILLE GROVE	Moore Reserve	Morshead DRIVE	Landfill	Contamination currently regulated under CLM Act	-33.97920603	151.0873578
INVERELL	Caltex Service Station	139-143 Otho STREET	Service Station	Under assessment	-29.77819403	151.1145699
INVERELL	Former Service Station	20 Oliver STREET	Service Station	Regulation under CLM Act not required	-29.77229743	151.1152692
INVERELL	Former Shell Depot	25 Edward STREET	Other Petroleum	Regulation under CLM Act not required	-29.76151684	151.1182033
INVERELL	Former Mobil Inverell Depot	29-33 Edward STREET	Other Petroleum	Regulation under CLM Act not required	-29.76135322	151.1171412
INVERELL	Caltex Service Station	4 Edward STREET	Service Station	Under assessment	-29.76123104	151.1147983
INVERELL	Caltex Service Station	55-59 Ring STREET	Service Station	Under assessment	-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
ISLINGTON	Shell Pipeline Easement (vacant land)	24 Fern STREET	Other Petroleum	Under assessment	-32.91706254	151.7473809
ISLINGTON	Caltex Service Station	240 Maitland ROAD	Service Station	Under assessment	-32.91138644	151.7457701
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	Under assessment	-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
JENNINGS	Former Arsenic Poison Factory	Duke Street, Manor Street and King STREET	Chemical Industry	Under assessment	-28.92833023	151.9301552
JESMOND	Caltex Service Station	27 Bluegum ROAD	Service Station	Under assessment	-32.9029287	151.691164
JINDABYNE	Caltex Service Station	50 Kosciuszko ROAD	Service Station	Under assessment	-36.41395847	148.6225113
JINDABYNE	BP Service Station (Reliance Petroleum)	8 Kosciuszko ROAD	Service Station	Regulation under CLM Act not required	-36.41478692	148.6178882
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 Jamieson STREET	Other Industry	Under assessment	-32.86399912	149.9779259
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
KATOOMBA	Former Katoomba/Leura Gasworks	Megalong STREET	Gasworks	Contamination currently regulated under CLM Act	-33.71318559	150.3187284
KELLYVILLE	BP Service Station Kellyville	19-23 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.71280997	150.9590756

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KELLYVILLE	Caltex Service Station	3-5 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.71436125	150.9602175
KELSO	Caltex Service Station Kelso BP Service Station (Reliance Petroleum)	19 Sydney ROAD 63 Sydney ROAD	Service Station Service Station	Regulation under CLM Act not required Under assessment	-33.41904247 -33.41925328	149.6023985 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 Service Station	1163 Mamre ROAD	Service Station	Regulation under CLM Act not required	-33.86972102	150.7966074
KEMPSEY	Liberty (Former Mobil) Service Station	108-112 Smith STREET	Service Station	Regulation under CLM Act not required	-31.07492508	152.8431945
KEMPSEY	Former Mobil depot	14 Hoptetoun STREET	Other Petroleum	Regulation under CLM Act not required	-31.07603107	152.8350132
KEMPSEY	Mobil Depot	154 Belgrave STREET	Service Station	Regulation under CLM Act not required	-31.07965043	152.8326303
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 Corner Pacific Highway and Cochrane STREET	Other Petroleum Service Station	Regulation under CLM Act not required Under assessment	-31.07500944 -31.07036743	152.8346699 152.8461571
KENSINGTON	Shell Coles Express Service Station Footpath adjacent to 10-20 Anzac Parade	10-20 Anzac PARADE	Service Station	Regulation under CLM Act not required	-33.9032124	151.2237836
KENSINGTON	7-Eleven Kensington	135 Anzac PARADE	Service Station	Under assessment	-33.91035885	151.2228537
KENSINGTON	Caltex Service Station	219a Anzac PARADE	Service Station	Under assessment	-33.91460752	151.2251266
KENSINGTON	Former Ampol Service Station	76-82 Anzac PARADE	Service Station	Regulation under CLM Act not required	-33.9059246	151.2242891
KENTHURST	Vacant Land	259 McClymonts ROAD	Unclassified	Regulation under CLM Act not required	-33.61283529	150.9425303
KHANCOBAN	Khancoban Tip	Alpine WAY 105 to 109 and 113 Shoalhaven STREET	Landfill	Regulation under CLM Act not required	-36.21994191	148.1542718
KIAMA	Former Gasworks Former Mobil Service Station Kiama Heights	7-9 South Kiama DRIVE	Gasworks Service Station	Regulation under CLM Act not required Under assessment	-34.67416881	150.8504143
KIAMA HEIGHTS	Former BP Service Station Lundfield	478 Pacific HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-34.69553931	150.8437977
KILLARA	7-Eleven Service Station (Former Mobil)	496 Pacific HIGHWAY	Service Station	Contamination currently regulated under CLM Act	-33.7719298	151.1613874
KILLARA	Killara Garage	544 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.77146554	151.1606903
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	-33.76974164	151.1599696
KILLARA			Service Station		-33.76312226	151.1549237

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
KILLARA	Former Caltex Service Station	692B-694 Pacific HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-33.76306802	151.1550109
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	Coles Express Service Station Kingsford	58 Gardeners ROAD	Service Station	Regulation under CLM Act not required	-33.9250054	151.2257601
KINGSFORD	Caltex Service Station	603-611 Anzac PARADE	Service Station	Under assessment	-33.93435787	151.2371198
KINGSGROVE	Shell Coles Express Service Station	137 Kingsgrove ROAD	Service Station	Regulation under CLM Act not required	-33.93276948	151.099026
KINGSGROVE	State Transit Authority Depot	17-23 Richland STREET	Other Petroleum	Regulation under CLM Act not required	-33.93646086	151.0973617
KINGSGROVE	Caltex Kingsgrove	351-357 Stoney Creek ROAD	Service Station	Regulation under CLM Act not required	-33.95132175	151.0926872
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
KIRRAWEE	Ingall Civil Products	127-141 Bath ROAD	Metal Industry	Regulation under CLM Act not required	-34.03029516	151.0754469
KIRRAWEE	Coles Express Kirrawee	470 Princes HIGHWAY	Service Station	Under assessment	-34.02735302	151.0845079
KIRRAWEE	7-Eleven (former Mobil) Service Station	542 Princes HIGHWAY	Service Station	Under assessment	-34.03238179	151.0758071
KOGARAH	Caltex Service Station	29 President AVENUE	Service Station	Regulation under CLM Act not required	-33.96516866	151.141145
KOGARAH	Woolworths Petrol Service Station	69 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.96330397	151.1371182
KOGARAH	7-Eleven Service Station	736 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.96406472	151.1376011
KOGARAH	Scarborough Park South	Production AVENUE	Landfill	Regulation being finalised	-33.97922253	151.140276
KOOLKHAN	Former Koolkhan Power Station	Summerland WAY	Other Industry	Regulation under CLM Act not required	-29.61688704	152.9300645
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	Industrial Facility	39 Heron ROAD	Chemical Industry	Under assessment	-32.89106439	151.7784064
KOORAGANG	NPC, berths 2 and 3	Heron ROAD	Metal Industry	Regulation being finalised	-32.89260063	151.7742527
KOORAGANG	Kooragang Island Waste Facility	Lot 121 DP874949 OTHER	Metal Industry	Contamination currently regulated under POEO Act	-32.88250732	151.7466125
KOORAGANG	Transpacific Technical Services	Raven STREET	Unclassified	Under assessment	-32.8634857	151.7414904
KOORAGANG	Vacant Land	Raven and Cormorant ROADS	Unclassified	Under assessment	-32.88410199	151.7701334
KOORINGAL	Caltex-branded (former Mobil) Service Station	24 Lake Albert ROAD	Service Station	Under assessment	-35.12239591	147.3769936
KOORINGAL	Caltex Service Station	265-267 Lake Albert ROAD	Service Station	Regulation under CLM Act not required	-35.14078443	147.3755442
KOSCIUSZKO	Sawpit Creek landfill	13km from Jindabyne, off Kosciuszko ROAD	Landfill	Regulation under CLM Act not required	-36.34858097	148.5673374

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
KOSCIUSZKO	Khancoban Spoil Dump	Alpine WAY	Landfill	Regulation under CLM Act not required	-36.21982803	148.1527401
KOSCIUSZKO	Smiggin Holes Snow Clearing Shed	Link ROAD	Landfill	Regulation under CLM Act not required	-36.39098211	148.4304981
KURMOND	BP Service Station	501 Bells Line of road ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.55096662	150.6911676
KURNELL	Caltex Refinery	2 Solander STREET	Other Petroleum	Contamination currently regulated under POEO Act	-34.0175214	151.2159572
KURNELL	Former Phillips Imperial Chemicals site	260 Captain Cook DRIVE	Chemical Industry	Regulation under CLM Act not required	-34.02493837	151.1952149
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	Solander STREET	Service Station	Under assessment	-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	Under assessment	-33.24337276	151.5065335
LAKE MUNMORAH	Caltex Service Station	1135 Pacific HIGHWAY	Service Station	Under assessment	-33.18501024	151.5526114
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	Coles Express Service Station Burns Bay	254 Burns Bay ROAD	Service Station	Regulation under CLM Act not required	-33.81719214	151.1518774
LANE COVE	BP Service Station	62 Epping ROAD	Service Station	Under assessment	-33.81108427	151.1641531
LANE COVE	Pacific Power	Sirius ROAD	Landfill	Contamination formerly regulated under the CLM Act	-33.80701776	151.1449658
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 WEST	Caltex Lane Cove West	235-245 Burns Bay ROAD	Service Station	Under assessment	-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
LANSVALE	Coles Express Lansvale	65 Hume HIGHWAY	Service Station	Under assessment	-33.89295753	150.9606136

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LAURIE TON	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	Yenda Producers (formerly Incelec) Leeton	1 - 2 Canal STREET	Other Petroleum	Under assessment	-34.55181457	146.3863516
LEETON	Caltex Service Station	1 Belah STREET	Service Station	Regulation under CLM Act not required	-34.55421752	146.3998431
LEETON	Former Mobil Depot	108 Calrose STREET	Other Petroleum	Under assessment	-34.55813326	146.3921296
LEETON	Former Fuel Depot, Leeton	1-3 Short St STREET	Other Petroleum	Under assessment	-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	RailCorp Leichhardt	7 Darley ROAD	Other Industry	Regulation under CLM Act not required	-33.87520846	151.1539012
LEICHHARDT	Bus Depot (Area E)	Cnr Balmain Rd and City West LINK	Other Industry	Under assessment	-33.87589727	151.1598073
LENNOX HEAD	Spoors Dip	13 Fig Tree Hill DRIVE	Cattle Dip	Contamination formerly regulated under the CLM Act	-28.78258175	153.5752527
LENNOX HEAD	Former Caltex Lennox Head	Byron STREET	Service Station	Regulation under CLM Act not required	-28.79189328	153.5883225
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	Under assessment	-33.7125311	150.3315386
LIDDELL	Liddell Power Station	New England HIGHWAY	Other Industry	Under assessment	-32.37393962	150.9756283
LIDSDALE	Angus Place Colliery	Wolgan ROAD	Other Industry	Under assessment	-33.35274573	150.0996773
LIDSDALE	Kerosene Vale Colliery	Wolgan ROAD	Other Industry	Under assessment	-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 St Cnr 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

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LISAROW	Lisarow Recycling Site	902A Pacific HIGHWAY	Metal Industry	Regulation under CLM Act not required	-33.38420179	151.3655856
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 Lismore Service Station	136 Woodlark STREET	Service Station	Regulation under CLM Act not required	-28.80807597	153.2807591
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 (CLM Act)	-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	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	Former Mobil Depot	353 Main STREET	Other Petroleum	Regulation under CLM Act not required	-33.48235166	150.1383012
LITHGOW	Lithgow Thales	4 Martini PARADE	Metal Industry	Contamination formerly regulated under the CLM Act	-33.49012248	150.1415389
LITHGOW	Former Shell Depot	6 Gasworks LANE	Other Petroleum	Under assessment	-33.47995091	150.162216
LITHGOW	Caltex Lithgow (Quota Park)	Adjacent to 1131 Great Western HIGHWAY	Unclassified	Regulation under CLM Act not required	-33.47927554	150.1366238
LITHGOW	Former Gasworks	Mort STREET	Gasworks	Regulation under CLM Act not required	-33.47995167	150.1635401
LIVERPOOL	AC McGrath (Wholesale) Pty Ltd	20 Shepherd (Cnr Atkinson St) STREET	Other Industry	Under assessment	-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
LLOYD	Former Caltex Depot Lloyd	(Urquinity Rd) 6876 Olympic HIGHWAY	Service Station	Under assessment	-35.15319793	147.3085469
LOFTUS	BP Freedom Fuel Service Station Loftus	127 Loftus AVENUE	Service Station	Contamination currently regulated under CLM Act	-34.04570765	151.0508004
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
LONG JETTY	Westside Petroleum Service Station	290-294 The Entrance ROAD	Service Station	Under assessment	-33.35688982	151.4862246
LONG JETTY	Brocks Garage	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
LONGUEVILLE	Caltex Service Station	5-7 Northwood ROAD	Service Station	Under assessment	-33.82452775	151.1725758

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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	Under assessment	-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	Waterloo Road	1 Waterloo ROAD	Other Petroleum	Under assessment	-33.78806	151.133209
MACQUARIE PARK	Caltex North Ryde Service Station	41-43 Epping ROAD	Service Station	Regulation under CLM Act not required	-33.79138236	151.1312248
MAITLAND	Coles Express Service Station	235 High STREET	Service Station	Regulation under CLM Act not required	-32.73923807	151.5620399
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
MALABAR	ANZAC Rifle Range former landfill	Franklin STREET	Landfill	Regulation being finalised	-33.95792671	151.2566373
MANDALONG	Mandalong Mine	Mandalong ROAD	Other Industry	Under assessment	-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	St Patrick's Estate	151 Darley ROAD	Unclassified	Regulation under CLM Act not required	-33.8044568	151.2938595
MANLY	Caltex Service Station	86 Pittwater ROAD	Service Station	Under assessment	-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	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	Under assessment	-33.14753814	151.5387832
MANNERING PARK	Mannering Park Mini Mart	70 Vales ROAD	Service Station	Under assessment	-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

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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	864 Pacific HIGHWAY	Other Petroleum	Under assessment	-33.06657244	151.6497674
MAROUBRA	Belmont Airport	299 Bunnerong PARADE	Service Station	Regulation under CLM Act not required	-33.94071282	151.2285063
MARRANGAROO	Coles Express Pagewood Service Station, Maroubra	394-398 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.45253322	150.1181023
MARRICKVILLE	United (Former Mobil) Service Station Marrangaroo	2 Carrington ROAD	Unclassified	Regulation under CLM Act not required	-33.91596071	151.1597199
MARRICKVILLE	TRW Steering and Suspension	22-28 Carrington ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-33.92012667	151.1566181
MARRICKVILLE	RailCorp	361 Victoria ROAD	Other Industry	Regulation under CLM Act not required	-33.91404835	151.1557132
MARRICKVILLE	Former Mobil Service Station	384 Illawarra ROAD	Service Station	Under assessment	-33.91534969	151.1506717
MARRICKVILLE	Woolworths Petrol Service Station Marrickville	490 Illawarra ROAD	Service Station	Regulation under CLM Act not required	-33.91845177	151.1459951
MARRICKVILLE	Mackey Park	Cnr Richardsons Crescent and Carrington ROAD	Landfill	Regulation under CLM Act not required	-33.9220263	151.1547903
MARRICKVILLE	Former Dry Cleaners and Loading Dock (adjacent Lot 1 DP612551)	Smidmore STREET	Other Industry	Regulation being finalised	-33.90707592	151.171701
MARRICKVILLE	Cooks River Aqueduct	Thornley STREET	Unclassified	Contamination formerly regulated under the CLM Act	-33.92204604	151.1480332
MARSDEN PARK	226 Grange Avenue	226 Grange AVENUE	Unclassified	Regulation under CLM Act not required	-33.70259609	150.83825
MARSFIELD	Coles Express Marsfield	189 Epping ROAD	Service Station	Under assessment	-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
MARYVILLE	7-Eleven (former Mobil) Service Station	184-188 Hannell STREET	Service Station	Under assessment	-32.91336028	151.7579315
MASCOT	Caltex Service Station	125 O'Riordan STREET	Service Station	Under assessment	-33.92309169	151.1911539
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	Ing Industrial Fund (unoccupied Land and General Parking)	19-33 Kent ROAD	Landfill	Regulation under CLM Act not required	-33.922765	151.185262
MASCOT	Mascot Pioneer Plating	25-29 Ricketty STREET	Metal Industry	Contamination currently regulated under CLM Act	-33.92075288	151.1824801
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	Business Centre	5-9 Ricketty STREET	Unclassified	Under assessment	-33.92029702	151.1816656
MASCOT	Former Shell Service Station	746 Botany ROAD	Service Station	Contamination currently regulated under CLM Act	-33.92352295	151.1955852

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MASCOT	Telstra Exchange	904-922 Botany ROAD	Other Industry	Regulation under CLM Act not required	-33.9293166	151.1942777
MATRAVILLE	Former Golden Fleece Terminal No1	133 -149 Beauchamp ROAD	Other Petroleum	Contamination formerly regulated under the CLM Act	-33.95776666	151.2248518
MATRAVILLE	Former Golden Fleece Terminal No2	151 Beauchamp ROAD	Other Petroleum	Contamination formerly regulated under the CLM Act	-33.95719404	151.2259884
MATRAVILLE	Vacant Lot	3 Wilkes AVENUE	Other Industry	Regulation under CLM Act not required	-33.96006406	151.2431087
MATRAVILLE	7-Eleven Service Station Matraville	515 Bunnerong ROAD	Service Station	Under assessment	-33.95943536	151.2317598
MATRAVILLE	Former Rieco Incinerator	Kain AVENUE	Other Industry	Contamination being managed via the planning process (EP&A Act)	-33.95980534	151.2423679
MAYFIELD	Waratah Steel Mill	23 Frith STREET	Metal Industry	Regulation under CLM Act not required	-32.89426592	151.7257429
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	Under assessment	-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	Under assessment	-32.88835767	151.7450751
MAYFIELD	OneSteel (BHP)	Industrial DRIVE	Metal Industry	Contamination currently regulated under CLM Act	-32.88366987	151.7449491
MAYFIELD	Newcastle Wire Mill	Ingall STREET	Metal Industry	Under assessment	-32.89008485	151.752949
MAYFIELD	BHPB Supply site	Lot 223 South and West - Industrial DRIVE	Metal Industry	Contamination currently regulated under CLM Act	-32.88583041	151.7388423
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 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
MCDougalls 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	Caltex Service Station Menai	1 Carter Road ROAD	Service Station	Regulation under CLM Act not required	-34.01654043	151.0124133
MENAI	7-Eleven (Former Mobil) Service Station Menai	289 Menai ROAD	Service Station	Regulation under CLM Act not required	-34.01579095	151.0131737

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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	Under assessment	-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 Merrylands	148 Woodville ROAD	Service Station	Under assessment	-33.83818499	150.9997199
MERRYLANDS	Former Stockfeed Manufacturing Site	1-7 & 9-11 Neil STREET	Other Petroleum	Regulation under CLM Act not required	-33.83390257	150.9947449
MERRYLANDS	Stockland Merrylands Court	227-259 Merrylands ROAD	Unclassified	Under assessment	-33.83560901	150.9875552
MERRYLANDS	Caltex Service Station	229 Woodville ROAD	Service Station	Regulation under CLM Act not required	-33.84547463	150.9983413
MERRYLANDS	7-Eleven Merrylands Service Station	295-297 Merrylands (Cnr Windsor Rd) ROAD	Service Station	Under assessment	-33.83533205	150.9851801
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	Under assessment	-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	Former AGL Gasworks	36 Hickson ROAD	Gasworks	Contamination currently regulated under CLM Act	-33.86243824	151.2032514
MILLERS POINT	Former AGL Gasworks	38 Hickson ROAD	Gasworks	Contamination being managed via the planning process (EP&A Act)	-33.86280104	151.2032452
MILLERS POINT	Port Services (Moores) Facility	4 Towns PLACE	Other Petroleum	Contamination currently regulated under POEO Act	-33.85581123	151.2024759
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
MILPERRA	Caltex Service Station	264 Milperra ROAD	Service Station	Regulation under CLM Act not required	-33.93018101	150.9910964
MILPERRA	Heatcraft Australia Pty Ltd	286 Horsley ROAD	Other Industry	Under assessment	-33.94031556	150.9958606
MILPERRA	United Group Rail Pty Limited	373 Horsley ROAD	Landfill	Regulation under CLM Act not required	-33.93286283	150.9934071
MILTON	Caltex Milton Service Station and Depot	331 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-35.33154474	150.4492852
MILTON	Former Sanitary Depot	Slaughterhouse ROAD	Other Industry	Regulation under CLM Act not required	-35.33819825	150.4471917
MINCHINBURY	BP Service Station	1055 Great Western Highway corner Archbold ROAD	Service Station	Regulation under CLM Act not required	-33.78211857	150.8244185
MINCHINBURY	7-Eleven (former Mobil) Service Station	815 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.78812909	150.8495992

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
MINTO	Shell Coles Express Service Station	73 Pembroke STREET	Service Station	Regulation under CLM Act not required	-34.02316454	150.8503118
MINTO	Land adjacent to Former Shell depot	Airds Road and Essex STREET	Other Petroleum	Regulation under CLM Act not required	-34.02110921	150.8414029
MINTO	Former Endeavour Energy's Depot	Pembroke ROAD	Unclassified	Regulation under CLM Act not required	-34.0331168	150.8464722
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	Under assessment	-34.44746118	150.4326183
MITTAGONG	Caltex Mittagong Service Station	65 Bowral ROAD	Service Station	Regulation under CLM Act not required	-34.45245915	150.4381291
MITTAGONG	Lots 1 and 2 Alfred St.	Alfred STREET	Other Petroleum	Contamination formerly regulated under the CLM Act	-34.44738105	150.4565159
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	BP Service Station Mona Vale	1721 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.68043443	151.3023553
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	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
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	Caltex Investigation Area	Polo Ave, Perak STREET	Service Station	Regulation being finalised (CLM Act)	-33.67431333	151.3091148
MOOBALL	Mooball General Store	5913 Tweed Valley WAY	Service Station	Under assessment	-28.44204594	153.4887648
MOONBI	Caltex Moonbi Service Station	New England HIGHWAY	Service Station	Under assessment	-31.02264369	151.069094
MOORE PARK	Area 2, Moore Park	Driver AVENUE	Unclassified	Regulation under CLM Act not required	-33.89426868	151.2226839
MOOREBANK	ABB Australia Pty Ltd	(a) 1 Bapaume ROAD	Other Industry	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.94143741	150.9208754
MOOREBANK	ABB Australia Pty Ltd	1 Bapaume ROAD	Other Industry	Under assessment	-33.94140315	150.9209285
MOOREBANK	Caltex Service Station Moorebank	2 Bridges ROAD	Service Station	Regulation under CLM Act not required	-33.92839682	150.9327012
MOOREBANK	Caltex Service Station	216 Newbridge ROAD	Service Station	Under assessment	-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	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

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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	Under assessment	-29.47603684	149.8476728
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	Former Mobil Depot	Gosport STREET	Other Petroleum	Contamination currently regulated under CLM Act	-29.47771921	149.8478438
MOREE	Former Golden Fleece	Gosport STREET	Other Petroleum	Contamination currently regulated under CLM Act	-29.47698315	149.8477108
MOREE	Moree Airport Evaporation Pond	Newell HIGHWAY	Unclassified	Regulation under CLM Act not required	-29.50289837	149.8411301
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
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
MORUYA	Former Fuel Depot Moruya	11 to 13 Ford STREET	Other Petroleum	Under assessment	-35.9112243	150.0826475
MORUYA	Caltex Service Station	26 Campbell STREET	Service Station	Regulation under CLM Act not required	-35.9104985	150.0711419
MORUYA	Caltex Service Station Moruya	80-84 Campbell STREET	Service Station	Under assessment	-35.91195596	150.0824213
MOSMAN	7-Eleven Mosman	162A Spit Road Corner Mitchell ROAD	Service Station	Under assessment	-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	Under assessment	-33.82302718	151.2435627
MOSS VALE	Coles Express Service Station	579 Argyle STREET	Service Station	Regulation under CLM Act not required	-34.55313422	150.364684
MOSS VALE	Woolworths Service Station Moss Vale	609 Argyle STREET	Service Station	Under assessment	-34.55409411	150.3609797
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

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
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	Under assessment	-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	Under assessment	-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	Caltex Service Station	36a Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.58436517	150.2465528
MOUNT VICTORIA	Former Mobil Service Station	81 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.5889727	150.2511783
MUDGE	Caltex Service Station	114-116 Church STREET	Service Station	Regulation under CLM Act not required	-32.59428029	149.5876199
MUDGE	Former Essential Energy Depot	27-31 Inglis STREET	Other Industry	Regulation under CLM Act not required	-32.60073	149.585658
MUDGE	Shell Coles Express Service Station	47 Church STREET	Service Station	Regulation under CLM Act not required	-32.59347493	149.5884623
MUDGE	BP Service Station Mudgee	77 Church STREET	Service Station	Regulation under CLM Act not required	-32.59545872	149.588123
MUDGE	Mobil Depot	Cnr Inglis Street & Douro STREET	Other Petroleum	Contamination currently regulated under CLM Act	-32.60023979	149.5823448
MUDGE	Former Caltex Depot Mudgee	cnr Nicholson Street & Atkinson STREET	Other Petroleum	Regulation under CLM Act not required	-32.60125298	149.5851398
MUDGE	Mudgee Gasworks	Mortimer Street and Court STREET	Gasworks	Regulation under CLM Act not required	-32.59168859	149.5817705
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	Former Norco Butter Factory	230 Tweed Valley WAY	Other Petroleum	Under assessment	-28.32791359	153.4073052
MURWILLUMBAH	Murwillumbah Ambulance Depot	27 Queen STREET	Other Petroleum	Regulation under CLM Act not required	-28.32552576	153.4000182
MUSWELLBROOK	Caltex Service Station	12-16 Sydney STREET	Service Station	Under assessment	-32.26789925	150.8879263
MUSWELLBROOK	Caltex Service Station	1-9 William STREET	Service Station	Under assessment	-32.26564196	150.8866925
MUSWELLBROOK	SRA Site	27 Brook STREET	Unclassified	Regulation being finalised	-32.26346086	150.8873181
MUSWELLBROOK	Former Mobil Depot Muswellbrook	43-51 Ford STREET	Other Petroleum	Under assessment	-32.2599725	150.887573
MUSWELLBROOK	Caltex Service Station	47-50 Victoria STREET	Service Station	Under assessment	-32.26788823	150.8930609
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	Woolworths Petrol	72 Brook STREET	Service Station	Regulation under CLM Act not required	-32.26325377	150.8905966

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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	Former Industrial Site	Lot 89 Rathmore STREET	Other Industry	Regulation under CLM Act not required	-32.30544071	150.8823657
MUSWELLBROOK	Bayswater Power Station	New England HIGHWAY	Other Industry	Under assessment	-32.3954046	150.9502683
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	Former Landfill	1 Elvard STREET	Landfill	Regulation under CLM Act not required	-34.043474	150.7393256
NARELLAN	Caltex Service Station Narellan	1 George Hunter DRIVE	Service Station	Regulation under CLM Act not required	-34.03963992	150.7432386
NAROOMA	Narooma Service Station	60 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-36.21617955	150.126261
NAROOMA	Former Caltex - Narooma	82 Princes HIGHWAY	Service Station	Contamination formerly regulated under the CLM Act	-36.21711766	150.1279305
NARRABEEN	7-Eleven Service Station	1234 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.71958892	151.298272
NARRABEEN	Shell Coles Express Service Station	1418 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.70013931	151.3002782
NARRABEEN	Caltex Service Station	1509-1511 Pittwater ROAD	Service Station	Regulation under CLM Act not required	-33.70455756	151.2969352
NARRABRI	Caltex Service Station	12 Reid STREET	Service Station	Under assessment	-30.32282764	149.7901182
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 Narrabri Service Station	31 Dangar (Chr Anne and Dangar) STREET	Service Station	Regulation under CLM Act not required	-30.32989667	149.7756598
NARRABRI	Caltex Service Station	31-35 Cooma ROAD	Service Station	Regulation under CLM Act not required	-30.33968576	149.7657241
NARRABRI	Caltex Service Station	7-13 James STREET	Service Station	Regulation under CLM Act not required	-30.33016168	149.7940732
NARRABRI	Cargill Soapstock Disposal Site	Westport ROAD	Unclassified	Contamination formerly regulated under the CLM Act	-30.4698458	149.6981931
NARRANDERA	Former Mobil Narrandera Depot	24 Whitton STREET	Other Petroleum	Regulation under CLM Act not required	-34.7410523	146.5620667
NARRANDERA	Narrandera Depot	5-7 Margaret STREET	Other Petroleum	Regulation under CLM Act not required	-34.74105391	146.5628144
NARRANDERA	Caltex (Former Mobil) Service Station Narrandera	Newell HIGHWAY	Service Station	Under assessment	-34.76124219	146.5398604
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

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
NELLIGEN	Former Clay Target Shooting Range	1398 Kings Highway and adjoining land on Old Bolaro Mountain ROAD	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	38 Stockton STREET	Service Station	Regulation under CLM Act not required	-32.72335662	152.1429384
NEMINGHA	Caltex Service Station and Depot	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	BP Service Station	105 St James ROAD	Service Station	Regulation under CLM Act not required	-32.92910325	151.7155801
NEW LAMBTON	Caltex Service Station New Lambton	144 Bridges ROAD	Service Station	Regulation under CLM Act not required	-32.93283668	151.7141748
NEW LAMBTON	7-Eleven (former Mobil) Service Station	291 Turton ROAD	Service Station	Regulation under CLM Act not required	-32.91773864	151.7243096
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 (CLM Act)	-32.89439868	151.7591272
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	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	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
NEWTOWN	Former Service Station	81 Wilson STREET	Service Station	Contamination formerly regulated under the CLM Act	-33.89626791	151.1827556
NORAVILLE	Former Toukley Landfill	Wilfred Barrett DRIVE	Landfill	Regulation under CLM Act not required	-33.27734185	151.5537784

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
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 Glosop STREET	Service Station	Under assessment	-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	1 Kiara PLACE Adjacent to HMAS Platypus, 118 High STREET	Gasworks	Regulation under CLM Act not required	-33.843145	151.2161142
NORTH SYDNEY	Neutral Bay Sediments	High STREET	Gasworks	Contamination currently regulated under 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
NORTH WOLLONGONG	Former Mobil Depot	122-126 Montague STREET	Other Petroleum	Regulation under CLM Act not required	-34.40988259	150.8939374
NORTHMEAD	Coles Express Service Station Northmead	197 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.77741733	151.0001719
NORTHMEAD	Former Prestige Plastics	1C Redbank ROAD	Other Industry	Under assessment	-33.79716925	150.989926
NORTHMEAD	Sydney Water Land	51c Hammers ROAD	Landfill	Regulation under CLM Act not required	-33.7887535	150.9858088
NORTHMEAD	7-Eleven (Former Mobil) Service Station	56 Windsor ROAD	Service Station	Under assessment	-33.79090731	150.9967332
NORTHMEAD	Caltex Service Station	98-100 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.78786563	150.9945909
NOWRA	Woolworths Service Station	2 Berry STREET	Service Station	Regulation being finalised	-34.87266278	150.6014052
NOWRA	Former Gasworks Managers Residence	24 Osborne STREET	Gasworks	Regulation under CLM Act not required	-34.8708875	150.5992586
NOWRA	Shell Coles Express Service Station	55 Kinghorne STREET	Service Station	Regulation under CLM Act not required	-34.87633757	150.6023481
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	Former Hollingworth Scrap Yard	72-74 Jervis and 117 East STREET	Other Industry	Regulation under CLM Act not required	-34.88324216	150.6034361
NOWRA	Harry Sawkins Park	Bounded by Princes Hwy, Graham St & McGrath AVENUE	Gasworks	Regulation under CLM Act not required	-34.87093993	150.6037157
NOWRA	Former gasworks	Lamonds LANE	Gasworks	Contamination currently regulated under CLM Act	-34.87111182	150.6000803

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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	126 Pangee STREET	Service Station	Under assessment	-31.56482841	147.2002892
NYNGAN	Caltex Service Station	39-41 Pangee STREET	Service Station	Under assessment	-31.56101006	147.1914997
OAK FLATS	Shellharbour City Works Depot	132 Industrial ROAD	Other Industry	Under assessment	-34.56546013	150.8087225
OBERON	Former Shell Depot	32 O'Connell ROAD	Other Petroleum	Regulation under CLM Act not required	-33.6997172	149.8450057
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	CSR Ltd Property and King's	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	Former Mobil Service Station	168 Peisley STREET	Service Station	Under assessment	-33.28525478	149.1037259
ORANGE	Caltex Orange Depot	184 Byng STREET	Service Station	Regulation under CLM Act not required	-33.28285589	149.1050273
ORANGE	BP-Branded Lowes Petroleum Depot	197 - 201 Margaret STREET	Other Petroleum	Regulation under CLM Act not required	-33.27145977	149.1078103
ORANGE	Former Mobil Service Station	24-28 Bathurst ROAD	Service Station	Regulation under CLM Act not required	-33.2866912	149.1066505
ORANGE	Woolworths Orange Service Station	357-361 Summer (Cnr William St) STREET	Service Station	Regulation under CLM Act not required	-33.28445811	149.1053604
ORANGE	Electrolux Orange	5-17 Edward STREET	Other Industry	Contamination currently regulated under CLM Act	-33.29874849	149.1038449
ORANGE	BP (Reliance Petroleum) Service Station Orange	56-60 Bathurst ROAD	Service Station	Regulation under CLM Act not required	-33.28980053	149.1086212
ORANGE	Caltex Summer Street Service Station Orange	70-74 Summer (Cnr Hill St) 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	BP Orange Service Station (Reliance Petroleum)	81 Summer STREET	Service Station	Regulation under CLM Act not required	-33.2825884	149.0951535
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 Manila ROAD	Other Petroleum	Under assessment	-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

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
PADSTOW	Caltex Padstow	115 Fairfield ROAD	Service Station	Regulation under CLM Act not required	-33.9434571	151.0345671
PADSTOW	Selleys / Dulux	1-29 Gow STREET	Unclassified	Under assessment	-33.93904125	151.0381725
PADSTOW	Galvatech	49 Gow STREET	Metal Industry	Contamination currently regulated under POEO Act	-33.93808679	151.0346862
PADSTOW	Fosco 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 Self Serve)	Corner Quondola Street and Bullara STREET	Service Station	Under assessment	-36.93104481	149.8746763
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 Clarinda STREET	Service Station	Under assessment	-33.13216152	148.1743239
PARKES	Caltex Service Station Parkes	352-360 Clarinda STREET	Service Station	Regulation under CLM Act not required	-33.13317454	148.173643
PARKES	BP Reliance East End Service Station Parkes	46 Clarinda STREET	Service Station	Regulation under CLM Act not required	-33.14243539	148.1846227
PARKES	Caltex Service Station	Eugowra ROAD	Service Station	Under assessment	-33.19007031	148.224822
PARKLEA	Caltex Parklea Service Station	Old Windsor (north of Miami Street) ROAD	Service Station	Regulation under CLM Act not required	-33.72407662	150.9336021
PARRAMATTA	BP Service Station	435 Church STREET	Service Station	Regulation under CLM Act not required	-33.80498714	151.0056151
PARRAMATTA	7-Eleven (former Mobil) Service Station	81 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.80919769	151.0142894
PARRAMATTA	Coleman Oval Embankment	Cnr of Pitt STREET and Maquarie STREET	Unclassified	Regulation under CLM Act not required	-33.80441625	150.9954841
PARRAMATTA	Parramatta Park Toilet Block Demolition	The Crescent 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
PENDLE HILL	Caltex Service Station	602-606 Great Western HIGHWAY	Service Station	Under assessment	-33.80827518	150.9421511
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	Caltex Penrith Service Station	153 Coreen AVENUE	Service Station	Regulation under CLM Act not required	-33.74287244	150.6927071
PENRITH	Lowes Petroleum (Former Mobil) Depot Penrith	174 Coreen AVENUE	Other Petroleum	Regulation under CLM Act not required	-33.74484268	150.6980504
PENRITH	Mirvac Industrial Site	2101 Castlereagh ROAD	Other Industry	Regulation under CLM Act not required	-33.73497514	150.6954097

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
PENRITH	7-Eleven (former Mobil) Service Station	212-222 Andrews ROAD	Service Station	Regulation under CLM Act not required	-33.73059678	150.6952571
PENRITH	7-Eleven Service Station Penrith	30 Henry STREET	Service Station	Regulation under CLM Act not required	-33.75408799	150.7045594
PENRITH	Caltex Service Station	Castlereagh Rd Cnr Lugard STREET	Service Station	Regulation under CLM Act not required	-33.73426843	150.6933382
PENRITH	Crane Enfield Metals	Castlereagh ROAD	Metal Industry	Contamination currently regulated under CLM Act	-33.73734959	150.696442
PENRITH	BP Express Service Station	Corner Coreen Avenue and Castlereagh ROAD	Service Station	Regulation under CLM Act not required	-33.74385498	150.6925743
PENRITH	Jet 60 Dry Cleaners	Shop 3 134-138 Henry STREET	Unclassified	Under assessment	-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
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 (former Mobil) Service Station	(Northbound) Hume HIGHWAY	Service Station	Regulation under CLM Act not required	-34.28303112	150.6363145
PHEASANTS NEST	7-Eleven Service Station	(Southbound) Hume HIGHWAY	Service Station	Under assessment	-34.28291571	150.6394606
PICTON	McDonalds	69 -71 Argyle STREET	Service Station	Regulation under CLM Act not required	-34.16711877	150.6121524
PICTON	Coles Express Picton	93-99 Argyle STREET	Service Station	Regulation under CLM Act not required	-34.16844337	150.6114236
PLUMPTON	Woolworths Service Station Plumpton (Plumpton Marketplace Shops)	260 Jersey ROAD	Service Station	Regulation under CLM Act not required	-33.74478874	150.8369408
PORT BOTANY	Port Botany Bus Depot	1 Bumborah Point ROAD	Other Petroleum	Under assessment	-33.96880413	151.2255889
PORT BOTANY	Vopak B	20 Friendship ROAD	Chemical Industry	Under assessment	-33.97946548	151.2121752
PORT BOTANY	Smith Bros	4 Bumborah Point ROAD	Other Petroleum	Regulation under CLM Act not required	-33.9681757	151.2239505
PORT BOTANY	Terminals	45 Friendship ROAD	Chemical Industry	Under assessment	-33.97609287	151.2174402
PORT BOTANY	Vopak A	49 Friendship ROAD	Chemical Industry	Regulation under CLM Act not required	-33.97426175	151.2206228
PORT BOTANY	Bunnerong Canal	Between Brotherson Dock and Bumborah Point ROAD	Unclassified	Regulation under CLM Act not required	-33.96800557	151.2227633
PORT BOTANY	Sydney Ports Bulk Liquids Berth	Charlotte ROAD	Other Petroleum	Contamination currently regulated under POEO Act	-33.97418047	151.2123791
PORT BOTANY	Port Botany Railway Corridors	Friendship ROAD	Other Industry	Regulation under CLM Act not required	-33.95467008	151.2178012
PORT BOTANY	Sydney Ports Marine Services	Interterminal Access ROAD	Other Petroleum	Under assessment	-33.97214594	151.2173122
PORT KEMBLA	Coates Hire Facility (Eastern Portion)	1 Flinders STREET	Other Industry	Regulation under CLM Act not required	-34.47104817	150.89162

Suburb	Site Name	Site Address	Contamination Activity Type	EPA 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	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	Under assessment	-34.47792834	150.9105503
PORT KEMBLA	No 2 Steelworks	Five Islands ROAD	Metal Industry	Contamination currently regulated under CLM Act	-34.45965024	150.8844432
PORT KEMBLA	Port Kembla Steelworks - No.1 Works Site	Five Islands ROAD	Metal Industry	Under assessment	-34.47386606	150.8794912
PORT KEMBLA	Port Kembla Steelworks - Steelhaven	Five Islands ROAD	Other Industry	Under assessment	-34.47605247	150.891144
PORT KEMBLA	Manildra Park	Flinders STREET	Other Petroleum	Contamination currently regulated under CLM Act	-34.46946878	150.8935731
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	Port Kembla Copper Smelter	Military ROAD	Metal Industry	Under assessment	-34.4810006	150.9063426
PORT KEMBLA	Commonwealth Rolling Mills (CRM)	Old Port ROAD	Metal Industry	Under assessment	-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	BHP Area 21	Springhill ROAD	Metal Industry	Contamination formerly regulated under the CLM Act	-34.45244614	150.8676517
PORT KEMBLA	Port Kembla Springhill Works	Springhill ROAD	Metal Industry	Under assessment	-34.45905808	150.8749558
PORT KEMBLA	Port Kembla Steelworks Recycling Area	Springhill ROAD	Unclassified	Under assessment	-34.45271181	150.8677127
PORT MACQUARIE	Caltex Service Station	100 Hastings River DRIVE	Service Station	Under assessment	-31.42934052	152.8830188
PORT MACQUARIE	Caltex Service Station	112-114 Gordon STREET	Service Station	Under assessment	-31.43491709	152.9047618
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	12-14 Bolwarra ROAD	Service Station	Under assessment	-31.45015286	152.8854769
PORT MACQUARIE	Former Mobil Depot	211 Lake ROAD	Other Petroleum	Regulation under CLM Act not required	-31.44688513	152.8864499
PORT MACQUARIE	Car park	28 Hayward STREET	Other Industry	Regulation under CLM Act not required	-31.43385131	152.9072399
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	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	Air BP Avgas Facility	Oliver DRIVE	Other Petroleum	Regulation under CLM Act not required	-31.43227222	152.8681083

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PORTLAND	Mt Piper Power Station	350 Boulder ROAD	Other Petroleum	Under assessment	-33.35581541	150.0350801
PORTLAND	Mt Piper Power Station	350 Boulder Road (Power Station)				
PORTLAND	Ivanhoe Colliery	OTHER	Other Industry	Under assessment	-33.349481	150.024182
PRAIRIEWOOD	7-Eleven (former Caltex) Service Station	Pipers Flat ROAD	Other Industry	Under assessment	-33.36595748	150.009577
PROSPECT	7-Eleven (former Mobil) Service Station Prospect	485-487 Smithfield ROAD	Service Station	Regulation under CLM Act not required	-33.87102509	150.9031383
PROSPECT	Gatehouse, 544 Reservoir Road	354 Flushcombe ROAD	Service Station	Regulation under CLM Act not required	-33.79541624	150.9049417
PROSPECT	Pincott's Cottage, Gate C1	544 Reservoir ROAD	Unclassified	Regulation under CLM Act not required	-33.81049244	150.9157439
PROSPECT	Cottage 3, William Lawson Drive	Off Reservoir ROAD	Unclassified	Regulation under CLM Act not required	-33.81589773	150.9144343
PUNCHBOWL	Caltex Service Station Punchbowl	William Lawson DRIVE	Unclassified	Regulation under CLM Act not required	-33.81490331	150.9149885
PUNCHBOWL	Former BP Service Station	1285-1289 Canterbury ROAD	Service Station	Regulation under CLM Act not required	-33.93146308	151.0596348
PUNCHBOWL	Punchbowl Laundry	1375 Canterbury Road, corner Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.93170424	151.0537302
PUTNEY	Putney Marina	42-44 Belmore ROAD	Chemical Industry	Under assessment	-33.93582701	151.0562638
PYMBLE	Caltex Service Station	20 Waterview STREET	Other Industry	Under assessment	-33.8268091	151.1003966
PYMBLE	Shell Coles Express Service Station	1117 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.74102977	151.1385257
PYRMONT	Former Council Works Depot (Fig and Wattle Depot)	21 Ryde ROAD	Service Station	Regulation under CLM Act not required	-33.75198512	151.1438115
QUAKERS HILL	BP Branded Parkway (Former Caltex) Service Station Quakers Hill	14-26 Wattle STREET	Other Industry	Under assessment	-33.8752655	151.1942645
QUAKERS HILL	7-Eleven (former Mobil) Service Station	450 Quakers Hill PARKWAY	Service Station	Regulation under CLM Act not required	-33.72998613	150.9023617
QUEANBEYAN	Former Mobil Emoleum Depot	83 Lalor ROAD	Service Station	Under assessment	-33.72759077	150.8966764
QUEANBEYAN	Former Mobil Service Station	109-111 High STREET	Other Petroleum	Regulation under CLM Act not required	-35.3396115	149.237556
QUEANBEYAN	Bill Lilley Automotive	151-153 Uriarra STREET	Service Station	Under assessment	-35.34425514	149.2148687
QUEANBEYAN	Woolworths Queanbeyan Service Station	169 Crawford STREET	Service Station	Regulation under CLM Act not required	-35.35138121	149.232486
QUEANBEYAN	Former Caltex Depot	196 Crawford (Cnr Morisset St) STREET	Service Station	Regulation under CLM Act not required	-35.35163055	149.2335759
QUEANBEYAN	Caltex Depot	20-30 Railway STREET	Other Petroleum	Regulation under CLM Act not required	-35.34523	149.22333
QUEANBEYAN	BP Queanbeyan	5 Stephens ROAD	Service Station	Under assessment	-35.34615546	149.207807
QUEANBEYAN	Former BP Queanbeyan	50 Yass ROAD	Service Station	Under assessment	-35.34126641	149.2445103
QUEANBEYAN	Caltex Queanbeyan Service Station	64 Uriarra ROAD	Service Station	Under assessment	-35.34646177	149.2246263
QUEANBEYAN WEST	Caltex Service Station	88 Macquid (also known as Bungendore Rd) STREET	Service Station	Under assessment	-35.34930535	149.2438607
QUIRINDI	Tamarang Servicentre	Lanyon Dr Cnr Mcrae St (1 Suraci Place) STREET	Service Station	Regulation under CLM Act not required	-35.36372923	149.2067531
		113-117 Station STREET	Service Station	Under assessment	-31.50179204	150.6814611

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QUIRINDI	Caltex Service Station, Quirindi	199-201 George STREET	Service Station	Regulation under CLM Act not required	-31.50654793	150.6803589
QUIRINDI	Former Mobil Depot, Quirindi	4-6 Cross STREET	Other Petroleum	Under assessment	-31.49903355	150.681972
RAMSGATE	Shell Coles Express Service Station	Grand Parade cnr Ramsgate ROAD	Service Station	Regulation under CLM Act not required	-33.98537988	151.1471234
RANDWICK	Caltex Service Station	2 Alison ROAD	Service Station	Regulation under CLM Act not required	-33.9065752	151.2320697
RANDWICK	Service Station, Randwick	33-37 Carrington ROAD	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
RAVENSWORTH	Ravensthorpe Operations Narama Mine	Lemington ROAD	Other Industry	Under assessment	-32.47115903	151.0359579
RAVENSWORTH	Cumnock Colliery	Old New England HIGHWAY	Other Industry	Under assessment	-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	Under assessment	-32.76503842	151.7425264
RAYMOND TERRACE	Former Motor Registry	53 William STREET	Other Petroleum	Regulation under CLM Act not required	-32.76286473	151.7445839
REDFERN	Former Printing Works	101a Marriott STREET	Other Industry	Regulation under CLM Act not required	-33.89512556	151.2113422
REDFERN	BP Service Station	116 Regent STREET	Service Station	Regulation under CLM Act not required	-33.89367876	151.1995256
REDFERN	BP-branded Jasbe Surry Hills	411 Cleveland STREET	Service Station	Under assessment	-33.89183974	151.2132466
REVESBY	Caltex Service Station Revesby	181 The River ROAD	Service Station	Under assessment	-33.95573605	151.0171779
REVESBY	Dorf Clark Industries	184-194 Milperra ROAD	Metal Industry	Regulation under CLM Act not required	-33.93387149	151.000553
REVESBY	Mirotone Pty Ltd	21 Marigold STREET	Chemical Industry	Contamination currently regulated under POEO Act	-33.93559608	151.0002207
REVESBY	Bituminous Products	33-35 Violet STREET	Chemical Industry	Contamination currently regulated under CLM Act	-33.93702092	151.0067896
RHODES	Former Glad factory site	10-16 Marquet STREET	Chemical Industry	Regulation under CLM Act not required	-33.82884048	151.0848716
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
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 (CLM Act)	-33.82727505	151.0853195
RHODES	Homebush Bay Sediments adjoining the former UCAL and Allied Feeds sites		Chemical Industry	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.8263749	151.0839216

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RICHMOND	Caltex Richmond Service Station	98 March (Cnr East Market St) STREET	Service Station	Regulation under CLM Act not required	-33.59937996	150.7514483
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	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	Under assessment	-33.677946	150.86367
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	1042 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.78214955	150.8287656
ROOTY HILL	7-Eleven (former Mobil) Service Station	106 Rooty Hill (South) ROAD	Service Station	Regulation under CLM Act not required	-33.78036181	150.8501998
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	Former Industrial Site (Former Electroplating Facility)	108 Dunning AVENUE	Other Industry	Under assessment	-33.91630811	151.201557
ROSEBERY	Autofoil P/L	2 Mentmore AVENUE	Other Industry	Regulation under CLM Act not required	-33.91121318	151.2054882
ROSEBERY	Caltex Service Station Rosebery	321 Gardeners ROAD	Service Station	Under assessment	-33.92302898	151.2059541
ROSEBERY	Rosebery Service Station	395 Gardeners ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.92246784	151.2024589
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	Kennards Rozelle	15-39 Wellington STREET	Other Petroleum	Regulation under CLM Act not required	-33.86176757	151.1686519
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

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ROZELLE	BP Service Station	Corner Darling Street and Thornton STREET	Service Station	Regulation under CLM Act not required	-33.8591647	151.1716591
ROZELLE	White Bay Power Station	Robert STREET	Other Industry	Regulation under CLM Act not required	-33.86674636	151.1772204
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	Under assessment	-32.71262159	151.5013865
RYDALMERE	Rheem Australia	1 Alan STREET	Other Industry	Contamination formerly regulated under the CLM Act	-33.81545013	151.0295476
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
RYDALMERE	BP Service Station	265 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.8109483	151.0328101
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	Hunter Douglas	Victoria ROAD	Chemical Industry	Regulation under CLM Act not required	-33.81009112	151.0384732
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	Shell Coles Express Ryde	45 Lane Cove ROAD	Service Station	Regulation under CLM Act not required	-33.80726028	151.109981
RYDE	Ryde Bus Depot	49 - 75 Buffalo ROAD	Unclassified	Under assessment	-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	Former 7-Eleven Ramsgate	368 Rocky Point ROAD	Service Station	Contamination currently regulated under CLM Act	-33.98631668	151.135849
SANS SOUCI	7-Eleven (Former Mobil) Service Station	474 Rocky Point ROAD	Service Station	Regulation under CLM Act not required	-33.99088939	151.1333779

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
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	Kendall Street Reserve	Lawson Street and Kendall STREET	Landfill	Under assessment	-33.99966431	151.13005
SCONE	Scone Works Depot	220 Susan STREET	Other Petroleum	Regulation under CLM Act not required	-32.04444892	150.879152
SCONE	Shell Coles Express Service Station	91- 93 Kelly STREET	Service Station	Contamination currently regulated under CLM Act	-32.04715941	150.8676346
SCONE	BP - Former Depot	Scone St, Guernsey St & Susan STREET	Service Station	Contamination formerly regulated under the CLM Act	-32.04599284	150.8662046
SCONE	Mobil Scone Airport Elit	Walker Pye AVENUE	Other Petroleum	Under assessment	-32.03596733	150.8323698
SEVEN HILLS	Transport Infrastructure	1 Powers ROAD	Other Industry	Regulation under CLM Act not required	-33.77387442	150.9379787
SEVEN HILLS	Caltex Service Station	105 Station ROAD	Service Station	Under assessment	-33.77435881	150.9448733
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	BP-branded Jasbe Petroleum Service Station	156 Prospect HIGHWAY	Service Station	Regulation under CLM Act not required	-33.76906502	150.9414821
SEVEN HILLS	Australian Waste Oil Refineries	27 Powers ROAD	Other Industry	Contamination currently regulated under CLM Act	-33.77536127	150.9511122
SEVEN HILLS	Australia Post	3 Powers ROAD	Unclassified	Regulation under CLM Act not required	-33.77434009	150.9395495
SEVEN HILLS	Caltex Service Station	38 Abbott ROAD	Service Station	Regulation under CLM Act not required	-33.76692649	150.9548271
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	7-Eleven (Former BP) Service Station	298-302 Sandgate ROAD	Service Station	Regulation under CLM Act not required	-32.8861645	151.6953912
SHORTLAND	Former Lorna St landfill	8/475 Sandgate ROAD	Landfill	Regulation under CLM Act not required	-32.87888726	151.7023245
SILVERWATER	Vacant property	103-105 Silverwater ROAD	Other Industry	Under assessment	-33.83831374	151.0472576
SILVERWATER	Former Printing Facility	46-58 Derby STREET	Unclassified	Under assessment	-33.83855869	151.0478649
SILVERWATER	Storage Facility	54-58 Derby STREET	Unclassified	Under assessment	-33.83855869	151.0478649
SILVERWATER	Silverwater Landfill	Carnarvon ROAD	Landfill	Regulation under CLM Act not required	-33.83506394	151.033214
SINGLETON	Putty Saw Mill	(via Singleton) Putty ROAD	Unclassified	Contamination currently regulated under CLM Act	-32.99958725	150.7111684
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	NSW Mines Rescue Services - Singleton	6 Lachlan AVENUE	Other Industry	Under assessment	-32.54537821	151.156584

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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	Under assessment	-32.68325751	151.1206158
SINGLETON	Mobil Singleton Airport Elit	Range ROAD	Other Petroleum	Under assessment	-32.60270846	151.1944828
SMITHFIELD	Freestones	1 Hume ROAD	Other Petroleum	Under assessment	-33.83577694	150.9310112
SMITHFIELD	Liquip International	13 Hume ROAD	Other Industry	Under assessment	-33.83802635	150.9319034
SMITHFIELD	Caltex Smithfield	16-18 Tait STREET	Service Station	Regulation under CLM Act not required	-33.84596441	150.9435497
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	Under assessment	-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	Former Caltex Service Station	46-58 Schwinghammer STREET	Service Station	Regulation under CLM Act not required	-29.71128273	152.9458313
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 Service Station	Corner Pacific Highway and Charles STREET	Service Station	Under assessment	-29.70814828	152.9412928
SOUTH GRAFTON	Caltex Service Station	Pacific Hwy Cnr Gwyder HIGHWAY	Service Station	Under assessment	-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	Former Mobil Service Station	126 - 128 Union STREET	Service Station	Regulation under CLM Act not required	-28.81242175	153.267541
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	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	Caltex Service Station	1-7 Buchanan (Cnr Tweed Valley Way) STREET	Service Station	Under assessment	-28.32687988	153.4093274
SOUTH MURWILLUMBAH	Caltex Service Station	32 Lundberg DRIVE	Service Station	Under assessment	-28.33246149	153.4195721
SOUTH MURWILLUMBAH	Caltex Service Station	39-41 Lundberg DRIVE	Service Station	Under assessment	-28.33274114	153.4215186
SOUTH MURWILLUMBAH	Former Mobil Depot	45 Wardrop STREET	Other Petroleum	Under assessment	-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
SOUTH TAMWORTH	Caltex Service Station	2 Kathleen Street, corner Kent STREET	Service Station	Regulation under CLM Act not required	-31.10361712	150.9186343

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SOUTH WENTWORTHVILLE	Caltex Service Station	313 Great Western HIGHWAY	Service Station	Regulation under CLM Act not required	-33.81643692	150.9718802
SOUTH WENTWORTHVILLE	Aldi Stores Development	331-339 Great Western HIGHWAY	Metal Industry	Regulation under CLM Act not required	-33.81605854	150.9697429
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	Former Trial Bay Caltex Depot	Phillip DRIVE	Other Petroleum	Regulation under CLM Act not required	-30.89190078	153.0573056
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	Under assessment	-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 (Cnr Putarri Ave) ROAD	Service Station	Regulation under CLM Act not required	-33.73265301	151.1563899
ST IVES	Caltex Service Station	164 Mona Vale ROAD	Service Station	Regulation under CLM Act not required	-33.7307595	151.1570462
ST IVES	Shell Service Station	179-181 Mona Vale ROAD	Service Station	Contamination currently regulated under CLM Act	-33.73124859	151.1575827
ST IVES	Caltex Service Station	363 Mona Vale ROAD	Service Station	Regulation under CLM Act not required	-33.7168971	151.1735263
ST IVES	Caltex Service Station	452 Mona Vale ROAD	Service Station	Regulation under CLM Act not required	-33.70752272	151.187545
ST MARYS	Former Woolworths Service Station	120-128 Forrester ROAD	Service Station	Regulation under CLM Act not required	-33.75525115	150.7752897
ST MARYS	Chemcolour Industries Ltd	19-25 Anne STREET	Chemical Industry	Under assessment	-33.75027071	150.7725397
ST MARYS	7-Eleven (former Mobil) Service Station	2 Christie STREET	Service Station	Under assessment	-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	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	Wardoo St Cnr Forrester ROAD	Service Station	Regulation under CLM Act not required	-33.75334263	150.7755489
ST PETERS	BP Express Service Station	2 Princes HIGHWAY	Service Station	Regulation under CLM Act not required	-33.90982281	151.1809936
ST PETERS	Cooks River Rail Terminal	20 Canal ROAD	Unclassified	Regulation under CLM Act not required	-33.91943986	151.1726689
ST PETERS	Former Tidyburn Facility	53 Barwon Park ROAD	Chemical Industry	Contamination formerly regulated under the CLM Act	-33.9130091	151.1809912
ST PETERS	Former Industrial Manufacturing Facility	75 Mary STREET	Other Industry	Regulation under CLM Act not required	-33.91307297	151.1731383
ST PETERS	Candemville Park	May STREET	Other Industry	Regulation under CLM Act not required	-33.90911815	151.176951
STANMORE	125 Corunna Road	125 Corunna ROAD	Unclassified	Regulation under CLM Act not required	-33.88937382	151.1644589

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
STRATHFIELD	7-Eleven (former Mobil) Service Station	577 Liverpool ROAD	Service Station	Under assessment	-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
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 (CLM Act)	-33.84456248	151.0788116
SYDNEY OLYMPIC PARK	Woo-la-ra Landfill	Hill ROAD	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.82695807	151.07282
SYDNEY OLYMPIC PARK	Blaxland Common Landfill	Jamieson STREET	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.82638382	151.05972
SYDNEY OLYMPIC PARK	Kronos Hill Landfill	Kevin Coombes AVENUE	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.84014442	151.0649521

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SYDNEY OLYMPIC PARK	Wilson Park (Former oil gas plant site)	Newington ROAD	Gasworks	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.82633586	151.0534322
SYDNEY OLYMPIC PARK	Former Golf Driving Range Landfill	Sarah Durack AVENUE	Landfill	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.85358517	151.0713987
SYDNEY OLYMPIC PARK	Aquatic Centre Carpark Landfill	Shane Gould AVENUE		Ongoing maintenance required to manage residual contamination (CLM Act)	-33.85093439	151.0656713
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
TAHMOOR	Tahmoor Colliery	Remembrance DRIVE	Other Industry	Under assessment	-34.25090795	150.5793631
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
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
TAMWORTH	Caltex Tamworth Service Station	109 Gunnedah ROAD	Service Station	Regulation under CLM Act not required	-31.09723226	150.8955299
TAMWORTH	Kensell's Mitsubishi	11-14 Kable AVENUE	Other Petroleum	Regulation under CLM Act not required	-31.08921565	150.9273063
TAMWORTH	Curlew Crescent	19-29 Curlew CRESCENT	Metal Industry	Regulation under CLM Act not required	-31.06963607	150.9069306
TAMWORTH	Caltex Star Tamworth	21 White STREET	Service Station	Under assessment	-31.09255137	150.9341709
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	Coles Express Tamworth	251 - 253 Goonoo Goonoo ROAD	Service Station	Contamination currently regulated under CLM Act	-31.11058167	150.9236721
TAMWORTH	BP Tamworth Service Station and Depot	27-29 Gunnedah ROAD	Service Station	Under assessment	-31.09642128	150.9058193
TAMWORTH	Housing NSW	29 -33 White STREET	Other Petroleum	Regulation under CLM Act not required	-31.0915651	150.9357811
TAMWORTH	Former Mobil Service Station	373-375 Armidale ROAD	Service Station	Regulation under CLM Act not required	-31.10122679	150.9441341
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	Mobil Depot	9 Hinkler ROAD	Other Petroleum	Under assessment	-31.09584286	150.9040493
TARCUITA	Mobil Service Station	(Hume Highway) 32 Sydney STREET	Service Station	Contamination formerly regulated under the CLM Act	-35.2772942	147.73574

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TAREE	Caltex Service Station	104-106 Commerce STREET	Service Station	Regulation under CLM Act not required	-31.90720519	152.4500926
TAREE	Caltex Taree	12 Pitt STREET	Service Station	Regulation under CLM Act not required	-31.90551738	152.4783334
TAREE	Former BP Service Station (Reliance Petroleum)	150 Manning River DRIVE	Service Station	Under assessment	-31.93842026	152.4682056
TAREE	Caltex Service Station	44-46 Stevenson STREET	Service Station	Under assessment	-31.90563595	152.4640848
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
TAREE	Former Shell Depot	53-55 Stevenson STREET	Other Petroleum	Regulation under CLM Act not required	-31.90514622	152.4649706
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 SOUTH	Caltex Service Station	Corner Manning River Drive and Glenthorne ROAD	Service Station	Under assessment	-31.93842026	152.4682056
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	Caltex Service Station	114 Taren Point ROAD	Service Station	Regulation under CLM Act not required	-34.02065958	151.1218938
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	Shell Coles Express Service Station	99-103 Parraweena ROAD	Service Station	Regulation under CLM Act not required	-34.02630233	151.1200897
TAREN POINT	Mangrove Lane Cycle pathway	Mangrove LANE	Unclassified	Regulation under CLM Act not required	-34.02404025	151.1324783
TELARAH	ACIRL	5 Junction STREET	Other Industry	Regulation under CLM Act not required	-32.73457183	151.5400128
TELARAH	Former Ausgrid Depot	Green STREET	Other Industry	Regulation under CLM Act not required	-32.7276446	151.5269745
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	Under assessment	-33.9253681	151.1596532
TEMPE	Railcorp Site Renwick Street	Renwick STREET	Other Industry	Regulation under CLM Act not required	-33.91997709	151.1576058
TEMPE	Former Tempe Tip	South STREET	Landfill	Contamination currently regulated under CLM Act	-33.9255792	151.1668117
TERALBA	Teralba, Lucky's Scrap Metal	21 Racecourse ROAD	Metal Industry	Contamination currently regulated under CLM Act	-32.946805	151.61698
TERALBA	Lake Macquarie Teralba Sanitary Depot	Griffen ROAD	Landfill	Regulation under CLM Act not required	-32.9372059	151.6214528
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

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THORNLEIGH	Coles Express Service Station Thornleigh	188 - 190 Pennant Hills ROAD	Service Station	Regulation under CLM Act not required	-33.72502184	151.0850569
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
THORNTON	Energy Australia Thornton Pole Yard	55 Weakleys DRIVE	Other Industry	Regulation under CLM Act not required	-32.79973875	151.6374998
TIGHES HILL	Former Mobil Terminal	110 Elizabeth STREET	Other Petroleum	Contamination currently regulated under CLM Act	-32.90600406	151.7586907
TIGHES HILL	Holcim Australia Cement Batchling 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
TIGHES HILL	Former Ampol Depot	94 Elizabeth STREET	Other Petroleum	Regulation being finalised	-32.90658137	151.757239
TOCUMWAL	Former Mobil Depot	(Murray Street) Newell HIGHWAY	Other Petroleum	Under assessment	-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	Minnet	25 School DRIVE	Metal Industry	Contamination currently regulated under POEO Act	-32.8301553	151.7300603
TOMAGO	Balcombe Sweat Furnace	26 Laverick AVENUE	Metal Industry	Regulation under CLM Act not required	-32.82557395	151.7056416
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	BP Toronto Service Station	132 Cary (Cnr Donnelly Ave) STREET	Service Station	Regulation under CLM Act not required	-33.01144673	151.5937863
TORONTO	Coles XP (Former Mobil) Toronto Service Station	133-137 Cary (Cnr Thorne St) STREET	Service Station	Under assessment	-33.01187681	151.5930879
TORONTO	Caltex Service Station	147 Cary STREET	Service Station	Under assessment	-33.01288007	151.5928388
TORONTO	Toronto Hotel	74 Victory PARADE	Unclassified	Regulation under CLM Act not required	-33.01214835	151.5958127
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	Under assessment	-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	Under assessment	-33.30578167	151.4198083
TUMBARUMBA	Caltex Service Station	150 Albury STREET	Service Station	Under assessment	-35.77024081	147.9927182
TUMBI UMBI	Former Tumbi Landfill	140 Bellevue ROAD	Landfill	Regulation under CLM Act not required	-33.3993472	151.456471
TUMUT	Telstra Depot	26 Carey STREET	Other Industry	Under assessment	-35.29873079	148.2191122
TUMUT	CSR Railway cutting	Jepsen AVENUE	Unclassified	Regulation being finalised	-35.30422002	148.1942579
TUMUT	CSR Blue Dam	Jepsen AVENUE	Other Industry	Regulation being finalised	-35.30098337	148.1958308

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
TUROSS HEAD	Tem Inn Restaurant (abandoned UPSS)	2 Trafalgar ROAD	Service Station	Regulation under CLM Act not required	-36.05871059	150.1308443
TURRAMURRA	Woolworths (Former Mobil) Service Station	1233 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.73317594	151.1313195
TURRAMURRA	7-Eleven (former Mobil) Service Station Turramurra	1408 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.73326389	151.1264194
TURRELLA	Tulloch Australia Pty Limited	61 Turrella STREET	Chemical Industry	Contamination currently regulated under CLM Act	-33.92857213	151.1475387
TURVEY PARK	Former Mobil Depot Wagga Wagga	97 - 99 Coleman STREET	Other Petroleum	Under assessment	-35.12173871	147.3576651
TWEED HEADS	Former Mobil Quix Service Station	60 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-28.20143775	153.5445381
	Francis Street Road Reserve adjacent to 79-81 Wharf Street, Tweed Heads	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	Woolworths Plus Petrol (Woolworths Caltex Tweed Heads South)	98-102 Pacific (100 Minjungbal Drive) HIGHWAY	Service Station	Regulation under CLM Act not required	-28.20488521	153.5448675
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 WEST	Caltex Service Station	96 to 98 Kennedy DRIVE	Service Station	Regulation being finalised	-28.1871486	153.5229866
ULAN	Ulan Coal Mine	3600 Ulan ROAD	Other Industry	Under assessment	-32.25620603	149.7558075
ULLADULLA	Coles Express Ulladulla	153 Princes HIGHWAY	Service Station	Under assessment	-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	Princes Hwy Cnr Deering STREET	Service Station	Under assessment	-35.36258645	150.4727798
ULTIMO	Shell Coles Express Service Station	387-429 Wattle STREET	Service Station	Regulation under CLM Act not required	-33.88138825	151.1966791
UNANDERRA	BlueScope Stainless Steel	13 Marley PLACE	Metal Industry	Contamination currently regulated under CLM Act	-34.44959798	150.8571632
UNANDERRA	Endeavour Energy Springhill Field Service Centre	195 Five Island ROAD	Other Industry	Regulation under CLM Act not required	-34.45837706	150.8598825
UNANDERRA	Unanderra Weekend Detention Centre	34-40 Lady Penryhn DRIVE	Landfill	Under assessment	-34.4620226	150.8473821
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
UNANDERRA	Caltex Service Station	86-98 Princes HIGHWAY	Service Station	Under assessment	-34.45414951	150.845165
UNANDERRA	Veolia Environmental Services	9 Waynote PLACE	Other Industry	Regulation under CLM Act not required	-34.46042393	150.863232
URALLA	Caltex Service Station	103 Bridge STREET	Service Station	Under assessment	-30.64524911	151.4934484
URALLA	Phoenix Foundry	44 Duke STREET	Metal Industry	Regulation under CLM Act not required	-30.65093272	151.5004479
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	Former Toll Site	110A Christina ROAD	Other Industry	Under assessment	-33.87919117	150.9812193
VILLAWOOD	Former Orica Crop Care	2 Christina ROAD	Chemical Industry	Contamination currently regulated under CLM Act	-33.880329	150.9896329
VILLAWOOD	Former Defence Site	29 Biloela STREET	Landfill	Regulation under CLM Act not required	-33.88782978	150.9886275
VILLAWOOD	Former Siemens/Westinghouse	49 Mlowera ROAD	Other Industry	Contamination formerly regulated under the CLM Act	-33.87641909	150.9836746
VILLAWOOD	Former Electrical Component Manufacturer	66 Christina ROAD	Other Industry	Ongoing maintenance required to manage residual contamination (CLM Act)	-33.88018315	150.9838773
VILLAWOOD	PPG Industries	9 Birmingham AVENUE	Chemical Industry	Under assessment	-33.87800757	150.9887929
VINEYARD	Shell Coles Express Service Station	731 Windsor ROAD	Service Station	Regulation under CLM Act not required	-33.65780463	150.8753245
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 Shell Depot	11-15 Lake Albert ROAD	Other Petroleum	Under assessment	-35.12273113	147.3786005
WAGGA WAGGA	Caltex Service Station	170 Fitzmaurice STREET	Service Station	Regulation under CLM Act not required	-35.10289587	147.3679002
WAGGA WAGGA	BP Wagga Wagga	180 Edward STREET	Service Station	Under assessment	-35.11850802	147.3639619
WAGGA WAGGA	Former Dry Cleaning Facility	183 Fitzmaurice STREET	Other Industry	Under assessment	-35.10209987	147.3683852
WAGGA WAGGA	Former Iron Foundry	212-230 Hammond STREET	Metal Industry	Regulation under CLM Act not required	-35.12605478	147.4045461
WAGGA WAGGA	Former BP Service Station	31 Bourke STREET	Service Station	Regulation under CLM Act not required	-35.12626628	147.3547199
WAGGA WAGGA	Former Caltex Service Station	343 Hammond AVENUE	Service Station	Regulation under CLM Act not required	-35.12420793	147.4157959
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 Gasworks	54 Chaston STREET	Gasworks	Contamination currently regulated under CLM Act	-35.12262069	147.3482778
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 Caltex Depot	60 Lake Albert DRIVE	Service Station	Regulation under CLM Act not required	-35.12316794	147.37724
WAGGA WAGGA	Former Gasworks	Cnr Tarcutta Street and Cross STREET	Gasworks	Contamination currently regulated under CLM Act	-35.10871183	147.3737933
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 Wiradjuri landfill	Narrung STREET	Landfill	Under assessment	-35.09628532	147.3619535
WAHROONGA	7-Eleven Service Station	1579 Pacific HIGHWAY	Service Station	Under assessment	-33.71974617	151.1168106
WAHROONGA	Coles Express Wahroonga	1601 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.71945571	151.1163002
WAITARA	Caltex Service Station	59-61 Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.71064349	151.1024644

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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	Under assessment	-33.40339296	150.0855101
WALLERAWANG	Lidsdale Coal Loading Facility	Main STREET	Other Industry	Under assessment	-33.39996523	150.0737717
WALLSEND	Coles Express Wallsend East	15 Thomas STREET	Service Station	Regulation under CLM Act not required	-32.90719444	151.6693426
WALLSEND	Caltex Maryland Service Station Wallsend	41 Minmi ROAD	Service Station	Regulation under CLM Act not required	-32.88967866	151.6619253
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
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	Under assessment	-33.06139532	151.5697186
WARATAH	Waratah Area Health	Turton ROAD	Unclassified	Regulation under CLM Act not required	-32.90961233	151.7260867
WARILLA	Woolworths Petrol Warilla	43 - 57 Shellharbour ROAD	Service Station	Regulation under CLM Act not required	-34.5470966	150.863748
WARKWORTH	United Collieries	134 Jerry Plain ROAD	Other Industry	Under assessment	-32.5654356	150.9916698
WARKWORTH	Emulsion Plant, Dyno Nobel Asia Pacific Pty Ltd	186 Long Point ROAD	Chemical Industry	Under assessment	-32.5781708	151.0834387
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
WARNERS BAY	Caltex Service Station	55 King STREET	Service Station	Under assessment	-32.97418806	151.6476184
WARNERVALE	Former Timber Treatment Plant	Aldenhams and Railway ROADS	Other Industry	Contamination formerly regulated under the CLM Act	-33.24732018	151.4469037
WARRAGAMBA	Warragamba Dam Viewing Platform	Eighteenth STREET	Unclassified	Under assessment	-33.88546354	150.6024501
WARRAWONG	Caltex Service Station	75-77 King STREET	Service Station	Regulation under CLM Act not required	-34.49037817	150.888802
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
WARREN	Former Shell Depot	8 Dubbo STREET	Other Petroleum	Regulation under CLM Act not required	-31.69379262	147.8308088
WATERLOO	Diversity Waterloo	1-13 Archibald AVENUE	Other Industry	Under assessment	-33.90204305	151.2097328
WATERLOO	Proposed Construction Site	2 John STREET	Other Industry	Regulation under CLM Act not required	-33.89989686	151.2010324
WATERLOO	22-24 Archibald Avenue	22-24 Archibald AVENUE	Other Petroleum	Under assessment	-33.90263766	151.2132105
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

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
WATERLOO	Lawrence Dry Cleaners	887-893 Bourke STREET	Unclassified	Contamination currently regulated under CLM Act	-33.89897433	151.2101436
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	Shell Coles Express Service Station	64 High STREET	Service Station	Under assessment	-31.45764495	152.7315975
WAUCHOPE	Former Timber Treatment Site	Blackbutt DRIVE	Other Industry	Regulation under CLM Act not required	-31.46575645	152.7228555
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	Contamination formerly regulated under the CLM Act	-33.83637995	151.193541
WAVERTON	SRA Land	95 Bay ROAD	Unclassified	Contamination formerly regulated under the CLM Act	-33.83716728	151.1969497
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
WENTWORTH POINT	Former TNT Express	23 Bennelong PARKWAY	Other Petroleum	Under assessment	-33.83115118	151.0726636
WENTWORTH POINT	RMS Eastern Precinct	3-7 Burroway ROAD	Other Petroleum	Regulation under CLM Act not required	-33.8233882	151.0815668
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	Under assessment	-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	30a Pacific HIGHWAY	Service Station	Regulation under CLM Act not required	-33.42778813	151.3190581
WEST GOSFORD	Caltex Service Station	69-71 Pacific HIGHWAY	Service Station	Under assessment	-33.42729985	151.3214621
WEST NOWRA	Endeavour Energy Nowra Field Service Centre	20 Depot ROAD	Other Industry	Regulation under CLM Act not required	-34.88993085	150.5878854

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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 PYMBLE	West Pymble Dry Cleaners	6 Philip MALL	Other Industry	Under assessment	-33.76109009	151.1284329
WEST RYDE	JHM Property Development	2A Mellor Street STREET	Metal Industry	Under assessment	-33.81207534	151.094598
WEST RYDE	Pfizer Australia Pty Ltd	38-42 Wharf ROAD	Chemical Industry	Under assessment	-33.81021085	151.0693631
WEST RYDE	Reckitt Benckiser	44 Wharf ROAD	Chemical Industry	Under assessment	-33.81172205	151.0692752
WEST RYDE	7-Eleven (former Mobil) Service Station	917 Victoria ROAD	Service Station	Regulation under CLM Act not required	-33.80921103	151.0932917
WEST TAMWORTH	Woolworths Petrol	119 Bridge STREET	Service Station	Regulation under CLM Act not required	-31.09358262	150.9167693
WEST WOLLONGONG	Woolworths Service Station	425 Crown STREET	Service Station	Contamination currently regulated under CLM Act	-34.42637378	150.8799288
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
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
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	BOC Sydney Operations Centre	428-440 Victoria STREET	Other Industry	Regulation under CLM Act not required	-33.84400237	150.8967556
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
WETHERILL PARK	Camide Former Landfill	Newton ROAD	Landfill	Regulation under CLM Act not required	-33.83898879	150.8963813
WICKHAM	Former Warehouse	10 Dangar STREET	Unclassified	Regulation under CLM Act not required	-32.92383206	151.759761
WICKHAM	Caltex Terminal	156 Hannell STREET	Other Petroleum	Contamination currently regulated under CLM Act	-32.91520778	151.7563638
WICKHAM	Fuchs Lubricants (Australasia) Pty Ltd Wickham	2 Holland STREET	Other Industry	Under assessment	-32.9214709	151.7556928
WICKHAM	Former Wool Store Building	33 Annie STREET	Other Petroleum	Under assessment	-32.91585059	151.755215
WICKHAM	Railcorp Wickham	50 Railway STREET	Other Industry	Regulation under CLM Act not required	-32.9210433	151.7544687
WICKHAM	Former Factory	57 Annie STREET	Other Industry	Regulation under CLM Act not required	-32.91524827	151.7539893
WILBERFORCE	Former Drum Reconditioners	12-14 Box AVENUE	Other Industry	Contamination formerly regulated under the CLM Act	-33.5453884	150.8587934

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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	Under assessment	-33.92391634	151.0676256
WILLIAMTOWN	Hunter Land	38 Cabbage Tree ROAD	Other Industry	Under assessment	-32.80750069	151.8310107
WILLOUGHBY	Caltex Service Station	157 Penhur STREET	Service Station	Regulation under CLM Act not required	-33.79793513	151.1981926
WILLOUGHBY	Shell Coles Express Service Station	616-626 Willoughby ROAD	Service Station	Regulation under CLM Act not required	-33.80593769	151.1988559
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	Caltex Service Station	52 Wingham ROAD	Service Station	Under assessment	-31.86236594	152.3805752
WINGHAM	Bogas Service Station	Cnr Primrose Street and Isabella STREET	Service Station	Under assessment	-31.86833656	152.3716346
WINMALEE	Prime (Caltex supplied) (former Mobil) Winnalee Service Station	281 Hawkesbury ROAD	Service Station	Under assessment	-33.68223276	150.5997203
WIRLINGA	Former Liquid Waste Disposal Facility	704 Riverina ROAD	Unclassified	Regulation under CLM Act not required	-36.07103958	147.0193522
WOLLI CREEK	Former Ausgrid Substation 10061	13 Gertrude STREET	Other Industry	Regulation under CLM Act not required	-33.93364031	151.1543818
WOLLONGONG	Former Wollongong Gasworks	120 and 122 Smith STREET	Gasworks	Under assessment	-34.42030173	150.8906745
WOLLONGONG	Redevelopment site	33 - 39 Beatson STREET	Other Petroleum	Regulation under CLM Act not required	-34.43196083	150.8976661
WOLLONGONG	Caltex Service Station	9 Filanders STREET	Service Station	Regulation under CLM Act not required	-34.41505616	150.8932515
WOLLONGONG	Greenhouse Park	Springhill ROAD	Landfill	Under assessment	-34.44119949	150.8931764
WOLLONGONG	Wollongong Harbour Central Spur	via Endeavour DRIVE	Other Petroleum	Under assessment	-34.42066879	150.906821
WOODBURN	Caltex Service Station	129 River STREET	Service Station	Under assessment	-29.07206887	153.3409769
WOODBURN	Crown Reserve 88037 Woodburn	Pacific HIGHWAY	Landfill	Under assessment	-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	56 Clarence STREET	Service Station	Under assessment	-30.11045544	153.1904609
WOOLLAHRA	Caltex Woollahra Service Station	116 Old South Head ROAD	Service Station	Contamination formerly regulated under the CLM Act	-33.88959697	151.2553736
WOOLLAHRA	Former Service Station	20 Wallis STREET	Service Station	Regulation under CLM Act not required	-33.8901965	151.2372752

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
WOOLLAHRA	Proposed Jewish Care Centre	7 - 21 Saber STREET	Unclassified	Regulation under CLM Act not required	-33.8904055	151.2480062
WOOLLOOMMOOLOO	Former BP Service Station	2 Dowley STREET	Service Station	Contamination being managed via the planning process (EP&A Act)	-33.86940191	151.2218741
WOOLLOMIN	Woolomin Gold Rush Store	65 - 71 Nundle ROAD	Service Station	Contamination currently regulated under CLM Act	-31.30415134	151.149729
WOOLOOWARE	Caltex Service Station	100 Woollooware ROAD	Service Station	Under assessment	-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
WYONG	Wyong Bayer/Kemcon	16 Lucca ROAD	Chemical Industry	Contamination formerly regulated under the CLM Act	-33.26192339	151.4429446
WYONG	IXOM Facility	8 Pavitt CRESCENT	Other Industry	Under assessment	-33.26379108	151.4485113
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
YAGOONA	Shell Coles Express Service Station	112 Rookwood ROAD	Service Station	Regulation under CLM Act not required	-33.89856213	151.0370458
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	Sydney Water Potts Hill Complex	91 Brunker ROAD	Other Industry	Under assessment	-33.89887589	151.0289165
YALLAH	Tallawarra Power Station site	Princes HIGHWAY	Unclassified	Contamination formerly regulated under the CLM Act	-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

Suburb	Site Name	Site Address	Contamination Activity Type	EPA Management Class	Latitude	Longitude
YASS	Caltex Service Station	1715 Yass Valley Way	Service Station	Regulation under CLM Act not required	-34.80708856	148.8824228
YASS	Caltex Service Station	228 Comur STREET	Service Station	Regulation under CLM Act not required	-34.84440036	148.9140179
YASS	Former Mobil Depot Yass	54-58 Laidlaw STREET	Service Station	Contamination currently regulated under CLM Act	-34.83227507	148.9069678
YASS	Former Gasworks	Dutton STREET	Gasworks	Contamination currently regulated under CLM Act	-34.83982614	148.9060029
YENNORA	Former Caltex Service Station	137-141 Fairfield STREET	Service Station	Regulation under CLM Act not required	-33.86824768	150.9706137
YENNORA	Spicer Axle Australia Manufacturing Facility	205-231 Fairfield ROAD	Other Industry	Regulation under CLM Act not required	-33.8555114	150.9579167
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
YOUNG	Former Shell Depot	166 Nasmyth STREET	Other Petroleum	Regulation under CLM Act not required	-34.31025192	148.2931008
YOUNG	Mobil Depot	186 Nasmyth STREET	Other Petroleum	Contamination currently regulated under CLM Act	-34.30954389	148.2908476
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	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	Zetland, Goodrich Control Systems site	84 - 92 Epsom ROAD	Other Industry	Under assessment	-33.91025707	151.2078048

APPENDIX E

COUNCIL RECORDS

Frances Kuipers

From: Jacqueline Shephard <jackie.shephard@penrith.city>
Sent: Thursday, 2 November 2017 9:44 AM
To: Frances Kuipers
Subject: GIPA request your ref: 14130/1
Attachments: LOt 111 DP1035909 Blaikie Rd Jamisontown.pdf

Our Ref: 8090260
Contact: Jackie Shephard
Telephone: 02 47 327732

Ms Frances Kuipers
Geotechnique Pty Ltd
PO Box 880
PENRITH NSW 2751

2 November 2017

Dear Ms Kuipers

I refer to your application, under the Government Information (Public Access) Act, 2009 (GIPA Act) requesting access to information regarding, Lot 111 DP1035909 121-133 Blaikie Road (cnr Pattys Place) Jamisontown.

I have on 2 November 2017, determined to provide access to the information sought in your access application (copies enclosed) under s. 58(1) (a) of the GIPA Act.

I can be contacted on 47327732 or email jackie.shephard@penrith.city should you require further information on this matter.

Regards

Jacqueline Shephard
Right to Information Officer

E jackie.shephard@penrith.city
T +612 4732 7732 | F +612 4732 7958 |
PO Box 60, PENRITH NSW 2751
www.visitpenrith.com.au
www.penrithcity.nsw.gov.au

PENRITH
CITY COUNCIL



Follow us

Our Ref: JC:TA:778893
Contact: Mr Julian Clark
Telephone: (02) 4732 7553

14 January, 2005



Dear Sir/Madam

**NOTICE OF INTENTION TO SERVE ORDER
ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979
SECTION 121(b) & 121 (h)**

An inspection by a Council Officer has revealed conditions of consent for regrading and land filling (DA 02/0518), are not being complied with. If you do not comply with the conditions listed below within **twenty-one (21) days**, Council intends to serve an Order under the *Environmental Planning and Assessment Act, 1979*.

This Notice has been prepared in accordance with the requirements of Section 121 (h) of the Environmental Planning and Assessment Act, 1979. The order will relate to order 1 in Table 121(b) of that Act. The details of that order will be:

Situation to which the proposed Order will refer:

Lot 111 DP 1035909 (No. 121-133) Blaikie Road, Jamisontown.

The required work to be performed is:

- 1. To comply with condition 3 of DA 02/0518 and provide evidence of your approval to enter adjoining properties to carry out works on your site.**
- 2. To comply with conditions 9 and 10 of DA 02/0518 and submit a validation report for fill material that has been imported onto your property.**

The circumstances that require the work to be performed:

Development Consent (DA 02/0518) was granted for the regrading and filling of the subject site subject to various conditions. I have outlined the conditions that are currently not being complied with below.

- 1. Condition 3 states "Documentary evidence of approval to enter adjoining properties to carry out works is to be provided to Council prior to the commencement of any works."**

Our records show that you have not provided the necessary documentary evidence.

2. Condition 9 states "No fill material is to be imported to the site without prior approval of Penrith City Council in accordance with Sydney Regional Environmental Plan No. 20 (Hawkesbury Nepean River) (No. 2 1997). No recycling of material for use as fill material on the site shall be carried out without the prior approval of Council."

Our records show that you have not obtained prior approval of Council before importing fill material.

3. Condition 10 states "No fill material shall be imported to the site until such time as a Validation Report for the fill material has been submitted to, considered and approved by Council. The Validation Report shall:

- ⇒ Be prepared by an appropriately qualified person (as defined in Penrith Contaminated Land Development Control Plan),
- ⇒ Provide details of the volume of fill material to be used in the filling operations,
- ⇒ Provide a classification of the fill material to be imported to the site in accordance with the Environment Protection Authority's "Environmental Guidelines: Assessment, Classification & Management of Non-Liquid Wastes" 1997, and
- ⇒ (based on the fill classification) determine whether the fill material is suitable for its intended purpose and land use and whether the fill material will or will not pose unacceptable risk to human health or the environment.

No fill material shall be imported to the site until such time as Council has approved the Validation Report and Council has formally advised of its approval of the submitted Validation Report.

On completion of the filling operations on the site, the person who issued the Validation Certificates for the fill material shall certify, by way of a Compliance Certificate or other written documentation that the fill material placed on the site is Virgin Excavated Natural Material in accordance with this condition. The Compliance Certificate or other written documentation and the Validation Certificates shall be submitted to the Principal Certifying Authority and Council. If the Principal Certifying Authority or Penrith City Council is not satisfied that suitable fill materials have been used on the site, further site investigations or remediation works may be requested. In these circumstances, the works shall be carried out prior to any further approved works occurring."

Our records show that you have not obtained prior approval of Council before importing fill material.

The proposed period for compliance with the Order is twenty one (21) days. You may, within eighteen (18) days from the date of this notice, make representations regarding the need for an Order or as to the terms of or period for compliance with the Order. Representations can be made verbally or in writing by or on your behalf in the following ways:

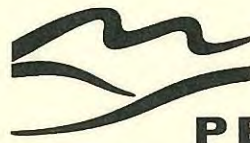
1. Directly at Council's Civic Centre main counter;
2. In writing addressed to: The General Manager, PO Box 60, Penrith, 2751.



Julian Clark

Environmental Compliance Officer

Should you have any further enquiries regarding this matter please contact me on the above number during normal business hours.



PENRITH VALLEY
River Mountains Lakes

DETERMINATION OF DEVELOPMENT APPLICATION

P E N R I T H C I T Y C O U N C I L

DESCRIPTION OF DEVELOPMENT

DA No. DA02/0518
Description of development REGRADING AND LAND FILLING

DETAILS OF THE APPLICANT

Name JOHN BROWN PARTNERS
Address DX 8024
PENRITH

NOTES

1. Your attention is drawn to the attached conditions of consent in attachment 2 and the timing requirements for these conditions in attachment 1.
2. You should also check if this type of development requires a construction certificate in addition to this development consent.
3. It is recommended that you read the Advisory Note enclosed with this consent.

DETAILS OF THE LAND TO BE DEVELOPED

Street No.	121
Street name	Blaikie Road
Suburb	Jamisontown
Lot No.	L111
DP/ SP	DP/1035909

DECISION OF CONSENT AUTHORITY

In accordance with Section 81(1)(a) of the Environmental Planning and Assessment Act 1979, consent is granted subject to the conditions listed in attachment 2 & the time frame for condition implementation in attachment 1.

Date from which consent operates	20 May 2003
Date the consent expires	20 May 2005
Determination Date	20 May 2003

Please note that this consent will lapse on the expiry date unless the development has commenced in that time.

REVIEW OF DETERMINATION & RIGHTS OF APPEAL

1. The applicant may request Council to review its determination pursuant to Section 82A of the Environmental Planning and Assessment Act 1979 within 12 months of receiving this Notice of Determination.
You cannot make this request if the development is Designated Development, Integrated Development, or State Significant development.
2. The applicant can appeal against this decision in the Land and Environment Court within 12 months of receiving this Notice of Determination.
You cannot appeal if a Commission of Inquiry was held for the subject development application, or if the development is a State Significant Development.
3. Right of Appeal if the application was for Designated Development
If a written objection was made in respect to the Application for Designated Development, the objector can appeal against Council's decision to the Land and Environment Court within 28 days after the date of this Notice. The objector cannot appeal if a Commission of Inquiry was held.
If the applicant appeals against Council's decision, objector(s) will be given a notice of the appeal and the objector(s) can apply to the Land and Environment Court within 28 days after the date of this appeal notice to attend the appeal and make submissions at that appeal.

REASONS

The conditions in the attached schedule have been imposed for the following reasons:

- To ensure compliance with the terms of the relevant Planning Instrument.
- To ensure that no injury is caused to the existing and likely future amenity of the neighbourhood.
- Due to the circumstances of the case and the public interest.
- To ensure that adequate road and drainage works are provided.
- To ensure that satisfactory arrangements are made to satisfy the increased demand for public recreation facilities.
- To ensure that access, parking and loading arrangements will be made to satisfy the demands created by the development.
- To ensure the structural integrity of the development.
- To ensure the protection of the health and safety of the occupants of the development.

REC

POINT OF CONTACT

If you have any questions regarding this consent you should contact:

Assessing officer

PETER WOOD

Contact telephone number

(02) 4732 7577

SIGNATURE

Name

PETER WOOD

Signature

For the Building Approvals and Environment Protection Manager

ATTACHMENT 1: TIME FRAME FOR CONDITIONS

TIME FRAME	CONDITION NO.
To be completed prior to the issue of Construction certificate	
To be completed prior to commencement of construction	3, 4, 6, 17
Matters to be complied with during construction	2, 8, 12, 13, 14
To be completed after construction works	5, 7, 15, 16, 18
Note: some conditions may not be listed in the table as they are operational or do not have a time constraint.	

ATTACHMENT 2: CONDITIONS OF CONSENT

GENERAL

- 1 The development must be implemented substantially in accordance with the plans numbered 31696FILLDASH1A & 2A, drawn by John Brown Partners and dated 17 March 2003, and stamped approved by Council, the application form and any supporting information received with the application, except as may be amended in red on the attached plans and by the following conditions.

{Note: Prescribed conditions under the Environmental Planning and Assessment Regulation 2000 as amended will apply to building and subdivision work commencing/approved on 1 July 2003.}
- 2 All construction works shall be carried out strictly in accordance with Penrith City Council's Engineering Works Development Control Plan and accompanying Guidelines for Engineering Works for Subdivisions and Developments Part 2-Construction.
- 3 Documentary evidence of approval to enter adjoining properties to carry out works is to be provided to Council prior to the commencement of any works.
- 4 A Vegetation Management Plan (VMP) as defined by Sydney Regional Environmental Plan No.20 - Hawkesbury Nepean, and recommending suitable plantings of endemic vegetation to protect water quality and ensure the bank areas of the wetland are adequately stabilised, is to be submitted to Council for consideration and approval prior to commencement of works.
- 5 The Vegetation Management Plan required to be submitted by Condition No.4 is to be implemented in accordance with the recommendations of that plan within 12 months of the commencement of works. Documentation from the person/s preparing the Vegetation Management Plan demonstrating compliance with this requirement is to be submitted to Council within 12 months of commencement of works.

ENVIRONMENTAL MATTERS

- 6 Erosion and sediment control measures shall be installed prior to the commencement of works on site including approved clearing of site vegetation, and maintained in accordance with the approved erosion and sediment control plan(s) for the development and the Department of Housing's "Managing Urban Stormwater: Soils and Construction" 1998.

{Note: To obtain a copy of the publication, you should contact the Publications Officer, Housing Production Division, Department of Housing on (02) 9821 6092.}

The erosion and sediment control measures shall be certified (by way of a Compliance Certificate) as having been installed in accordance with the approved erosion and sediment control plan(s) for the development and "Managing Urban Stormwater: Soils and Construction" 1998. The Compliance Certificate shall be obtained and issued a minimum 2 days before works are to commence on site.

The approved sediment and erosion control measures are to be installed prior to and maintained throughout the construction phase of the development until the landscaping required by the Vegetation Management Plan has been completed for the development and the remaining land that was subject to the works, have been stabilised and grass cover established. These

measures shall ensure that the tracking of mud and soil deposits from the site does not occur during the construction of the development.

- 7 All land that has been disturbed by earthworks and not subject to the Vegetation Management Plan is to be spraygrassed or similarly treated to establish a grass cover.
- 8 The bulk earthworks are to be conducted in accordance with the Preliminary Geotechnical Recommendations of the Preliminary Contamination Assessment and Geotechnical Investigation report prepared by GeoEnviro Consultancy Pty Ltd and dated February 2002. In this regard an appropriately qualified consultant is to oversee and provide a final report validating the work upon completion which is to include:
 - Removal of unsuitable materials on site and disposal in accordance with Condition No. 12;
 - All materials to be exported off the site to be tested and categorised in accordance with the appropriate NSW Environment Protection Authority Guidelines;
 - Asbestos material managed in accordance with Workcover requirements;
 - Documentary evidence of unsuitable materials, excavation, lawful transport and disposal;
 - Validation that the site will not pose any risk to human health or the environment.
- 9 No fill material is to be imported to the site without the prior approval of Penrith City Council in accordance with Sydney Regional Environmental Plan No.20 (Hawkesbury-Nepean River) (No.2-1997). No recycling of material for use as fill material on the site shall be carried out without the prior approval of Council.
- 10 No fill material shall be imported to the site until such time as a Validation Report for the fill material has been submitted to, considered and approved by Council. The Validation Report shall:
 - * be prepared by an appropriately qualified person (as defined in Penrith Contaminated Land Development Control Plan),
 - * provide details of the volume of fill material to be used in the filling operations,
 - * provide a classification of the fill material to be imported to the site in accordance with the Environment Protection Authority's "Environmental Guidelines: Assessment, Classification & Management of Non-Liquid Wastes" 1997, and
 - * (based on the fill classification) determine whether the fill material is suitable for its intended purpose and land use and whether the fill material will or will not pose unacceptable risk to human health or the environment.

No fill material shall be imported to the site until such time as Council has approved the Validation Report and Council has formally advised of its approval of the submitted Validation Report.

On completion of the filling operations on the site, the person who issued the Validation Certificates for the fill material shall certify, by way of a Compliance Certificate or other written documentation that the fill material placed on the site is Virgin Excavated Natural Material in accordance with this condition. The Compliance Certificate or other written documentation and the Validation Certificates shall be submitted to the Principal Certifying Authority and Council, if Council is not the Principal Certifying Authority prior to the [issue of the Occupation Certificate for the development. / Subdivision Certificate./ release of the linen plan.] Delete if not applicable If the Principal Certifying Authority or Penrith City Council is not satisfied that suitable fill materials have been used on the site, further site investigations or remediation works may be requested. In these circumstances, the works shall be carried out prior to any further approved works occurring.
- 11 Where a building is to take place on any land that is to be filled, such filling is to be compacted appropriately prior to any construction work being carried out.
- 12 All excavated material or waste generated as a result of the development that cannot be re-used

or recycled shall be disposed of at a Council approved site or waste facility. Details of the proposed disposal location of all excavated material from the development site shall be provided to the Principal Certifying Authority prior to works commencing.

CONSTRUCTION

- 13 Stamped plans and a copy of the development consent and any other Certificates to be relied upon shall be available on site at all times during construction.

Signage but not more than 2 signs are to contain the following details:

- * the name of the Principal Certifying Authority, their address and telephone number,
- * the name of the person in charge of the work site and telephone number at which that person may be contacted during work hours,
- * that unauthorised entry to the work site is prohibited,
- * the designated waste storage area must be covered when the site is unattended, and
- * all sediment and erosion control measures shall be fully maintained until completion of the construction phase.

The signage but no more than 2 signs stating the above details is to be erected:

- * at the commencement of, and for the full length of the, construction works onsite, and
- * in a prominent position on the work site and in a manner that can be easily read by pedestrian traffic.

All construction signage is to be removed on completion of earthworks or construction works and when a Compliance Certificate has been issued by the Principal Certifying Authority certifying that the development has complied fully with the development consent and, where required, been constructed in accordance with the Construction Certificate.

- 14 Subdivision or construction works that are carried out in the open that involve the use of heavy vehicles, heavy machinery and other equipment likely to cause offence to adjoining properties shall be restricted to the following hours in accordance with the NSW Environment Protection Authority Noise Control Guidelines:

- * Mondays to Fridays, 7am to 6pm
- * Saturdays, 7am to 1pm (if inaudible on neighbouring residential premises), otherwise 8am to 1pm
- * No work is permitted on Sundays and Public Holidays.

Other construction works carried out inside a building/tenancy and do not involve the use of equipment that emits noise are not restricted to the construction hours stated above.

The provisions of the Protection of the Environment Operations Act, 1997 in regulating offensive noise also apply to all construction works.

ENGINEERING

- 15 After completion of all the engineering works, Work-as-Executed Drawings and Certificates are to be submitted to the Principal Certifying Authority in accordance with Penrith City Council's Engineering Works Development Control Plan and Guidelines for Engineering Works for Subdivisions and Developments - Part 1 Design and Part 2 Construction. A copy of Work-as-Executed Drawings and Certificates are also to be submitted with Penrith City Council, if Council is not the Principal Certifying Authority.

- 16 As part of the Work-as-Executed Drawings, details of all fill placed on the site is to be indicated on a contoured fill plan. These details must show, by various shadings or cross-hatchings, the depth of any fill within 0.3m depth ranges.

CERTIFICATION

- 17 Prior to the commencement of any earthworks or construction/demolition works on site, the proponent is to:

(a) employ a Principal Certifying Authority to oversee that the said works carried out on the site are in accordance with the development consent issued for the approved development, and with the relevant provisions of the Environmental Planning and Assessment Act and accompanying Regulation, and

(a) submit a Notice of Commencement to Penrith City Council.

The Principal Certifying Authority shall submit to Council an "Appointment of Principal Certifying Authority" in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.

{Note: As from 1 July 2003, if Penrith City Council is to be appointed as the Principal Certifying Authority (PCA) for the development, then the proponent is to formally appoint Council as the PCA. You should contact Council's Building Approvals and Environment Protection Department on (02) 47327991 to commence the procedures for appointing Council as the PCA.}

Information to accompany the Notice of Commencement

Two (2) days before any earthworks are to commence on site (including the clearing site vegetation), the proponent shall submit a "Notice of Commencement" to Council in accordance with Section 81A of the Environmental Planning and Assessment Act 1979.

The following documentation shall accompany the "Notice of Commencement" to be submitted to Penrith City Council:

* A Compliance Certificate certifying that sediment and erosion control measures has been installed in accordance with condition No.6.

- 18 On completion of the earthworks, a Compliance Certificate is to be obtained from the Principal Certifying Authority certifying compliance that all conditions of the development consent required to be met has in fact been met. The Certificate shall not be issued if any conditions of this consent, but not the conditions relating to the operation of the development, are outstanding.

A copy of the Compliance Certificate and all necessary documentation supporting the issue of the Certificate is to be submitted to Penrith City Council, if Council is not the Principal Certifying Authority.

{Note: As from 1 July 2003, an Occupation Certificate will be required for Class 1 and 10 buildings before the building can be occupied. This is the date when the "Building Legislation Amendment (Quality of Construction) Act 2002" comes into effect.}

Name

PETER WOOD

Signature

For the Building Approvals and Environment Protection Manager



Delegate's Report

Development Application No. DA02/0518

I have considered the report prepared on this matter and the recommendation contained therein, and pursuant to the delegated authority granted by the General Manager (pursuant to Section 378 of the Local Government Act 1993) on 4 September 1998 (Minute No. 844) the application is -

Determined in accordance with the recommendation.



Determined contrary to the recommendation.



Referred to Council for determination.



Name of Delegate

Surinder Singh

Signature of Delegate



Date of Determination

20.05.03

I have reviewed the details of this application, and Council's requirements, and also certify that -

Section 94 contributions are not applicable to this development.

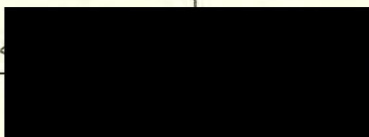


Section 94 contributions are applicable to this development, and the contributions calculated by the reporting officer attached to this certification are true and correct and have been properly incorporated as conditions to the consent to be issued by Council.



Name of Delegate

Signature of Delegate



Date of Determination

Determination of the Development Application is to be advertised under Section 101 Environmental Planning and Assessment Act 1979.



Delegate's report 040400

DEVELOPMENT ASSESSMENT DA02/0518

Applicant:	John Brown Partners PO Box 259 Penrith 2751
Development Site:	Lot 111 DP1035909 121 Blaikie Road (Corner Patty's Place), Jamisontown
Proposal:	Proposed filling of existing depression adjoining the north-west boundary.
Owner:	
Zoning:	4(b) Special Industry
Relevant Planning Instruments:	Penrith Industrial LEP 1996 SREP 20 Hawkesbury Nepean
Relevant Codes/Policies	Industrial DCP 1996 Contaminated Lands DCP Notification and Advertising DCP
Definition of Use:	Site Filling
Permissibility:	Permissible with consent in 4(b) zone and requires Council consent under SREP 20.
Public Notice:	Notification and Advertising DCP requires 14 day notification to affected persons for landfill or earthworks unless they are minor with no effects on adjoining land. The application as amended has not been notified as it has demonstrated, in particular through the flood study, that there would be no impact on adjoining lands. In addition the average depth of fill is only minimal at around 1m.
Referrals:	Development Services Engineer – No objections subject to conditions Senior Environmental Officer – Concerns regarding Filling of Wetland area, - Flora/Fauna, Geotech submissions adequate.

Site

The subject land is trapezoidal in shape with a frontage to Patty's Place (south-east boundary) of 187.205m, a frontage to Blaikie Road (north-east boundary) of 128.985m and a total area of 2.244 Hectares. The eastern part of the site is generally level however the land slopes down towards the north-west boundary where approximately 20m from this boundary it falls at an average grade of 1:4 before levelling out to form a depression which continues within adjoining properties to the south and west.

The land has previously been used for agricultural purposes with the existing watercourse within the depression being dammed. This depression is at times inundated with ponding water and is therefore defined as a wetland as confirmed by the submitted flora and fauna assessment and by advice from the Department of Land and Water Conservation.

Proposal & Background

The application proposes the introduction of fill to the existing depression occupying an area of approximately 4,700m² adjoining the north-west boundary of site. The original plans submitted proposed regrading and filling of approximately 75% of the site in two stages as follows:

Stage 1: Filling most of the site at a depth of between 0-2m above existing ground level to within 5m of the north-west boundary with a 1:5 batter and the majority of fill within the existing depression;

Stage 2: Construction of a 2m boundary retaining wall for the length of the north-west and part of the south-west boundary and continuation of filling to these boundaries and at a depth of 2m above existing ground level.

The application included submission of a Contamination Assessment and Geotechnical Investigation Report and a Flood Impact Assessment Report. Council raised the following concerns in response to the submitted application:

- The proposed retaining wall and fill within the wetland area is inconsistent with the objectives and provisions of Penrith Industrial LEP and DCP relating to environmental considerations and urban design;
- The proposal is inconsistent with the strategies of SREP No.20 – Hawkesbury Nepean relating to the protection and enhancement of wetlands;
- The proposal is inconsistent with development to the south in terms of setback from the wetland area;
- The fill proposal should be justified in terms of an overall development proposal for the site which indicates desired finished levels, setbacks and drainage proposed.

In response to these concerns, several meetings with and requests from Council, the applicant has submitted flora and fauna assessment reports and a series of amended plans. The current proposal has deleted the stage 2 retaining wall and proposes filling with a 1:5 average grade batter 3m wide to the north-west boundary and a transition to a 6m wide batter to the south-west boundary, adjoining the existing setback to the south.

Key Issues

The proposal has been assessed against the relevant planning instruments and other heads of consideration pursuant to Section 79C of the EP & A Act, 1979 and the following key issues have emerged:

1. Statutory Requirements - SREP 20, Industrial LEP 1996, Industrial DCP.
2. Drainage Considerations;
3. Flora & Fauna Assessment
4. Potential Site Contamination;

Response to Key Issues

Statutory Requirements

SREP 20 – Hawkesbury Nepean

This plan applies to the subject land being within the Hawkesbury-Nepean Catchment. The proposed filling requires consent under this plan as the depth of proposed fill may marginally exceed 1m and it is proposed over an area far greater than 100m². SREP 20 defines a wetland as:

An area with characteristics of both terrestrial and aquatic environments that is flooded or waterlogged often enough to support aquatic or other plants typical of areas with those characteristics.

The flora and fauna assessment report identified plant species namely reeds and floating plants within the low-lying area as distinct from the surrounding dryer areas. Given this and that the land is inundated at times the depression is defined as a wetland.

This plan provides specific planning policies and recommended strategies for environmentally sensitive areas which include wetlands as well as flora and fauna strategies for wetlands. The subject land is not identified as containing a wetland of regional significance by the map to this plan and it is recognized that the wetlands have been artificially created from a watercourse. The most relevant strategies of the plan to the subject land are therefore the following flora and fauna strategies:

- Consider the desirability of protecting any wetlands of local significance which are not included on the map;
- Consider the desirability of protecting or, if necessary, actively managing constructed wetlands if they have significant conservation values or make a significant contribution to improvements in water quality.

The flora and fauna assessment submitted has demonstrated that the wetland area does not contain quality habitat for threatened species of flora and fauna and no threatened species were observed. The flood impact assessment has also demonstrated that the existing depression on the subject property does not play a drainage function such that proposed filling of the depression will hinder the drainage capacity of the site or

upstream properties. It can therefore be concluded that the local significance of the wetland on the subject property is limited.

It is evident however from inspection of the site on various occasions that the wetland is more prominently inundated towards the south-west boundary and on land adjoining to the south. It also plays a hydrological function on land adjoining the subject property to the south in terms of stormwater detention and disposal. To this extent the wetlands on the southern part of the site and the adjoining land to the south are of greater local significance and their protection is desirable in accordance with the abovementioned strategies.

The proposed transition in the extent of fill and battered embankment to boundaries now proposed is considered to have regard to remaining wetland on the property and adjoining lands. It also provides an opportunity to establish vegetation to ensure for the protection and enhancement of water quality entering the remaining wetland area, in accordance with SREP 20's strategies for wetlands.

Industrial LEP 1996

The land is zoned 4(b) – Special Industry under this plan in which zone site filling is permitted with the consent of Council which is consistent with SREP 20. The relevant aims and objectives of the plan and zone relate to promoting development which minimises adverse environmental impact and observes sound environmental management practices. A relevant zone objective is also to promote development which makes efficient use of industrial land.

The proposed filling can be consistent with these objectives given the limited local significance of the wetland on the property and subject to specific conditions requiring a suitable edge to the remaining wetland area. The proposal is inherently consistent with the objective to make efficient use of industrial land which would otherwise be precluded by the wetland. Special provisions of this plan also relevant to the objectives are environmental considerations and drainage including:

- Potential impact on adjoining rural land by water pollution;
- The effect on water quality through sedimentation and control measures proposed;
- The need for site rehabilitation or remediation measures;
- Water quality and quantity.

As the proposed development can be drained via Blaikie Road impact on water quality and quantity entering the wetlands is minimised. This relates to the future development of the site however and its filling alone would not incorporate such drainage. The wetlands would therefore be susceptible to overland flow from the site in the interim.

Council's Senior Environment Officer has advised that a native vegetation corridor of 10m in accordance with DLWC recommendations is preferred between the wetland and development on the site. Where a lesser setback is proposed consistent with adjoining developments to the south i.e. less than 5m to the top of bank, unavoidable disturbance to the bank of the wetland would occur. It would then be necessary to require a rehabilitation plan prior to any works commencing to ensure the bank areas of the wetland are adequately rehabilitated and restabilised.

The proposal now before Council would replace the existing banks such that a rehabilitation plan for these areas is no longer applicable. The same objectives could be achieved however through the adoption of a Vegetation Management Plan as defined by SREP 20 which specifically relates to its strategies for wetlands.

The following measures are therefore recommended as **conditions** of approval:

- Submission and implementation of a Vegetation Management Plan as defined by SREP 20 (to be submitted for consideration and approval prior to the commencement of works), to ensure the bank areas of the wetland are adequately rehabilitated and restabilised through planting of endemic vegetation;
- Provision of soil erosion and sediment control measures in accordance with the approved plan (standard D001).

Industrial DCP 1996

The environmental management provisions of the DCP for water quality and drainage are relevant. These matters have been considered and are addressed under LEP provisions and the following section. The land is located within an "Area of Scenic or Visual Importance" under the DCP being land which can be viewed from the Blue Mountains Escarpment and the M4 gateway entry to the city. The implications primarily relate to the built form however the DCP requires additional setbacks and landscaping in these areas.

The proposal now proposes an embankment with an average grade of 1:5 and varying in width from 3 – 6m. This provides for some landscaping as associated with the fill proposal however it is suggested that this should not necessarily define the setback from the north-west boundary for any future industrial development.

In order to meet these requirements of the DCP, the proposal has been amended to provide a transition in setback from the north-west boundary to be compatible visually with that of adjoining setbacks to the south. To ensure however that the fill alone presents a high visual quality as an edge to the wetland and in conjunction with the approved landscaping edge for the site to the south, landscaping along this edge is recommended. This should incorporate endemic screen and wetland plantings in and can be achieved the required Vegetation Management Plan.

Drainage Considerations

The application is supported by a Flood Impact Assessment report prepared by Cardno Willing. This report finds that drainage across the existing site is in a westerly direction to the natural low points forming a "gully" with outflows occurring under the M4 motorway via drainage culverts to Schoolhouse Creek.

The report provides an assessment of the fill proposal against Council's Interim Flood Policy and concludes that the filling of flood prone land on the site would not lead to any local drainage problems, providing that the drainage works for the future development is connected to the existing street system.

Development Consent No. 01/3458 has been operated, completing road construction and drainage works along Patty's Place and Blaikie Road to permit the drainage of this site to these roads as required. Council's Senior Development Engineer has assessed the current proposal and has no objection subject to conditions.

Flora & Fauna

In order to fully assess the significance of the existing wetland on the site Council requested submission of a flora and fauna assessment. The report as amended and

prepared by Conacher Travers characterised the site as disturbed land and wetland. It found emergent reeds and floating plants both native and exotic with no significant weed species within the wetland areas.

A number of native birds, mammals, amphibians and reptiles were recorded present on the site. The report included an 8-part test and concluded that habitat values are limited and of low quality for threatened flora or fauna species which were not recorded on the site and the vegetation is not similar to any native vegetation type or community listed as an endangered ecological community.

Council's Senior Environment officer has advised that although the report indicates there will be no significant effect on threatened species, the provisions of SREP 20 regarding the enhancement and protection of wetlands still apply. To this extent the recommended Vegetation Management Plan is aimed at providing for improved habitat adjoining the wetland.

Potential Site Contamination

The application included submission of a Preliminary Contamination Assessment and Geotechnical Investigation report prepared by GeoEnviro Consultancy which tested several sample locations on site. This assessment found unsuitable fill material existed on the site including bricks, concrete and bonded asbestos pieces which must be removed and disposed of appropriately. Council's Senior Environment Officer has reviewed this report and recommended that an estimation of the volume of unsuitable materials to be removed should be provided prior to the works commencing. In addition they have recommended that the recommendations of the report be incorporated as a **condition** of approval.

It is noted that additional fill has been placed on the property since the Preliminary Contamination Assessment was undertaken and it is understood that this material has been excavated from the basement of the adjoining Homemaker centre development to the south. As per the Senior Environment Officer's recommendation a **condition** is recommended that all fill materials imported to the site require validation in accordance with Council's contaminated land DCP (standard condition D007 amended).

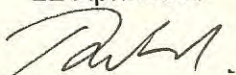
Conclusion

The application as submitted had no regard to the visually scenic importance of the site, compatibility with adjoining development, rural lands and the existing wetland. The amended application has evolved to propose a transition to adjoining development and encroachment on the wetland. The wetland on the site has been demonstrated through flooding and flora/fauna reports to be of limited local significance. It is therefore considered that the proposal can achieve the objectives and meet the provisions of SREP 20, Penrith Industrial LEP and DCP by incorporating landscaping in accordance with the recommended Vegetation Management Plan. Given this and the industrial zoning of the entire site, the amended application is considered worthy of support.

Recommendation

That the application be approved subject to the recommended conditions attached.

Peter Wood
Environmental Planner
22 April 2003



PENRITH CITY COUNCIL

City Centre, 601 High Street, Penrith 2750 • PO Box 60, Penrith 2751
Phone 02 4732 7777 • Fax 02 4732 7879 • Email pencit@penrithcity.nsw.gov.au • DX 8017 Penrith



INTERNAL USE ONLY

Fees	\$320.00	Receipt Date	12.3.02
Receipt No.	2048621	Application No.	02/0518

TYPE OF APPROVAL(S) (note 1)

- ☒ Development consent
☐ Subdivision
☐ Designated development
☐ Integrated development
 (nominate approval body below)

- ☐ Building construction certificate
☐ Engineering construction certificate
☐ Complying development certificate
☐ Subdivision certificate
☐ Approval under Section 68 of the Local Govt. Act
 (nominate approval below)

☐ Extension of development consent

☐ Modify a consent and or construction certificate
 (See Note 1 – Type of Approval/Modification)

DESCRIPTION OF PROPOSAL

REGRADING + FILLING. SEE STATEMENT OF ENVIRONMENTAL
 EFFECTS FOR MORE DETAILS

Total cost of proposal including GST \$ 50,000

PROPERTY DESCRIPTION

Address	121 BLAIKIE ROAD		
	JAMISONTOWN		
Lot & DP / SP	LOT 111 D.P. 1035909	(778893)	

APPLICANTS DETAILS

Name(s)	JOHN BROWN PARTNERS			
Address	DX 8024			
Suburb	PENRITH	Postcode		
Phone No.		Mobile No.		Fax No.
Contact	COLIN FOULDS	Applicant's signature		

BUILDERS DETAILS

Name(s)				
Address				
Suburb		Postcode		
Phone No.		Mobile No.		Fax No.
Licence No.				

APPLICATION FORM



OWNERS DETAILS (note 2)

Name(s)

Address

Suburb

Phone No.

Signature(s) of **all** owners to give consent to the lodgement of this application.

MATERIALS SCHEDULE

Gross floor area of new and existing buildings

Wall construction material

Floor construction material

Roof construction material

Frame construction material

Swimming pool construction materials

How many storeys does the building have

If residential development, how many dwellings are proposed

SEPTIC TANK DETAILS

If you require approval under Section 68 of the Local Government Act for a septic tank you are required to supply the following information and provide detailed plans and specifications.

☐ Aerated system

☐ Site disposal system

☐ Pump out system

Number of People & No. of bedrooms

Brand and model of system

Septic tank capacity

Collection well capacity

Disposal area & site area (m²)

PECUNIARY INTEREST

Does Penrith City Council employ the applicant or is the application being submitted on behalf of an employee? (yes or no)

NO

Does the applicant have any relationship to any staff or Councillor of Penrith City Council or is the application submitted on behalf of someone who has such a relationship? (yes or no)

NO

If you have answered yes to either of the above you must disclose this relationship.



PREVIOUS SITE USES & CONTAMINATION

Site contamination can come from a wide range of materials and activities. If you think that your site may be contaminated then you should read Council's Contaminated Land Development Control Plan.

What was the previous use of the subject site?

AGRICULTURE

NOTES

Note 1 – Type of Approval

1. **Development Consent** is required for building work, subdivision, use of a premises and demolition. You can lodge a combined application for a development consent and a building construction certificate in certain circumstances.
2. **Building Construction Certificates** are required to certify that the development is in accordance with the Building Code of Australia. Without this certificate construction work can not commence. Construction certificates can be obtained from Council or a private certifier.
3. **Subdivision Certificates** are required to allow registration of the plan under the Conveyancing Act 1919.
4. **Engineering Construction Certificates** are required to certify that the engineering works comply with Council's Engineering Works DCP.
5. **Designated Development** is a type of development that requires a more significant assessment process including the preparation of an environmental impact statement.
6. **Extension to Development Consent:** if you wish to extend the life of an existing consent prior to it lapsing.
7. **Application to Modify a Consent:** If you wish to modify a Development Consent and or Construction Certificate this will apply. Please provide information about the modification in the description of proposal box including the number of the development application or construction certificate that you are proposing to modify. If appropriate please ensure that the plans clearly depict what the modification is by coloring the proposed modification.
8. **Complying Development Certificate:** is a certificate issued by either Council or a private certifier stating that the development is consistent with Penrith Council Exempt and Complying Local Environmental Plan and Development Control Plan. These replace Development Consent and Building Construction Certificates.
9. **Integrated Development:** Integrated Development Consent relates to development where consent is required from Council and one or more other approval bodies. If you think that your application may be Integrated Development then you should contact the relevant authority to determine what their application requirements are. These other approvals may include one or more of the following.
 - Fisheries Management Act 1994
 - Heritage Act 1977
 - National Parks and Wildlife Act 1974
 - Pollution Control Act 1970
 - Rivers and Foreshores Improvement Act 1948
 - Roads Act 1993
 - Waste Minimisation and Management Act 1995
 - Water Act 1912
10. **Other approvals under Section 68 of the LGA:** This includes but is not limited to the following other approvals:
 - Install a sewage management system (septic tank)
 - Structures or places of public entertainment
 - Waste management facilities
 - Swinging a hoist or goods across a public road

Note 2 – Owners Details

This section is to be completed by **all** property owners. If the owner of the property is a company then a director or a secretary of the company must sign the application. If the property is within a strata then the consent of the strata management is also required.

Note 3 – Number of Plans & Supporting Information

Depending on the type of development that you are proposing you will need to provide different quantities of the required information. For example:

- Standard DA – 4 copies
- Advertised development – 6 copies
- Integrated development – check with Council as this varies depending upon the number of additional approval bodies.
- Subdivision – 9 copies



MATRIX OF INFORMATION TO ACCOMPANY APPLICATION (note 3)

	Residential dwellings	Alteration and additions to residential dwellings	Garage, Outbuilding, Awning, Carport, etc	Farm shed	Swimming pool	Dual occupancy	Multi unit housing	Commercial/Industrial building	Alteration and additions to Commercial/Industrial	Demolition	Subdivision of land	Septic tank	Advertising sign	Home business	Applicant check list	Council check list
Site plan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Floor plan	✓	✓	✓	✓		✓	✓	✓	✓		✧	✓		✓		
Elevation plan	✓	✓	✓	✓	✓	✓	✓	✓	✓				✓	✱		
Section plan	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✧	✱	✓	
Specifications	✱	✱	✱	✱	✱	✱	✱	✱	✱	✓		✓	✧	✱	✓	
Statement of Environmental Effects	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✧	✓	✓	
Energy rating	✓	✧				✓	✓									
Shadow diagrams	✧	✧				✧	✧	✧	✧							
Notification plan	✧	✧	✧	✧		✓	✓	✧	✧					✓	✓	
Landscaping plan	✧	✧	✧	✓		✓	✓	✓	✧			✓				
Erosion/Sediment control	✓	✓	✧	✧	✧	✓	✓	✓	✧	✓	✧	✧	✧		✓	
Drainage plan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✧	✧	✓				
Waste management plan	✓	✧		✧	✓	✓	✓	✓	✧	✓				✧		

The table above indicates the minimum information required to be supplied for your particular type of application.

✓ Indicates this information is required

✱ Indicates this information is required if you are applying for a Construction Certificate or Complying Development Certificate

✧ Indicates this information may be required

Certain applications may require the submission of additional information that has not been listed above.

Council encourages consultation prior to lodging your application. This ensures that many issues may be resolved before an application is lodged and that each application contains all necessary information to enable prompt processing by Council.

APPLICATION ACCEPTANCE - TO BE COMPLETED BY COUNCIL

Additional information required before the application will be accepted

Satisfactory to lodge	YES / NO
Responsible officer	Date

APPENDIX F

TABLE 1 - TEST PIT LOGS

Project	Proposed Commercial Development	Job No	14130/1
Location	Lot 111 in DP1035909, corner Blaikie Road and Pattys Place	Refer to Drawing No	14130/1-AA1
	Jamisontown	Logged & Sampled by	JH

TABLE 1

Page 1 of 4

Test pit	Depth (m)	Sample Depth (m)	Date	Time	Material Description	Remarks*
TP1	0-0.5	0-0.15	05/12/2017		(CI) Silty CLAY, medium plasticity, orange	
TP2	0-0.2	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel and river rock	
	0.2-0.7	0.45-0.55			(CI) Silty CLAY, medium plasticity, orange	
TP3	0-0.4	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel	
	0.4-0.9	0.45-0.55			(CI) Silty CLAY, medium plasticity, orange	
TP4	0-0.5	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel	
	0.5-1.0	0.55-0.65			(CI) Silty CLAY, medium plasticity, brown-grey	
TP5	0-1.0	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel	
		0.5-0.8				
	1.0-1.5	1.05-1.15			(CI) Silty CLAY, medium plasticity, brown-grey	
TP6	0-1.0	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel	
		0.5-0.8				
	1.0-1.5	1.05-1.15			(CI) Silty CLAY, medium plasticity, brown-grey	
TP7	0-1.0	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel, bricks, concrete and car tyres	
		0.5-0.8				
	1.0-1.5	1.05-1.15			(CI) Silty CLAY, medium plasticity, brown-grey	
TP8	0-0.5	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel	
	0.5-1.0	0.55-0.65			(CI) Silty CLAY, medium plasticity, brown-grey	

NS = No Sample

*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

Form No 0009-Rev7 Jun 2014

Project	Proposed Commercial Development	Job No	14130/1
Location	Lot 111 in DP1035909, corner Blaikie Road and Pattys Place	Refer to Drawing No	14130/1-AA1
	Jamisontown	Logged & Sampled by	JH

TABLE 1

Page 2 of 4

Test pit	Depth (m)	Sample Depth (m)	Date	Time	Material Description	Remarks*
TP9	0-0.5	0-0.15	05/12/2017		(CI) Silty CLAY, medium plasticity, orange	
TP10	0-0.5	0-0.15	05/12/2017		(CI) Silty CLAY, medium plasticity, orange	
TP11	0-0.5	0-0.15	05/12/2017		(CI) Silty CLAY, medium plasticity, orange	
TP12	0-0.5	0-0.15	05/12/2017		(CI) Silty CLAY, medium plasticity, orange	
TP13	0-0.5	0-0.15	05/12/2017		(CI) Silty CLAY, medium plasticity, orange	
TP14	0-0.5	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel and river rock	
	0.5-1.0	0.55-0.65			(CI) Silty CLAY, medium plasticity, brown-grey	
TP15	0-0.5	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel and river rock	
	0.5-1.0	0.55-0.65			(CI) Silty CLAY, medium plasticity, brown-grey	
TP16	0-0.8	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel and river rock	
		0.5-0.8			(CI) Silty CLAY, medium plasticity, brown-grey	
	0.8-1.3	0.85-0.95			(CI) Silty CLAY, medium plasticity, brown-grey	
TP17	0-1.0	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel	
		0.5-0.8				
	1.0-1.5	1.05-1.15			(CI) Silty CLAY, medium plasticity, brown-grey	

NS = No Sample

*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

Form No 0009-Rev7 Jun 2014

Project	Proposed Commercial Development	Job No	14130/1
Location	Lot 111 in DP1035909, corner Blaikie Road and Pattys Place	Refer to Drawing No	14130/1-AA1
	Jamisontown	Logged & Sampled by	JH

TABLE 1

Page 3 of 4

Test pit	Depth (m)	Sample Depth (m)	Date	Time	Material Description	Remarks*
TP18	0-0.8	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel	
		0.5-0.8			(Cl) Silty CLAY, medium plasticity, brown-grey	
	0.8-1.3	0.85-0.95			(Cl) Silty CLAY, medium plasticity, brown-grey	
TP19	0-0.5	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel	
	0.5-1.0	0.55-0.65			(Cl) Silty CLAY, medium plasticity, brown-grey	
TP20	0-0.2	0-0.15	05/12/2017		TOPSOIL: Clayey Silt, low plasticity, grey, trace root fibres	
	0.2-0.5	NS			(Cl) Silty CLAY, medium plasticity, orange	
TP21	0-0.2	0-0.15	05/12/2017		TOPSOIL: Clayey Silt, low plasticity, grey, trace root fibres	
	0.2-0.5	NS			(Cl) Silty CLAY, medium plasticity, orange	
TP22	0-0.5	0-0.15	05/12/2017		(Cl) Silty CLAY, medium plasticity, orange	
TP23	0-0.2	0-0.15	05/12/2017		TOPSOIL: Clayey Silt, low plasticity, grey, trace root fibres	
	0.2-0.5	NS			(Cl) Silty CLAY, medium plasticity, orange	
TP24	0-0.2	0-0.15	05/12/2017		TOPSOIL: Clayey Silt, low plasticity, grey, trace root fibres	
	0.2-0.5	NS			(Cl) Silty CLAY, medium plasticity, orange	
TP25	0-0.2	0-0.15	05/12/2017		TOPSOIL: Clayey Silt, low plasticity, grey, trace root fibres	
	0.2-0.5	NS			(Cl) Silty CLAY, medium plasticity, brown-grey	

NS = No Sample

*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

Form No 0009-Rev7 Jun 2014

Project	Proposed Commercial Development	Job No	14130/1
Location	Lot 111 in DP1035909, corner Blaikie Road and Pattys Place	Refer to Drawing No	14130/1-AA1
	Jamisontown	Logged & Sampled by	JH

TABLE 1

Page 4 of 4

Test pit	Depth (m)	Sample Depth (m)	Date	Time	Material Description	Remarks*
TP26	0-0.5	0-0.15	05/12/2017		FILL: Silty Clay, low to medium plasticity, grey-brown, with gravel	
	0.5-1.0	0.55-0.65			(Cl) Silty CLAY, medium plasticity, brown-grey	
TP27	0-0.2	0-0.15	05/12/2017		TOPSOIL: Clayey Silt, low plasticity, grey, trace root fibres	
	0.2-0.5	NS			(Cl) Silty CLAY, medium plasticity, brown-grey	
TP28	0-0.2	0-0.15	05/12/2017		TOPSOIL: Clayey Silt, low plasticity, grey, trace root fibres	
	0.2-0.5	NS			(Cl) Silty CLAY, medium plasticity, brown-grey	
TP29	0-0.2	0-0.15	05/12/2017		TOPSOIL: Clayey Silt, low plasticity, grey, trace root fibres	
	0.2-0.5	NS			(Cl) Silty CLAY, medium plasticity, brown-grey	
TP30	0-0.2	0-0.15	05/12/2017		TOPSOIL: Clayey Silt, low plasticity, grey, trace root fibres	
	0.2-0.5	NS			(Cl) Silty CLAY, medium plasticity, brown-grey	
TP31	0-0.2	0-0.15	05/12/2017		TOPSOIL: Clayey Silt, low plasticity, grey, trace root fibres	
	0.2-0.5	NS			(Cl) Silty CLAY, medium plasticity, brown-grey	
TP32	0-0.2	0-0.15	05/12/2017		TOPSOIL: Clayey Silt, low plasticity, grey, trace root fibres	
	0.2-0.5	NS			(Cl) Silty CLAY, medium plasticity, orange	
TP33	0-0.5	0-0.15	05/12/2017		(Cl) Silty CLAY, medium plasticity, orange	

NS = No Sample

*Odour (O), Discolouration (D), Petroleum Hydrocarbon Staining (PHS), Asbestos Containing Material (ACM), Ash Material (ASHM), Demolition Waste (DW), Groundwater (GW), Perched Water (PW) PID reading etc.

Form No 0009-Rev7 Jun 2014

APPENDIX G

GROUNDWATER MAP

All data times are Eastern Standard Time

Map

Info

**Groundwater Bores**

- Groundwater works
- ◆ Telemetered bores
- ▲ Logged bores
- Manual bores

Monitoring Bore Types

Alluvial

Coastal Sands

Fractured Rock

Porous Rock

Great Artesian Basin

Discontinued

Satellite

Terrain

Map

Hybrid

Groundwater Works

Monitoring Bores

Telemetered Bores

Coal Basin Bores

Discontinued Bores

There are **no sites** within 500 metres of the selected point.

Google

Scale = 1 : 3385

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Sync Center
Sync requested
1 errors



11:59 AM
13/11/2017

APPENDIX H

LABORATORY TEST RESULTS REPORTS/CERTIFICATES

CLIENT DETAILS

Contact Anwar Barbhuyia
Client Geotechnique
Address P.O. Box 880
 PENRITH NSW 2751

Telephone 02 4722 2700
Facsimile 02 4722 6161
Email anwar@geotech.com.au
Project 14130-1 Jamisontown
Order Number (Not specified)
Samples 50

LABORATORY DETAILS

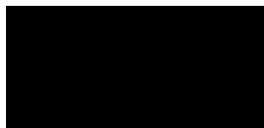
Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
 Alexandria NSW 2015

Telephone +61 2 8594 0400
Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com
SGS Reference SE173432 R0
Date Received 6/12/2017
Date Reported 12/12/2017

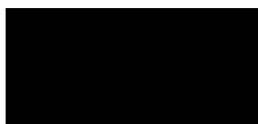
COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).
 No respirable fibres detected in all soil samples using trace analysis technique as per AS 4964-2004.
 Asbestos analysed by Approved Identifier Yusuf Kuthpudin.

SIGNATORIES



Akheequear Beniameen
 Chemist



Bennet Lo
 Senior Organic Chemist/Metals Chemist



Huong Crawford
 Production Manager



Kamrul Ahsan
 Senior Chemist



Ly Kim Ha
 Organic Section Head



Ravee Sivasubramaniam
 Hygiene Team Leader



ANALYTICAL RESULTS

SE173432 R0

VOC's in Soil [AN433] Tested: 8/12/2017

			TP7	TS1
			SOIL	SOIL
			0.0-0.15	-
			5/12/2017	5/12/2017
			SE173432.007	SE173432.039
PARAMETER	UOM	LOR		
Benzene	mg/kg	0.1	<0.1	[96%]
Toluene	mg/kg	0.1	<0.1	[94%]
Ethylbenzene	mg/kg	0.1	<0.1	[97%]
m/p-xylene	mg/kg	0.2	<0.2	[97%]
o-xylene	mg/kg	0.1	<0.1	[97%]
Total Xylenes	mg/kg	0.3	<0.3	-
Total BTEX	mg/kg	0.6	<0.6	-
Naphthalene	mg/kg	0.1	<0.1	-



ANALYTICAL RESULTS

SE173432 R0

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 8/12/2017

			TP7
			SOIL
			0.0-0.15
			5/12/2017
PARAMETER	UOM	LOR	SE173432.007
TRH C6-C9	mg/kg	20	<20
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25



ANALYTICAL RESULTS

SE173432 R0

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 7/12/2017

			TP7
			SOIL
			0.0-0.15
			5/12/2017
			SE173432.007
PARAMETER	UOM	LOR	
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16 (F2)	mg/kg	25	<25
TRH >C10-C16 (F2) - Naphthalene	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH C10-C40 Total (F bands)	mg/kg	210	<210



ANALYTICAL RESULTS

SE173432 R0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 7/12/2017

			TP7
			SOIL
			0.0-0.15
			5/12/2017
			SE173432.007
PARAMETER	UOM	LOR	
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8



ANALYTICAL RESULTS

SE173432 R0

OC Pesticides in Soil [AN420] Tested: 7/12/2017

PARAMETER	UOM	LOR	TP1	TP7	TP13	TP20	TP21
			SOIL 0.0-0.15 5/12/2017 SE173432.001	SOIL 0.0-0.15 5/12/2017 SE173432.007	SOIL 0.0-0.15 5/12/2017 SE173432.013	SOIL 0.0-0.15 5/12/2017 SE173432.020	SOIL 0.0-0.15 5/12/2017 SE173432.021
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1



ANALYTICAL RESULTS

SE173432 R0

OC Pesticides in Soil [AN420] Tested: 7/12/2017 (continued)

PARAMETER	UOM	LOR	TP26	C1	C2	C5	C6
			SOIL 0.0-0.15 5/12/2017 SE173432.026	SOIL - 5/12/2017 SE173432.040	SOIL - 5/12/2017 SE173432.041	SOIL - 5/12/2017 SE173432.044	SOIL - 5/12/2017 SE173432.045
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1



ANALYTICAL RESULTS

SE173432 R0

OC Pesticides in Soil [AN420] Tested: 7/12/2017 (continued)

PARAMETER	UOM	LOR	C8	D1
			SOIL - 5/12/2017 SE173432.047	SOIL - 5/12/2017 SE173432.049
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1
Dieldrin	mg/kg	0.05	<0.05	<0.05
Endrin	mg/kg	0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1



ANALYTICAL RESULTS

SE173432 R0

PCBs in Soil [AN420] Tested: 7/12/2017

			TP7
			SOIL
			0.0-0.15
			5/12/2017
PARAMETER	UOM	LOR	SE173432.007
Arochlor 1016	mg/kg	0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1



ANALYTICAL RESULTS

SE173432 R0

pH in soil (1:5) [AN101] Tested: 12/12/2017

PARAMETER	UOM	LOR	TP1	TP2	TP6	TP7	TP9
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432.001	SE173432.002	SE173432.006	SE173432.007	SE173432.009
pH	pH Units	-	6.4	7.4	6.7	8.5	6.8

PARAMETER	UOM	LOR	TP14	TP17	TP20	TP22	TP23
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432.014	SE173432.017	SE173432.020	SE173432.022	SE173432.023
pH	pH Units	-	7.2	6.7	7.1	6.3	7.6

PARAMETER	UOM	LOR	TP26	TP28	TP31
			SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017
			SE173432.026	SE173432.029	SE173432.032
pH	pH Units	-	7.7	6.8	6.9



ANALYTICAL RESULTS

SE173432 R0

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 11/12/2017

PARAMETER	UOM	LOR	TP1	TP2	TP6	TP7	TP9
			SOIL 0.0-0.15 5/12/2017 SE173432.001	SOIL 0.0-0.15 5/12/2017 SE173432.002	SOIL 0.0-0.15 5/12/2017 SE173432.006	SOIL 0.0-0.15 5/12/2017 SE173432.007	SOIL 0.0-0.15 5/12/2017 SE173432.009
Exchangeable Sodium, Na	mg/kg	2	17	35	31	27	9
Exchangeable Sodium, Na	meq/100g	0.01	0.07	0.15	0.14	0.12	0.04
Exchangeable Sodium Percentage*	%	0.1	3.7	5.9	3.8	0.6	2.2
Exchangeable Potassium, K	mg/kg	2	46	43	75	58	69
Exchangeable Potassium, K	meq/100g	0.01	0.12	0.11	0.19	0.15	0.18
Exchangeable Potassium Percentage*	%	0.1	6.1	4.2	5.4	0.7	9.5
Exchangeable Calcium, Ca	mg/kg	2	250	300	400	3900	250
Exchangeable Calcium, Ca	meq/100g	0.01	1.3	1.5	2.0	20	1.2
Exchangeable Calcium Percentage*	%	0.1	65.7	57.3	56.5	95.3	66.1
Exchangeable Magnesium, Mg	mg/kg	2	57	100	150	86	51
Exchangeable Magnesium, Mg	meq/100g	0.02	0.47	0.84	1.2	0.71	0.42
Exchangeable Magnesium Percentage*	%	0.1	24.4	32.5	34.3	3.4	22.2
Cation Exchange Capacity	meq/100g	0.02	1.9	2.6	3.6	21	1.9

PARAMETER	UOM	LOR	TP14	TP17	TP20	TP22	TP23
			SOIL 0.0-0.15 5/12/2017 SE173432.014	SOIL 0.0-0.15 5/12/2017 SE173432.017	SOIL 0.0-0.15 5/12/2017 SE173432.020	SOIL 0.0-0.15 5/12/2017 SE173432.022	SOIL 0.0-0.15 5/12/2017 SE173432.023
Exchangeable Sodium, Na	mg/kg	2	150	16	35	7	9
Exchangeable Sodium, Na	meq/100g	0.01	0.66	0.07	0.15	0.03	0.04
Exchangeable Sodium Percentage*	%	0.1	9.3	3.3	5.8	3.3	1.1
Exchangeable Potassium, K	mg/kg	2	69	46	50	44	28
Exchangeable Potassium, K	meq/100g	0.01	0.18	0.12	0.13	0.11	0.07
Exchangeable Potassium Percentage*	%	0.1	2.5	5.4	4.8	13.1	2.1
Exchangeable Calcium, Ca	mg/kg	2	350	290	330	110	610
Exchangeable Calcium, Ca	meq/100g	0.01	1.7	1.4	1.7	0.53	3.1
Exchangeable Calcium Percentage*	%	0.1	24.7	65.5	62.9	62.4	86.7
Exchangeable Magnesium, Mg	mg/kg	2	550	69	85	22	44
Exchangeable Magnesium, Mg	meq/100g	0.02	4.5	0.57	0.70	0.18	0.36
Exchangeable Magnesium Percentage*	%	0.1	63.6	25.8	26.4	21.2	10.2
Cation Exchange Capacity	meq/100g	0.02	7.1	2.2	2.6	0.85	3.5

PARAMETER	UOM	LOR	TP26	TP28	TP31
			SOIL 0.0-0.15 5/12/2017 SE173432.026	SOIL 0.0-0.15 5/12/2017 SE173432.029	SOIL 0.0-0.15 5/12/2017 SE173432.032
Exchangeable Sodium, Na	mg/kg	2	37	9	15
Exchangeable Sodium, Na	meq/100g	0.01	0.16	0.04	0.07
Exchangeable Sodium Percentage*	%	0.1	2.8	1.9	4.6
Exchangeable Potassium, K	mg/kg	2	47	50	14
Exchangeable Potassium, K	meq/100g	0.01	0.12	0.13	0.04
Exchangeable Potassium Percentage*	%	0.1	2.1	6.0	2.5
Exchangeable Calcium, Ca	mg/kg	2	740	300	200
Exchangeable Calcium, Ca	meq/100g	0.01	3.7	1.5	0.98
Exchangeable Calcium Percentage*	%	0.1	64.2	71.4	67.0
Exchangeable Magnesium, Mg	mg/kg	2	220	54	46
Exchangeable Magnesium, Mg	meq/100g	0.02	1.8	0.44	0.38
Exchangeable Magnesium Percentage*	%	0.1	31.0	20.7	25.9
Cation Exchange Capacity	meq/100g	0.02	5.7	2.1	1.5



ANALYTICAL RESULTS

SE173432 R0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 8/12/2017

PARAMETER	UOM	LOR	TP1	TP7	TP13	TP20	TP21
			SOIL 0.0-0.15 5/12/2017 SE173432.001	SOIL 0.0-0.15 5/12/2017 SE173432.007	SOIL 0.0-0.15 5/12/2017 SE173432.013	SOIL 0.0-0.15 5/12/2017 SE173432.020	SOIL 0.0-0.15 5/12/2017 SE173432.021
Arsenic, As	mg/kg	3	4	<3	<3	<3	<3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.3	12	11	9.8	7.6	8.3
Copper, Cu	mg/kg	0.5	3.8	10	5.8	3.8	6.4
Lead, Pb	mg/kg	1	7	17	6	7	9
Nickel, Ni	mg/kg	0.5	3.5	4.5	5.1	3.6	5.0
Zinc, Zn	mg/kg	0.5	13	77	12	14	22

PARAMETER	UOM	LOR	TP26	C1	C2	C3	C4
			SOIL 0.0-0.15 5/12/2017 SE173432.026	SOIL - 5/12/2017 SE173432.040	SOIL - 5/12/2017 SE173432.041	SOIL - 5/12/2017 SE173432.042	SOIL - 5/12/2017 SE173432.043
Arsenic, As	mg/kg	3	3	4	5	<3	<3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.3	8.7	7.9	13	11	9.5
Copper, Cu	mg/kg	0.5	7.0	9.1	6.7	3.9	3.2
Lead, Pb	mg/kg	1	9	9	12	6	5
Nickel, Ni	mg/kg	0.5	4.9	6.3	3.9	3.6	3.5
Zinc, Zn	mg/kg	0.5	21	23	17	18	10

PARAMETER	UOM	LOR	C5	C6	C7	C8	C9
			SOIL - 5/12/2017 SE173432.044	SOIL - 5/12/2017 SE173432.045	SOIL - 5/12/2017 SE173432.046	SOIL - 5/12/2017 SE173432.047	SOIL - 5/12/2017 SE173432.048
Arsenic, As	mg/kg	3	5	<3	<3	<3	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.3	10	9.6	6.9	8.5	7.2
Copper, Cu	mg/kg	0.5	10	8.1	3.8	3.8	3.8
Lead, Pb	mg/kg	1	11	10	6	6	6
Nickel, Ni	mg/kg	0.5	6.8	4.7	2.9	2.9	3.2
Zinc, Zn	mg/kg	0.5	24	19	14	11	11

PARAMETER	UOM	LOR	D1
			SOIL - 5/12/2017 SE173432.049
Arsenic, As	mg/kg	3	4
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.3	10
Copper, Cu	mg/kg	0.5	5.3
Lead, Pb	mg/kg	1	12
Nickel, Ni	mg/kg	0.5	4.5
Zinc, Zn	mg/kg	0.5	14



ANALYTICAL RESULTS

SE173432 R0

Mercury in Soil [AN312] Tested: 11/12/2017

PARAMETER	UOM	LOR	TP1	TP7	TP13	TP20	TP21
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432.001	SE173432.007	SE173432.013	SE173432.020	SE173432.021
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	TP26	C1	C2	C3	C4
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	-	-	-	-
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432.026	SE173432.040	SE173432.041	SE173432.042	SE173432.043
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	C5	C6	C7	C8	C9
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432.044	SE173432.045	SE173432.046	SE173432.047	SE173432.048
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	D1
			SOIL
			-
			5/12/2017
			SE173432.049
Mercury	mg/kg	0.05	<0.05



ANALYTICAL RESULTS

SE173432 R0

Moisture Content [AN002] Tested: 11/12/2017

PARAMETER	UOM	LOR	TP1	TP2	TP6	TP7	TP9
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432.001	SE173432.002	SE173432.006	SE173432.007	SE173432.009
% Moisture	%w/w	0.5	6.4	4.1	8.4	5.6	4.1

PARAMETER	UOM	LOR	TP13	TP14	TP17	TP20	TP21
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432.013	SE173432.014	SE173432.017	SE173432.020	SE173432.021
% Moisture	%w/w	0.5	5.7	7.3	3.6	6.8	3.6

PARAMETER	UOM	LOR	TP22	TP23	TP26	TP28	TP31
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432.022	SE173432.023	SE173432.026	SE173432.029	SE173432.032
% Moisture	%w/w	0.5	4.4	2.9	4.7	2.9	2.0

PARAMETER	UOM	LOR	C1	C2	C3	C4	C5
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432.040	SE173432.041	SE173432.042	SE173432.043	SE173432.044
% Moisture	%w/w	0.5	5.4	5.4	4.6	5.3	5.1

PARAMETER	UOM	LOR	C6	C7	C8	C9	D1
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432.045	SE173432.046	SE173432.047	SE173432.048	SE173432.049
% Moisture	%w/w	0.5	4.4	3.4	3.0	4.6	3.5



ANALYTICAL RESULTS

SE173432 R0

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 11/12/2017

			TP7	TP7
			SOIL	SOIL
			0.0-0.15	0.5-0.8
			5/12/2017	5/12/2017
			SE173432.007	SE173432.050
PARAMETER	UOM	LOR		
Total Sample Weight	g	1	684	625
ACM in >7mm Sample*	g	0.01	<0.01	<0.01
AF/FA in >2mm to <7mm Sample*	g	0.0001	<0.0001	<0.0001
AF/FA in <2mm Sample*	g	0.0001	<0.0001	<0.0001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Fibre Type	No unit	-	NAD	NAD



ANALYTICAL RESULTS

SE173432 R0

Metals in Water (Dissolved) by ICPOES [AN320] Tested: 11/12/2017

			R1
			WATER
			-
			5/12/2017
PARAMETER	UOM	LOR	SE173432.038
Arsenic, As	mg/L	0.02	<0.02
Cadmium, Cd	mg/L	0.001	<0.001
Chromium, Cr	mg/L	0.005	<0.005
Copper, Cu	mg/L	0.005	<0.005
Lead, Pb	mg/L	0.02	<0.02
Nickel, Ni	mg/L	0.005	<0.005
Zinc, Zn	mg/L	0.01	<0.01



ANALYTICAL RESULTS

SE173432 R0

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 11/12/2017

			R1
			WATER
			-
			5/12/2017
PARAMETER	UOM	LOR	SE173432.038
Mercury	mg/L	0.0001	<0.0001

METHOD

METHODOLOGY SUMMARY

AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.						
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.						
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.						
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.						
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl ₂) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.						
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.						
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below : <table data-bbox="443 1077 715 1153"> <tr> <td>ESP < 6%</td><td>non-sodic</td></tr> <tr> <td>ESP 6-15%</td><td>sodic</td></tr> <tr> <td>ESP > 15%</td><td>strongly sodic</td></tr> </table>	ESP < 6%	non-sodic	ESP 6-15%	sodic	ESP > 15%	strongly sodic
ESP < 6%	non-sodic						
ESP 6-15%	sodic						
ESP > 15%	strongly sodic						
	Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-						
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.						
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500						
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.						
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.						
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.						
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Petroleum Hydrocarbons (TPH) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.						
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.						
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).						

AN420

SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).

AN433

VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC's are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

AN605

This technique gravimetrically determines the mass of Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight.

AN605

This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free fibres which are only observed by standard trace analysis as per AN 602.

AN605

AMO = Amosite Detected
CRY = Chrysotile Detected
CRO = Crocidolite Detected
ORG = Organic Fibres Detected
SMF = Synthetic Mineral Fibres Detected
UMF = Unknown Mineral Fibres Detected
NAD = No Asbestos Detected

AN605

Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009.



FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
		IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be $1.6 / 2$ (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the $\pm$ sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here : <http://www.sgs.com.au/~media/Local/Australia/Documents/Technical%20Documents/MP-AU-ENV-QU-022%20QA%20QC%20Plan.pdf>

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STATEMENT OF QA/QC PERFORMANCE

SE173432 R0

CLIENT DETAILS

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Project **14130-1 Jamisontown**
Order Number (Not specified)
Samples 50

LABORATORY DETAILS

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SGS Reference **SE173432 R0**
Date Received 06 Dec 2017
Date Reported 12 Dec 2017

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document and was supplied by the Client.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	Mercury in Soil	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	37 Soil, 1 Water
Date documentation received	6/12/17@2:34pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		



HOLDING TIME SUMMARY

SE173432 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE173432.001	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP2	SE173432.002	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP6	SE173432.006	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP7	SE173432.007	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP9	SE173432.009	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP14	SE173432.014	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP17	SE173432.017	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP20	SE173432.020	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP22	SE173432.022	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP23	SE173432.023	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP26	SE173432.026	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP28	SE173432.029	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP31	SE173432.032	LB138301	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP7	SE173432.007	LB138315	05 Dec 2017	06 Dec 2017	03 Jun 2018	11 Dec 2017	03 Jun 2018	12 Dec 2017
TP7	SE173432.050	LB138315	05 Dec 2017	06 Dec 2017	03 Jun 2018	11 Dec 2017	03 Jun 2018	12 Dec 2017

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
R1	SE173432.038	LB138343	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE173432.001	LB138290	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP7	SE173432.007	LB138290	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP13	SE173432.013	LB138290	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP20	SE173432.020	LB138290	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP21	SE173432.021	LB138290	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
TP26	SE173432.026	LB138290	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
C1	SE173432.040	LB138290	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
C2	SE173432.041	LB138290	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
C3	SE173432.042	LB138290	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
C4	SE173432.043	LB138291	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
C5	SE173432.044	LB138291	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
C6	SE173432.045	LB138291	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
C7	SE173432.046	LB138291	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
C8	SE173432.047	LB138291	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
C9	SE173432.048	LB138291	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017
D1	SE173432.049	LB138291	05 Dec 2017	06 Dec 2017	02 Jan 2018	11 Dec 2017	02 Jan 2018	12 Dec 2017

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
R1	SE173432.038	LB138256	05 Dec 2017	06 Dec 2017	03 Jun 2018	11 Dec 2017	03 Jun 2018	11 Dec 2017

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE173432.001	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP2	SE173432.002	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP3	SE173432.003	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP4	SE173432.004	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP5	SE173432.005	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP6	SE173432.006	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP7	SE173432.007	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP8	SE173432.008	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP9	SE173432.009	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP10	SE173432.010	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP11	SE173432.011	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP12	SE173432.012	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017



HOLDING TIME SUMMARY

SE173432 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP13	SE173432.013	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP14	SE173432.014	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP15	SE173432.015	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP16	SE173432.016	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP17	SE173432.017	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP18	SE173432.018	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP19	SE173432.019	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP20	SE173432.020	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP21	SE173432.021	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP22	SE173432.022	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP23	SE173432.023	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP24	SE173432.024	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP25	SE173432.025	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP26	SE173432.026	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP27	SE173432.028	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP28	SE173432.029	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP29	SE173432.030	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP30	SE173432.031	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP31	SE173432.032	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP32	SE173432.033	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
TP33	SE173432.034	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
X1	SE173432.035	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
X2	SE173432.036	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
X3	SE173432.037	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
C1	SE173432.040	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
C2	SE173432.041	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
C3	SE173432.042	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
C4	SE173432.043	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
C5	SE173432.044	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
C6	SE173432.045	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
C7	SE173432.046	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
C8	SE173432.047	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
C9	SE173432.048	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017
D1	SE173432.049	LB138278	05 Dec 2017	06 Dec 2017	19 Dec 2017	11 Dec 2017	16 Dec 2017	12 Dec 2017

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE173432.001	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP7	SE173432.007	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP13	SE173432.013	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP20	SE173432.020	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP21	SE173432.021	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP26	SE173432.026	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP26	SE173432.027	LB138140	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C1	SE173432.040	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C2	SE173432.041	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C5	SE173432.044	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C6	SE173432.045	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C8	SE173432.047	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
D1	SE173432.049	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE173432.001	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP7	SE173432.007	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP13	SE173432.013	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP20	SE173432.020	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP21	SE173432.021	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP26	SE173432.026	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP26	SE173432.027	LB138140	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C1	SE173432.040	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
C2	SE173432.041	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C5	SE173432.044	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C6	SE173432.045	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C8	SE173432.047	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
D1	SE173432.049	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017

PCBs in Soil

Method: ME-(AU)-ENVJAN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE173432.001	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP7	SE173432.007	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP13	SE173432.013	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP20	SE173432.020	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP21	SE173432.021	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP26	SE173432.026	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP26	SE173432.027	LB138140	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C1	SE173432.040	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C2	SE173432.041	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C5	SE173432.044	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C6	SE173432.045	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C8	SE173432.047	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
D1	SE173432.049	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017

pH in soil (1:5)

Method: ME-(AU)-ENVJAN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE173432.001	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP2	SE173432.002	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP6	SE173432.006	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP7	SE173432.007	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP9	SE173432.009	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP14	SE173432.014	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP17	SE173432.017	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP20	SE173432.020	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP22	SE173432.022	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP23	SE173432.023	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP26	SE173432.026	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP28	SE173432.029	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017
TP31	SE173432.032	LB138367	05 Dec 2017	06 Dec 2017	12 Dec 2017	12 Dec 2017	13 Dec 2017	12 Dec 2017

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-ENVJAN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE173432.001	LB138200	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
TP7	SE173432.007	LB138200	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
TP13	SE173432.013	LB138200	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
TP20	SE173432.020	LB138200	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
TP21	SE173432.021	LB138200	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
TP26	SE173432.026	LB138223	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
C1	SE173432.040	LB138223	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
C2	SE173432.041	LB138223	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
C3	SE173432.042	LB138223	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
C4	SE173432.043	LB138223	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
C5	SE173432.044	LB138223	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
C6	SE173432.045	LB138223	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
C7	SE173432.046	LB138223	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
C8	SE173432.047	LB138223	05 Dec 2017	06 Dec 2017	03 Jun 2018	08 Dec 2017	03 Jun 2018	12 Dec 2017
C9	SE173432.048	LB138293	05 Dec 2017	06 Dec 2017	03 Jun 2018	11 Dec 2017	03 Jun 2018	12 Dec 2017
D1	SE173432.049	LB138293	05 Dec 2017	06 Dec 2017	03 Jun 2018	11 Dec 2017	03 Jun 2018	12 Dec 2017

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-ENVJAN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP1	SE173432.001	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP7	SE173432.007	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP13	SE173432.013	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017



HOLDING TIME SUMMARY

SE173432 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-ENVJAN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP20	SE173432.020	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP21	SE173432.021	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP26	SE173432.026	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
TP26	SE173432.027	LB138140	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C1	SE173432.040	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C2	SE173432.041	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C5	SE173432.044	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C6	SE173432.045	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
C8	SE173432.047	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017
D1	SE173432.049	LB138149	05 Dec 2017	06 Dec 2017	19 Dec 2017	07 Dec 2017	16 Jan 2018	12 Dec 2017

VOC's in Soil

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP7	SE173432.007	LB138207	05 Dec 2017	06 Dec 2017	19 Dec 2017	08 Dec 2017	17 Jan 2018	12 Dec 2017
TS1	SE173432.039	LB138207	05 Dec 2017	06 Dec 2017	19 Dec 2017	08 Dec 2017	17 Jan 2018	12 Dec 2017

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP7	SE173432.007	LB138207	05 Dec 2017	06 Dec 2017	19 Dec 2017	08 Dec 2017	17 Jan 2018	12 Dec 2017
TS1	SE173432.039	LB138207	05 Dec 2017	06 Dec 2017	19 Dec 2017	08 Dec 2017	17 Jan 2018	12 Dec 2017

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP1	SE173432.001	%	60 - 130%	91
	TP7	SE173432.007	%	60 - 130%	101
	TP13	SE173432.013	%	60 - 130%	97
	TP20	SE173432.020	%	60 - 130%	109
	TP21	SE173432.021	%	60 - 130%	97
	TP26	SE173432.026	%	60 - 130%	97
	C1	SE173432.040	%	60 - 130%	109
	C2	SE173432.041	%	60 - 130%	99
	C5	SE173432.044	%	60 - 130%	103
	C6	SE173432.045	%	60 - 130%	106
	C8	SE173432.047	%	60 - 130%	95
	D1	SE173432.049	%	60 - 130%	97

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	TP7	SE173432.007	%	70 - 130%	82
d14-p-terphenyl (Surrogate)	TP7	SE173432.007	%	70 - 130%	82
d5-nitrobenzene (Surrogate)	TP7	SE173432.007	%	70 - 130%	74

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	TP7	SE173432.007	%	60 - 130%	101

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP7	SE173432.007	%	60 - 130%	99
	TS1	SE173432.039	%	60 - 130%	91
d4-1,2-dichloroethane (Surrogate)	TP7	SE173432.007	%	60 - 130%	73
	TS1	SE173432.039	%	60 - 130%	85
d8-toluene (Surrogate)	TP7	SE173432.007	%	60 - 130%	78
	TS1	SE173432.039	%	60 - 130%	84
Dibromofluoromethane (Surrogate)	TP7	SE173432.007	%	60 - 130%	77
	TS1	SE173432.039	%	60 - 130%	78

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	TP7	SE173432.007	%	60 - 130%	99
d4-1,2-dichloroethane (Surrogate)	TP7	SE173432.007	%	60 - 130%	73
d8-toluene (Surrogate)	TP7	SE173432.007	%	60 - 130%	78
Dibromofluoromethane (Surrogate)	TP7	SE173432.007	%	60 - 130%	77



METHOD BLANKS

SE173432 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-(ENV)AN122

Sample Number	Parameter	Units	LOR	Result
LB138301.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

Mercury (dissolved) in Water

Method: ME-(AU)-(ENV)AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB138343.001	Mercury	mg/L	0.0001	<0.0001

Mercury in Soil

Method: ME-(AU)-(ENV)AN312

Sample Number	Parameter	Units	LOR	Result
LB138290.001	Mercury	mg/kg	0.05	<0.05
LB138291.001	Mercury	mg/kg	0.05	<0.05

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-(ENV)AN320

Sample Number	Parameter	Units	LOR	Result
LB138256.001	Arsenic, As	mg/L	0.02	<0.02
	Cadmium, Cd	mg/L	0.001	<0.001
	Chromium, Cr	mg/L	0.005	<0.005
	Copper, Cu	mg/L	0.005	<0.005
	Lead, Pb	mg/L	0.02	<0.02
	Nickel, Ni	mg/L	0.005	<0.005
	Zinc, Zn	mg/L	0.01	<0.01

OC Pesticides in Soil

Method: ME-(AU)-(ENV)AN420

Sample Number	Parameter	Units	LOR	Result
LB138149.001	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
	Alpha BHC	mg/kg	0.1	<0.1
	Lindane	mg/kg	0.1	<0.1
	Heptachlor	mg/kg	0.1	<0.1
	Aldrin	mg/kg	0.1	<0.1
	Beta BHC	mg/kg	0.1	<0.1
	Delta BHC	mg/kg	0.1	<0.1
	Heptachlor epoxide	mg/kg	0.1	<0.1
	Alpha Endosulfan	mg/kg	0.2	<0.2
	Gamma Chlordane	mg/kg	0.1	<0.1
	Alpha Chlordane	mg/kg	0.1	<0.1
	p,p'-DDE	mg/kg	0.1	<0.1
	Dieldrin	mg/kg	0.05	<0.05
	Endrin	mg/kg	0.2	<0.2
	Beta Endosulfan	mg/kg	0.2	<0.2
	p,p'-DDD	mg/kg	0.1	<0.1
	p,p'-DDT	mg/kg	0.1	<0.1
	Endosulfan sulphate	mg/kg	0.1	<0.1
	Endrin Aldehyde	mg/kg	0.1	<0.1
	Methoxychlor	mg/kg	0.1	<0.1
	Endrin Ketone	mg/kg	0.1	<0.1
	Isodrin	mg/kg	0.1	<0.1
	Mirex	mg/kg	0.1	<0.1
Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	103

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-(ENV)AN420

Sample Number	Parameter	Units	LOR	Result
LB138149.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB138149.001	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1
	Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
	Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
	Benzo(ghi)perylene	mg/kg	0.1	<0.1
	Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates			
	d5-nitrobenzene (Surrogate)	%	-	110
	2-fluorobiphenyl (Surrogate)	%	-	120
	d14-p-terphenyl (Surrogate)	%	-	124

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB138149.001	Arochlor 1016	mg/kg	0.2	<0.2
	Arochlor 1221	mg/kg	0.2	<0.2
	Arochlor 1232	mg/kg	0.2	<0.2
	Arochlor 1242	mg/kg	0.2	<0.2
	Arochlor 1248	mg/kg	0.2	<0.2
	Arochlor 1254	mg/kg	0.2	<0.2
	Arochlor 1260	mg/kg	0.2	<0.2
	Arochlor 1262	mg/kg	0.2	<0.2
	Arochlor 1268	mg/kg	0.2	<0.2
	Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates			
	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	103

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB138200.001	Arsenic, As	mg/kg	3	<3
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.3	<0.3
	Copper, Cu	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Zinc, Zn	mg/kg	0.5	<0.5
LB138223.001	Arsenic, As	mg/kg	3	<3
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.3	<0.3
	Copper, Cu	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Zinc, Zn	mg/kg	0.5	<0.5
LB138293.001	Arsenic, As	mg/kg	3	<3
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.3	<0.3
	Copper, Cu	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Zinc, Zn	mg/kg	0.5	<0.5

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB138149.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR
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METHOD BLANKS

SE173432 R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB138207.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Surrogates	Dibromofluoromethane (Surrogate)	%	-	84
		d4-1,2-dichloroethane (Surrogate)	%	-	90
		d8-toluene (Surrogate)	%	-	87
		Bromofluorobenzene (Surrogate)	%	-	83
	Totals	Total BTEX	mg/kg	0.6	<0.6

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Sample Number		Parameter	Units	LOR	Result
LB138207.001	Surrogates	TRH C6-C9	mg/kg	20	<20
		Dibromofluoromethane (Surrogate)	%	-	84
		d4-1,2-dichloroethane (Surrogate)	%	-	90
		d8-toluene (Surrogate)	%	-	87

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-ENVJAN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173394.007	LB138290.014	Mercury	mg/kg	0.05	0.07	0.07	104	8
SE173432.042	LB138290.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE173446.003	LB138291.014	Mercury	mg/kg	0.05	0.01590300800	0.0133591961	200	0
SE173446.013	LB138291.024	Mercury	mg/kg	0.05	0.01412494980	0.0128678928	200	0

Moisture Content

Method: ME-(AU)-ENVJAN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173432.020	LB138278.022	% Moisture	%w/w	0.5	6.8	6.3	45	8
SE173432.043	LB138278.044	% Moisture	%w/w	0.5	5.3	4.9	50	6
SE173432.049	LB138278.051	% Moisture	%w/w	0.5	3.5	4.0	57	13

OC Pesticides in Soil

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173432.026	LB138149.025	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
		Alpha BHC	mg/kg	0.1	<0.1	0	200	0
		Lindane	mg/kg	0.1	<0.1	0	200	0
		Heptachlor	mg/kg	0.1	<0.1	0	200	0
		Aldrin	mg/kg	0.1	<0.1	0	200	0
		Beta BHC	mg/kg	0.1	<0.1	0	200	0
		Delta BHC	mg/kg	0.1	<0.1	0	200	0
		Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
		o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
		Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
		Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
		Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
		trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
		p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
		Dieldrin	mg/kg	0.05	<0.05	0	200	0
		Endrin	mg/kg	0.2	<0.2	0	200	0
		o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
		o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
		Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
		p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
		p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
		Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
		Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
		Methoxychlor	mg/kg	0.1	<0.1	0	200	0
		Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
Isodrin	mg/kg	0.1	<0.1	0	200	0		
Mirex	mg/kg	0.1	<0.1	0	200	0		
Surrogates		Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.165	30	13

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-ENVJAN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173490.006	LB138149.023	Naphthalene	mg/kg	0.1	<3.4	<2.9	33	0
		2-methylnaphthalene	mg/kg	0.1	10	8.6	31	16
		1-methylnaphthalene	mg/kg	0.1	6.1	5.0	32	19
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	155	0
		Acenaphthene	mg/kg	0.1	<0.2	<0.2	93	0
		Fluorene	mg/kg	0.1	<0.2	<0.1	148	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = \frac{|OriginalResult - ReplicateResult|}{Mean} \times 100$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \frac{SDL}{Mean} + LR$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173490.006	LB138149.023	Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	134	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	175	0
		Total PAH (18)	mg/kg	0.8	20	17	34	17
		d5-nitrobenzene (Surrogate)	mg/kg	-	1.2	1.0	30	15
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	9
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	11

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173432.023	LB138367.014	pH	pH Units	-	7.6	7.7	31	1
SE173568.005	LB138367.028	pH	pH Units	-	5.3	5.2	32	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173432.021	LB138200.024	Arsenic, As	mg/kg	3	<3	3	65	15
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.3	8.3	8.5	36	3
		Copper, Cu	mg/kg	0.5	6.4	8.0	37	22
		Lead, Pb	mg/kg	1	9	10	40	8
		Nickel, Ni	mg/kg	0.5	5.0	7.4	38	39 @
		Zinc, Zn	mg/kg	0.5	22	26	38	14
SE173432.047	LB138223.024	Arsenic, As	mg/kg	3	<3	<3	79	5
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.3	8.5	8.6	36	1
		Copper, Cu	mg/kg	0.5	3.8	3.4	44	12
		Lead, Pb	mg/kg	1	6	6	46	8
		Nickel, Ni	mg/kg	0.5	2.9	3.1	47	4
		Zinc, Zn	mg/kg	0.5	11	10	49	4
SE173446.005	LB138293.024	Arsenic, As	mg/kg	3	7.811692307610.1895168855		41	26
		Cadmium, Cd	mg/kg	0.3	0.15534615380.1443402126		200	0
		Chromium, Cr	mg/kg	0.3	15.17509999997.0546982485		33	12
		Copper, Cu	mg/kg	0.5	23.92330769236.9329815505		32	12
		Lead, Pb	mg/kg	1	21.90380769237.3616322701		33	74 @
		Nickel, Ni	mg/kg	0.5	9.46279999999.7429643527		35	3
		Zinc, Zn	mg/kg	0.5	19.08938461553.5411976235		34	9
SE173490.002	LB138200.014	Lead, Pb	mg/kg	1	14	25	35	56 @
SE173524.004	LB138223.014	Arsenic, As	mg/kg	3	4	<3	60	27
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.3	6.8	5.4	38	24
		Copper, Cu	mg/kg	0.5	7.1	6.7	37	6
		Lead, Pb	mg/kg	1	8	7	43	16
		Nickel, Ni	mg/kg	0.5	2.9	2.5	48	14
		Zinc, Zn	mg/kg	0.5	17	11	45	43
SE173557.004	LB138293.014	Arsenic, As	mg/kg	3	4	3	59	20
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.3	11	10	35	6
		Copper, Cu	mg/kg	0.5	10	9.5	35	6
		Lead, Pb	mg/kg	1	12	11	39	9
		Nickel, Ni	mg/kg	0.5	5.2	4.9	40	7
		Zinc, Zn	mg/kg	0.5	34	29	36	16

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173490.006	LB138149.023	TRH C10-C14	mg/kg	20	2200	2000	31	13
		TRH C15-C28	mg/kg	45	160	140	60	9
		TRH C29-C36	mg/kg	45	<45	<45	200	0
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	2400	2100	35	13
		TRH C10-C40 Total (F bands)	mg/kg	210	2300	2000	40	13
		TRH F Bands	mg/kg	25	2300	2000	31	13

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-ENVJAN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173490.006	LB138149.023	TRH F Bands						
		TRH >C10-C16 (F2) - Naphthalene	mg/kg	25	2300	2000	31	12
		TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
		TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-ENVJAN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173432.007	LB138207.022	Monocyclic	Benzene	mg/kg	0.1	<0.1	0	200	0
			Aromatic	Toluene	mg/kg	0.1	<0.1	0	200
			Ethylbenzene	mg/kg	0.1	<0.1	0	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0	200	0
			o-xylene	mg/kg	0.1	<0.1	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0	200	0
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	3.8	4.29	50	11
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	3.7	4.45	50	20
			d8-toluene (Surrogate)	mg/kg	-	3.9	5.09	50	27
			Bromofluorobenzene (Surrogate)	mg/kg	-	4.9	4.21	50	16
		Totals	Total Xylenes	mg/kg	0.3	<0.3	0	200	0
			Total BTEX	mg/kg	0.6	<0.6	0	200	0
		SE173490.002	LB138207.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1
Aromatic	Toluene				mg/kg	0.1	<0.1	<0.1	200
	Ethylbenzene			mg/kg	0.1	<0.1	<0.1	200	0
	m/p-xylene			mg/kg	0.2	0.9	0.8	54	19
	o-xylene			mg/kg	0.1	0.2	0.2	77	14
Polycyclic	Naphthalene			mg/kg	0.1	3.8	2.8	33	30
Surrogates	Dibromofluoromethane (Surrogate)			mg/kg	-	0.2	0.2	50	4
	d4-1,2-dichloroethane (Surrogate)			mg/kg	-	3.6	3.7	50	4
	d8-toluene (Surrogate)			mg/kg	-	3.9	3.9	50	1
	Bromofluorobenzene (Surrogate)			mg/kg	-	5.1	5.8	50	14
Totals	Total Xylenes			mg/kg	0.3	1.2	1.0	58	18
	Total BTEX			mg/kg	0.6	1.2	1.0	57	18

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-ENVJAN433

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %	
SE173432.007	LB138207.022	TRH C6-C10	mg/kg	25	<25	0	200	0	
		TRH C6-C9	mg/kg	20	<20	0	200	0	
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	3.8	4.29	30	11
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	3.7	4.45	30	20
			d8-toluene (Surrogate)	mg/kg	-	3.9	5.09	30	27
			Bromofluorobenzene (Surrogate)	mg/kg	-	4.9	4.21	30	16
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	0	200	0
SE173490.002	LB138207.014	TRH C6-C10	mg/kg	25	220	190	42	17	
		TRH C6-C9	mg/kg	20	37	31	89	16	
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	0.2	0.2	30	4
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	3.6	3.7	30	4
			d8-toluene (Surrogate)	mg/kg	-	3.9	3.9	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	5.1	5.8	30	14
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	220	190	42	17

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]JAN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138301.002	Exchangeable Sodium, Na	mg/kg	2	NA	72.68	80 - 120	96
	Exchangeable Potassium, K	mg/kg	2	NA	238.12	80 - 120	95
	Exchangeable Calcium, Ca	mg/kg	2	NA	692	80 - 120	96
	Exchangeable Magnesium, Mg	mg/kg	2	NA	134.2	80 - 120	95

Mercury in Soil

Method: ME-(AU)-[ENV]JAN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138290.002	Mercury	mg/kg	0.05	0.18	0.2	70 - 130	92
LB138291.002	Mercury	mg/kg	0.05	0.17	0.2	70 - 130	86

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]JAN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138256.002	Arsenic, As	mg/L	0.02	2.0	2	80 - 120	98
	Cadmium, Cd	mg/L	0.001	2.0	2	80 - 120	100
	Chromium, Cr	mg/L	0.005	2.0	2	80 - 120	99
	Copper, Cu	mg/L	0.005	2.0	2	80 - 120	99
	Lead, Pb	mg/L	0.02	2.0	2	80 - 120	100
	Nickel, Ni	mg/L	0.005	2.0	2	80 - 120	100
	Zinc, Zn	mg/L	0.01	2.0	2	80 - 120	99

OC Pesticides in Soil

Method: ME-(AU)-[ENV]JAN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138149.002	Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	123
	Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	124
	Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	125
	Dieldrin	mg/kg	0.05	0.23	0.2	60 - 140	114
	Endrin	mg/kg	0.2	0.2	0.2	60 - 140	119
	p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	119
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	-	0.14	0.15	40 - 130	96

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]JAN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138149.002	Naphthalene	mg/kg	0.1	3.9	4	60 - 140	97
	Acenaphthylene	mg/kg	0.1	3.8	4	60 - 140	95
	Acenaphthene	mg/kg	0.1	3.8	4	60 - 140	96
	Phenanthrene	mg/kg	0.1	3.9	4	60 - 140	98
	Anthracene	mg/kg	0.1	3.7	4	60 - 140	93
	Fluoranthene	mg/kg	0.1	3.4	4	60 - 140	86
	Pyrene	mg/kg	0.1	3.3	4	60 - 140	84
	Benzo(a)pyrene	mg/kg	0.1	4.0	4	60 - 140	101
	Surrogates	d5-nitrobenzene (Surrogate)	-	0.5	0.5	40 - 130	94
		2-fluorobiphenyl (Surrogate)	-	0.5	0.5	40 - 130	100
		d14-p-terphenyl (Surrogate)	-	0.5	0.5	40 - 130	98

PCBs in Soil

Method: ME-(AU)-[ENV]JAN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138149.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	116

pH in soil (1:5)

Method: ME-(AU)-[ENV]JAN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138367.003	pH	pH Units	-	7.4	7.415	98 - 102	100

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]JAN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138200.002	Arsenic, As	mg/kg	3	51	50	80 - 120	102
	Cadmium, Cd	mg/kg	0.3	52	50	80 - 120	105
	Chromium, Cr	mg/kg	0.3	53	50	80 - 120	105
	Copper, Cu	mg/kg	0.5	53	50	80 - 120	106
	Lead, Pb	mg/kg	1	53	50	80 - 120	107

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138200.002	Nickel, Ni	mg/kg	0.5	53	50	80 - 120	106
	Zinc, Zn	mg/kg	0.5	53	50	80 - 120	105
LB138223.002	Arsenic, As	mg/kg	3	49	50	80 - 120	99
	Cadmium, Cd	mg/kg	0.3	51	50	80 - 120	101
	Chromium, Cr	mg/kg	0.3	52	50	80 - 120	103
	Copper, Cu	mg/kg	0.5	53	50	80 - 120	107
	Lead, Pb	mg/kg	1	52	50	80 - 120	104
	Nickel, Ni	mg/kg	0.5	51	50	80 - 120	102
	Zinc, Zn	mg/kg	0.5	50	50	80 - 120	101
LB138293.002	Arsenic, As	mg/kg	3	51	50	80 - 120	102
	Cadmium, Cd	mg/kg	0.3	52	50	80 - 120	104
	Chromium, Cr	mg/kg	0.3	52	50	80 - 120	105
	Copper, Cu	mg/kg	0.5	53	50	80 - 120	106
	Lead, Pb	mg/kg	1	53	50	80 - 120	106
	Nickel, Ni	mg/kg	0.5	53	50	80 - 120	105
	Zinc, Zn	mg/kg	0.5	52	50	80 - 120	103

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138149.002	TRH C10-C14	mg/kg	20	30	40	60 - 140	75
	TRH C15-C28	mg/kg	45	<45	40	60 - 140	73
	TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands						
	TRH >C10-C16 (F2)	mg/kg	25	29	40	60 - 140	73
	TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
	TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	75

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138207.002	Monocyclic						
	Benzene	mg/kg	0.1	2.2	2.9	60 - 140	74
	Aromatic						
	Toluene	mg/kg	0.1	2.2	2.9	60 - 140	77
	Ethylbenzene	mg/kg	0.1	2.0	2.9	60 - 140	68
	m/p-xylene	mg/kg	0.2	4.3	5.8	60 - 140	75
	o-xylene	mg/kg	0.1	2.1	2.9	60 - 140	73
	Surrogates						
	Dibromofluoromethane (Surrogate)	mg/kg	-	4.3	5	60 - 140	85
	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.5	5	60 - 140	90
	d8-toluene (Surrogate)	mg/kg	-	4.2	5	60 - 140	84
	Bromofluorobenzene (Surrogate)	mg/kg	-	4.9	5	60 - 140	98

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138207.002	TRH C6-C10	mg/kg	25	<25	24.65	60 - 140	81
	TRH C6-C9	mg/kg	20	<20	23.2	60 - 140	78
	Surrogates						
	Dibromofluoromethane (Surrogate)	mg/kg	-	4.3	5	60 - 140	85
	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.5	5	60 - 140	90
	d8-toluene (Surrogate)	mg/kg	-	4.2	5	60 - 140	84
	Bromofluorobenzene (Surrogate)	mg/kg	-	4.9	5	60 - 140	98
	VPH F Bands						
	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	7.25	60 - 140	98

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Porth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE173432.038	LB138343.004	Mercury	mg/L	0.0001	0.0073	<0.0001	0.008	91

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE173432.043	LB138291.004	Mercury	mg/kg	0.05	0.17	<0.05	0.2	83
SE173523.004	LB138290.004	Mercury	mg/kg	0.05	1.6	1.6	0.2	-16 ☹

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE173432.038	LB138256.004	Arsenic, As	mg/L	0.02	2.0	<0.02	2	101
		Cadmium, Cd	mg/L	0.001	2.1	<0.001	2	104
		Chromium, Cr	mg/L	0.005	2.0	<0.005	2	101
		Copper, Cu	mg/L	0.005	2.0	<0.005	2	101
		Lead, Pb	mg/L	0.02	2.0	<0.02	2	102
		Nickel, Ni	mg/L	0.005	2.0	<0.005	2	102
		Zinc, Zn	mg/L	0.01	2.0	<0.01	2	103

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE173432.001	LB138149.024	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
		Alpha BHC	mg/kg	0.1	<0.1	-	-
		Lindane	mg/kg	0.1	<0.1	-	-
		Heptachlor	mg/kg	0.1	<0.1	0.2	100
		Aldrin	mg/kg	0.1	<0.1	0.2	116
		Beta BHC	mg/kg	0.1	<0.1	-	-
		Delta BHC	mg/kg	0.1	<0.1	0.2	121
		Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
		o,p'-DDE	mg/kg	0.1	<0.1	-	-
		Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
		Gamma Chlordane	mg/kg	0.1	<0.1	-	-
		Alpha Chlordane	mg/kg	0.1	<0.1	-	-
		trans-Nonachlor	mg/kg	0.1	<0.1	-	-
		p,p'-DDE	mg/kg	0.1	<0.1	-	-
		Dieldrin	mg/kg	0.05	<0.05	0.2	102
		Endrin	mg/kg	0.2	<0.2	0.2	115
		o,p'-DDD	mg/kg	0.1	<0.1	-	-
		o,p'-DDT	mg/kg	0.1	<0.1	-	-
		Beta Endosulfan	mg/kg	0.2	<0.2	-	-
		p,p'-DDD	mg/kg	0.1	<0.1	-	-
		p,p'-DDT	mg/kg	0.1	<0.1	0.2	122
		Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
		Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
		Methoxychlor	mg/kg	0.1	<0.1	-	-
		Endrin Ketone	mg/kg	0.1	<0.1	-	-
		Isodrin	mg/kg	0.1	<0.1	-	-
		Mirex	mg/kg	0.1	<0.1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	112

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE173523.001	LB138223.004	Arsenic, As	mg/kg	3	48	4	50	88
		Cadmium, Cd	mg/kg	0.3	49	<0.3	50	98
		Chromium, Cr	mg/kg	0.3	66	16	50	98
		Copper, Cu	mg/kg	0.5	75	29	50	91
		Lead, Pb	mg/kg	1	140	120	50	43 ☹
		Nickel, Ni	mg/kg	0.5	49	2.6	50	94
		Zinc, Zn	mg/kg	0.5	110	79	50	60 ☹
SE173555.001	LB138293.004	Arsenic, As	mg/kg	3	49	3	50	92
		Cadmium, Cd	mg/kg	0.3	47	<0.3	50	93

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE173555.001	LB138293.004	Chromium, Cr	mg/kg	0.3	58	10	50	96
		Copper, Cu	mg/kg	0.5	73	22	50	101
		Lead, Pb	mg/kg	1	52	7	50	88
		Nickel, Ni	mg/kg	0.5	120	44	50	154 @
		Zinc, Zn	mg/kg	0.5	79	42	50	74

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE173505.001	LB138207.004	Monocyclic	Benzene	mg/kg	0.1	<0.1	2.9	68
		Aromatic	Toluene	mg/kg	0.1	<0.1	2.9	73
			Ethylbenzene	mg/kg	0.1	<0.1	2.9	60
			m/p-xylene	mg/kg	0.2	<0.2	5.8	68
			o-xylene	mg/kg	0.1	<0.1	2.9	68
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	-	-
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	4.0	3.7	80
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.2	3.9	84
			d8-toluene (Surrogate)	mg/kg	-	3.9	3.6	79
			Bromofluorobenzene (Surrogate)	mg/kg	-	4.7	3.7	93
		Totals	Total Xylenes	mg/kg	0.3	6.1	<0.3	-
			Total BTEX	mg/kg	0.6	12	<0.6	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE173505.001	LB138207.004	TRH C6-C10	mg/kg	25	<25	<25	24.65	86
		TRH C6-C9	mg/kg	20	20	<20	23.2	87
		Surrogates	Dibromofluoromethane (Surrogate)	mg/kg	-	4.0	3.7	80
			d4-1,2-dichloroethane (Surrogate)	mg/kg	-	4.2	3.9	84
			d8-toluene (Surrogate)	mg/kg	-	3.9	3.6	79
			Bromofluorobenzene (Surrogate)	mg/kg	-	4.7	3.7	93
		VPH F	Benzene (F0)	mg/kg	0.1	2.0	<0.1	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	7.25	132



MATRIX SPIKE DUPLICATES

SE173432 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.



Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here : <http://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf>

- * NATA accreditation does not cover the performance of this service .
 - ** Indicative data, theoretical holding time exceeded.
 - Sample not analysed for this analyte.
 - IS Insufficient sample for analysis.
 - LNR Sample listed, but not received.
 - LOR Limit of reporting.
 - QFH QC result is above the upper tolerance.
 - QFL QC result is below the lower tolerance.
-
- ① At least 2 of 3 surrogates are within acceptance criteria.
 - ② RPD failed acceptance criteria due to sample heterogeneity.
 - ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
 - ④ Recovery failed acceptance criteria due to matrix interference.
 - ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
 - ⑥ LOR was raised due to sample matrix interference.
 - ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
 - ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
 - ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
 - ⑩ LOR was raised due to high conductivity of the sample (required dilution).
 - † Refer to Analytical Report comments for further information.

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6/12/17 2.34p

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

Tel: (02) 4722 2700

CHAIN OF CUSTODY

Results Required by: Normal Turnaround

Date: 12.12.2017

Your Reference No.:

TO: SGS UNIT 16, 33 MADDOX STREET ALEXANDRIA NSW 2015 Tel: 02 8594 0400							Sampled By: JH Job No: 14130/1 Project Manager: AB Location: Jamisontown														
Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	TRH & BTEX	PAH	OCP	OPP	PCB	Asbestos 0.001% w/w	Asbestos	BTEX	Phenols	Herbicides*			
1 TP1	0.0-0.15	05/12/17	SG			✓	✓	✓			✓										
2 TP2	0.0-0.15	05/12/17	SG/SP				✓	✓													
3 TP2	0.25-0.35	05/12/17	SG																		
3 TP3	0.0-0.15	05/12/17	SG/SP																		
TP3	0.45-0.55	05/12/17	SG																		
4 TP4	0.0-0.15	05/12/17	SG/SP																		
TP4	0.55-0.65	05/12/17	SG																		
5 TP5	0.0-0.15	05/12/17	SG/SP																		
TP5	0.5-0.8	05/12/17	SG/SP																		
TP5	1.05-1.15	05/12/17	SG																		
6 TP6	0.0-0.15	05/12/17	SG/SP				✓	✓													
TP6	0.5-0.8	05/12/17	SG/SP																		
TP6	1.05-1.15	05/12/17	SG																		
7 TP7	0.0-0.15	05/12/17	SG/SP			✓	✓	✓	✓	✓	✓		✓	✓							
SG TP7	0.5-0.8	05/12/17	SG/SP											✓							
TP7	1.05-1.15	05/12/17	SG																		
8 TP8	0.0-0.15	05/12/17	SG/SP																		
TP8	0.55-0.65	05/12/17	SG																		
9 TP9	0.0-0.15	05/12/17	SG				✓	✓													
10 TP10	0.0-0.15	05/12/17	SG																		
11 TP11	0.0-0.15	05/12/17	SG																		
12 TP12	0.0-0.15	05/12/17	SG																		
13 TP13	0.0-0.15	05/12/17	SG			✓					✓										
14 TP14	0.0-0.15	05/12/17	SG/SP				✓	✓													
TP14	0.55-0.65	05/12/17	SG																		
15 TP15	0.0-0.15	05/12/17	SG/SP																		
TP15	0.55-0.65	05/12/17	SG																		
16 TP16	0.0-0.15	05/12/17	SG/SP																		
TP16	0.5-0.8	05/12/17	SG/SP																		
TP16	0.85-0.95	05/12/17	SG																		
17 TP17	0.0-0.15	05/12/17	SG/SP				✓	✓													
TP17	0.5-0.8	05/12/17	SG/SP																		

SGS EHS Alexandria Laboratory



SE173432 COC
Received: 06 - Dec - 2017

Tel: (02) 4722 2700

Date: 12.12.2017

[illegible]

GEOTECHNIQUE PTY LTD

CHAIN OF CUSTODY

Results Required by: Normal Turnaround

TO: SGS UNIT 16, 33 MADDOX STREET ALEXANDRIA NSW 2015 Tel: 02 8594 0400		Job No.: 14130/1 Location: Jamisontown					
Composite	Sub-Sample	Depth (m)	Metals As Cd Cr Cu Pb Hg Ni Zn	OCP	OPP	PCB	Herbicides*
39 40 C1	2 TP2 3 TP3 4 TP4	0.0-0.15 0.0-0.15 0.0-0.15	✓	✓			
40 41 C2	5 TP5 6 TP6 7 TP8 8 TP9	0.0-0.15 0.0-0.15 0.0-0.15 0.0-0.15	✓	✓			
41 42 C3	9 TP9 10 TP10 11 TP11	0.0-0.15 0.0-0.15 0.0-0.15	✓				
42 43 C4	12 TP12 22 TP22 34 TP33	0.0-0.15 0.0-0.15 0.0-0.15	✓				
43 44 C5	14 TP14 15 TP15 16 TP16	0.0-0.15 0.0-0.15 0.0-0.15	✓	✓			
44 45 C6	17 TP17 18 TP18 19 TP19	0.0-0.15 0.0-0.15 0.0-0.15	✓	✓			
45 46 C7	23 TP23 24 TP24 25 TP25	0.0-0.15 0.0-0.15 0.0-0.15	✓				
46 47 C8	27 TP27 28 TP28 30 TP29	0.0-0.15 0.0-0.15 0.0-0.15	✓	✓			
47 48 C9	31 TP30 32 TP31 33 TP32	0.0-0.15 0.0-0.15 0.0-0.15	✓				
48 49 D1	35 X1 36 X2 37 X3		✓	✓			
Relinquished by							
Name	Signature	Date					
ANWAR BARBHUYIA	AB	6/12/17					

* 2,4,5-T, 2,4-D, MCPA, MCPB, Mecoprop & Picloram



SAMPLE RECEIPT ADVICE

SE173432

CLIENT DETAILS

Contact Anwar Barbhuyia
Client Geotechnique
Address P.O. Box 880
PENRITH NSW 2751

Telephone 02 4722 2700
Facsimile 02 4722 6161
Email anwar@geotech.com.au

Project **14130-1 Jamisontown**
Order Number (Not specified)
Samples 50

LABORATORY DETAILS

Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
Alexandria NSW 2015

Telephone +61 2 8594 0400
Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com

Samples Received Wed 6/12/2017
Report Due Tue 12/12/2017
SGS Reference **SE173432**

SUBMISSION DETAILS

This is to confirm that 50 samples were received on Wednesday 6/12/2017. Results are expected to be ready by COB Tuesday 12/12/2017. Please quote SGS reference SE173432 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	37 Soil, 1 Water
Date documentation received	6/12/17@2:34pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

19 soil samples have been placed on hold.

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SAMPLE RECEIPT ADVICE

SE173432

CLIENT DETAILS

Client **Geotechnique**

Project **14130-1 Jamisontown**

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	OC Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	pH in soil (1:5)	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	TP1 0.0-0.15	13	28	-	-	1	-	-	-
002	TP2 0.0-0.15	13	-	-	-	1	-	-	-
006	TP6 0.0-0.15	13	-	-	-	1	-	-	-
007	TP7 0.0-0.15	13	28	26	11	1	10	12	8
009	TP9 0.0-0.15	13	-	-	-	1	-	-	-
013	TP13 0.0-0.15	-	28	-	-	-	-	-	-
014	TP14 0.0-0.15	13	-	-	-	1	-	-	-
017	TP17 0.0-0.15	13	-	-	-	1	-	-	-
020	TP20 0.0-0.15	13	28	-	-	1	-	-	-
021	TP21 0.0-0.15	-	28	-	-	-	-	-	-
022	TP22 0.0-0.15	13	-	-	-	1	-	-	-
023	TP23 0.0-0.15	13	-	-	-	1	-	-	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .



SAMPLE RECEIPT ADVICE

SE173432

CLIENT DETAILS

Client **Geotechnique**

Project **14130-1 Jamisontown**

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	OC Pesticides in Soil	pH in soil (1:5)	VOC's in Soil
026	TP26 0.0-0.15	13	28	1	-
029	TP28 0.0-0.15	13	-	1	-
032	TP31 0.0-0.15	13	-	1	-
039	TS1	-	-	-	12
040	C1	-	28	-	-
041	C2	-	28	-	-
044	C5	-	28	-	-
045	C6	-	28	-	-
047	C8	-	28	-	-

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE173432

CLIENT DETAILS

Client Geotechnique

Project 14130-1 Jamisontown

SUMMARY OF ANALYSIS

		OC Pesticides in Soil
No.	Sample ID	
049	D1	28

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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SAMPLE RECEIPT ADVICE

SE173432

CLIENT DETAILS

Client **Geotechnique**

Project **14130-1 Jamisontown**

SUMMARY OF ANALYSIS

No.	Sample ID	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	TP1 0.0-0.15	-	1	1	7
002	TP2 0.0-0.15	-	-	1	-
006	TP6 0.0-0.15	-	-	1	-
007	TP7 0.0-0.15	9	1	1	7
009	TP9 0.0-0.15	-	-	1	-
013	TP13 0.0-0.15	-	1	1	7
014	TP14 0.0-0.15	-	-	1	-
017	TP17 0.0-0.15	-	-	1	-
020	TP20 0.0-0.15	-	1	1	7
021	TP21 0.0-0.15	-	1	1	7
022	TP22 0.0-0.15	-	-	1	-
023	TP23 0.0-0.15	-	-	1	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.

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Please indicate as soon as possible should your request differ from these details .

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SAMPLE RECEIPT ADVICE

SE173432

CLIENT DETAILS

Client **Geotechnique**

Project **14130-1 Jamisontown**

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
026	TP26 0.0-0.15	1	1	7
029	TP28 0.0-0.15	-	1	-
032	TP31 0.0-0.15	-	1	-
040	C1	1	1	7
041	C2	1	1	7
042	C3	1	1	7
043	C4	1	1	7
044	C5	1	1	7
045	C6	1	1	7
046	C7	1	1	7
047	C8	1	1	7
048	C9	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.

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Testing as per this table shall commence immediately unless the client intervenes with a correction .



SAMPLE RECEIPT ADVICE

SE173432

CLIENT DETAILS

Client **Geotechnique**

Project **14130-1 Jamisontown**

SUMMARY OF ANALYSIS

No.	Sample ID	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
049	D1	-	1	1	7
050	TP7 0.5-0.8	9	-	-	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .



SAMPLE RECEIPT ADVICE

SE173432

CLIENT DETAILS

Client **Geotechnique**

Project **14130-1 Jamisontown**

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	Metals in Water (Dissolved) by ICPOES
038	R1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

CLIENT DETAILS

Contact Anwar Barbhuyia
Client Geotechnique
Address P.O. Box 880
 PENRITH NSW 2751

Telephone 02 4722 2700
Facsimile 02 4722 6161
Email anwar@geotech.com.au

Project **14130-1 Jamisontown Additional**
Order Number (Not specified)
Samples 50

LABORATORY DETAILS

Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
 Alexandria NSW 2015

Telephone +61 2 8594 0400
Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com

SGS Reference **SE173432A R0**
Date Received 14/12/2017
Date Reported 18/12/2017

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES



Bennet Lo
 Senior Organic Chemist/Metals Chemist



ANALYTICAL RESULTS

SE173432A R0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 15/12/2017

PARAMETER	UOM	LOR	TP2	TP3	TP4	TP5	TP6
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432A.002	SE173432A.003	SE173432A.004	SE173432A.005	SE173432A.006
Nickel, Ni	mg/kg	0.5	3.7	6.2	7.3	5.2	4.2

PARAMETER	UOM	LOR	TP8	TP9	TP10	TP11	TP12
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432A.008	SE173432A.009	SE173432A.010	SE173432A.011	SE173432A.012
Nickel, Ni	mg/kg	0.5	4.3	3.3	2.6	3.5	3.8

PARAMETER	UOM	LOR	TP14	TP15	TP16	TP17	TP18
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432A.014	SE173432A.015	SE173432A.016	SE173432A.017	SE173432A.018
Nickel, Ni	mg/kg	0.5	4.8	8.0	5.0	3.0	9.7

PARAMETER	UOM	LOR	TP19	TP22	TP23	TP24	TP25
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432A.019	SE173432A.022	SE173432A.023	SE173432A.024	SE173432A.025
Nickel, Ni	mg/kg	0.5	6.0	3.5	3.5	3.5	1.1

PARAMETER	UOM	LOR	TP27	TP28	TP29	TP30	TP31
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
			SE173432A.028	SE173432A.029	SE173432A.030	SE173432A.031	SE173432A.032
Nickel, Ni	mg/kg	0.5	2.9	3.2	3.3	4.0	2.9

PARAMETER	UOM	LOR	TP32	TP33
			SOIL	SOIL
			0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017
			SE173432A.033	SE173432A.034
Nickel, Ni	mg/kg	0.5	3.4	3.0



ANALYTICAL RESULTS

SE173432A R0

Moisture Content [AN002] Tested: 15/12/2017

			TP3	TP4	TP5	TP8	TP10
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
PARAMETER	UOM	LOR	SE173432A.003	SE173432A.004	SE173432A.005	SE173432A.008	SE173432A.010
% Moisture	%w/w	0.5	7.5	7.0	5.2	6.9	5.6

			TP11	TP12	TP15	TP16	TP18
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
PARAMETER	UOM	LOR	SE173432A.011	SE173432A.012	SE173432A.015	SE173432A.016	SE173432A.018
% Moisture	%w/w	0.5	5.0	5.9	7.4	4.9	6.2

			TP19	TP24	TP25	TP27	TP29
			SOIL	SOIL	SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017	5/12/2017	5/12/2017
PARAMETER	UOM	LOR	SE173432A.019	SE173432A.024	SE173432A.025	SE173432A.028	SE173432A.030
% Moisture	%w/w	0.5	8.3	3.2	4.3	4.9	1.0

			TP30	TP32	TP33
			SOIL	SOIL	SOIL
			0.0-0.15	0.0-0.15	0.0-0.15
			5/12/2017	5/12/2017	5/12/2017
PARAMETER	UOM	LOR	SE173432A.031	SE173432A.033	SE173432A.034
% Moisture	%w/w	0.5	8.6	5.4	5.4

METHOD

METHODOLOGY SUMMARY

AN002

The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.

AN040/AN320

A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.

AN040

A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
		IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here : <http://www.sgs.com.au/~media/Local/Australia/Documents/Technical%20Documents/MP-AU-ENV-QU-022%20QA%20QC%20Plan.pdf>

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STATEMENT OF QA/QC PERFORMANCE

SE173432A R0

CLIENT DETAILS

Contact Anwar Barbhuyia
Client Geotechnique
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PENRITH NSW 2751

Telephone 02 4722 2700
Facsimile 02 4722 6161
Email anwar@geotech.com.au

Project **14130-1 Jamisontown Additional**
Order Number (Not specified)
Samples 50

LABORATORY DETAILS

Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
Alexandria NSW 2015

Telephone +61 2 8594 0400
Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com

SGS Reference **SE173432A R0**
Date Received 14 Dec 2017
Date Reported 18 Dec 2017

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document and was supplied by the Client.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	27 Soil
Date documentation received	14/12/17@1:42pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Two Days		



HOLDING TIME SUMMARY

SE173432A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP3	SE173432A.003	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP4	SE173432A.004	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP5	SE173432A.005	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP8	SE173432A.008	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP10	SE173432A.010	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP11	SE173432A.011	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP12	SE173432A.012	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP15	SE173432A.015	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP16	SE173432A.016	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP18	SE173432A.018	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP19	SE173432A.019	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP24	SE173432A.024	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP25	SE173432A.025	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP27	SE173432A.028	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP29	SE173432A.030	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP30	SE173432A.031	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP32	SE173432A.033	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017
TP33	SE173432A.034	LB138696	05 Dec 2017	14 Dec 2017	19 Dec 2017	15 Dec 2017	20 Dec 2017	16 Dec 2017

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP2	SE173432A.002	LB138701	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP3	SE173432A.003	LB138701	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP4	SE173432A.004	LB138701	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP5	SE173432A.005	LB138701	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP6	SE173432A.006	LB138701	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP8	SE173432A.008	LB138701	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP9	SE173432A.009	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP10	SE173432A.010	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP11	SE173432A.011	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP12	SE173432A.012	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP14	SE173432A.014	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP15	SE173432A.015	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP16	SE173432A.016	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP17	SE173432A.017	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP18	SE173432A.018	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP19	SE173432A.019	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP22	SE173432A.022	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP23	SE173432A.023	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP24	SE173432A.024	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP25	SE173432A.025	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP27	SE173432A.028	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP28	SE173432A.029	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP29	SE173432A.030	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP30	SE173432A.031	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP31	SE173432A.032	LB138702	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP32	SE173432A.033	LB138727	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017
TP33	SE173432A.034	LB138727	05 Dec 2017	14 Dec 2017	03 Jun 2018	15 Dec 2017	03 Jun 2018	18 Dec 2017



SURROGATES

SE173432A R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.



METHOD BLANKS

SE173432A R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements In Soil/Waste Solids/Materials by ICPOES Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB138701.001	Nickel, Ni	mg/kg	0.5	<0.5
LB138702.001	Nickel, Ni	mg/kg	0.5	<0.5
LB138727.001	Nickel, Ni	mg/kg	0.5	<0.5



DUPLICATES

SE173432A R0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173432A.018	LB138696.011	% Moisture	%w/w	0.5	6.2	6.2	46	0
SE173757.002	LB138696.022	% Moisture	%w/w	0.5	11.44303797482	1621621621	38	6
SE173757.012	LB138696.033	% Moisture	%w/w	0.5	21.53635116520	8264462806	35	3
SE173757.022	LB138696.044	% Moisture	%w/w	0.5	15.43209876545	5279503106	36	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE173432A.008	LB138701.024	Nickel, Ni	mg/kg	0.5	4.3	5.1	41	17
SE173432A.019	LB138702.014	Nickel, Ni	mg/kg	0.5	6.0	7.9	37	28
SE173432A.032	LB138702.024	Nickel, Ni	mg/kg	0.5	2.9	2.7	48	6
SE173595.075	LB138701.014	Nickel, Ni	mg/kg	0.5	2.92188295442	5582040650	48	13



Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES**Method: ME-(AU)-[ENV]AN040/AN320**

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138701.002	Nickel, Ni	mg/kg	0.5	52	50	80 - 120	103
LB138702.002	Nickel, Ni	mg/kg	0.5	49	50	80 - 120	97
LB138727.002	Nickel, Ni	mg/kg	0.5	50	50	80 - 120	100



MATRIX SPIKES

SE173432A R0

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE173432A.00	LB138702.004	Nickel, Ni	mg/kg	0.5	52	3.3	50	98
SE173773.016	LB138701.004	Nickel, Ni	mg/kg	0.5	52	6.53011764705	50	92
SE173808.001	LB138727.004	Nickel, Ni	mg/kg	0.5	43	1.03548974003	50	84



MATRIX SPIKE DUPLICATES

SE173432A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.



Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here : <http://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf>

- * NATA accreditation does not cover the performance of this service .
 - ** Indicative data, theoretical holding time exceeded.
 - Sample not analysed for this analyte.
 - IS Insufficient sample for analysis.
 - LNR Sample listed, but not received.
 - LOR Limit of reporting.
 - QFH QC result is above the upper tolerance.
 - QFL QC result is below the lower tolerance.
-
- ① At least 2 of 3 surrogates are within acceptance criteria.
 - ② RPD failed acceptance criteria due to sample heterogeneity.
 - ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
 - ④ Recovery failed acceptance criteria due to matrix interference.
 - ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
 - ⑥ LOR was raised due to sample matrix interference.
 - ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
 - ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
 - ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
 - ⑩ LOR was raised due to high conductivity of the sample (required dilution).
 - † Refer to Analytical Report comments for further information.

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CHAIN OF CUSTODY

Results Required by: 2 days

Your Reference No.: SE173432

[illegible]



SAMPLE RECEIPT ADVICE

SE173432A

CLIENT DETAILS

Contact Anwar Barbhuyia
Client Geotechnique
Address P.O. Box 880
PENRITH NSW 2751

Telephone 02 4722 2700
Facsimile 02 4722 6161
Email anwar@geotech.com.au

Project **14130-1 Jamisontown Additional**
Order Number (Not specified)
Samples 50

LABORATORY DETAILS

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Laboratory SGS Alexandria Environmental
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Alexandria NSW 2015

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Samples Received Thu 14/12/2017
Report Due Mon 18/12/2017
SGS Reference **SE173432A**

SUBMISSION DETAILS

This is to confirm that 50 samples were received on Thursday 14/12/2017. Results are expected to be ready by COB Monday 18/12/2017. Please quote SGS reference SE173432A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	27 Soil
Date documentation received	14/12/17@1:42pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Two Days		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE173432A

CLIENT DETAILS

Client **Geotechnique**

Project **14130-1 Jamisontown Additional**

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	Total Recoverable Elements in Soil/Waste
002	TP2 0.0-0.15	-	1
003	TP3 0.0-0.15	1	1
004	TP4 0.0-0.15	1	1
005	TP5 0.0-0.15	1	1
006	TP6 0.0-0.15	-	1
008	TP8 0.0-0.15	1	1
009	TP9 0.0-0.15	-	1
010	TP10 0.0-0.15	1	1
011	TP11 0.0-0.15	1	1
012	TP12 0.0-0.15	1	1
014	TP14 0.0-0.15	-	1
015	TP15 0.0-0.15	1	1
016	TP16 0.0-0.15	1	1
017	TP17 0.0-0.15	-	1
018	TP18 0.0-0.15	1	1
019	TP19 0.0-0.15	1	1
022	TP22 0.0-0.15	-	1
023	TP23 0.0-0.15	-	1
024	TP24 0.0-0.15	1	1

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.

The numbers shown in the table indicate the number of results requested in each package.

Please indicate as soon as possible should your request differ from these details .

Testing as per this table shall commence immediately unless the client intervenes with a correction .



SAMPLE RECEIPT ADVICE

SE173432A

CLIENT DETAILS

Client **Geotechnique**

Project **14130-1 Jamisontown Additional**

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	Total Recoverable Elements in Soil/Waste
025	TP25 0.0-0.15	1	1
028	TP27 0.0-0.15	1	1
029	TP28 0.0-0.15	-	1
030	TP29 0.0-0.15	1	1
031	TP30 0.0-0.15	1	1
032	TP31 0.0-0.15	-	1
033	TP32 0.0-0.15	1	1
034	TP33 0.0-0.15	1	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

CLIENT DETAILS

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Project 14130-1 Jamisontown Additional
Order Number (Not specified)
Samples 50

LABORATORY DETAILS

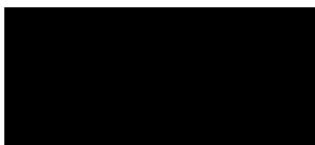
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Email au.environmental.sydney@sgs.com
SGS Reference SE173432B R0
Date Received 18/12/2017
Date Reported 19/12/2017

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES



Bennet Lo
 Senior Organic Chemist/Metals Chemist



ANALYTICAL RESULTS

SE173432B R0

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 19/12/2017

PARAMETER	UOM	LOR	TP3	TP4	TP15	TP18
			SOIL 0.0-0.15 5/12/2017 SE173432B.003	SOIL 0.0-0.15 5/12/2017 SE173432B.004	SOIL 0.0-0.15 5/12/2017 SE173432B.015	SOIL 0.0-0.15 5/12/2017 SE173432B.018
Exchangeable Sodium, Na	mg/kg	2	89	280	390	120
Exchangeable Sodium, Na	meq/100g	0.01	0.39	1.2	1.7	0.51
Exchangeable Sodium Percentage*	%	0.1	13.9	24.8	14.9	8.5
Exchangeable Potassium, K	mg/kg	2	18	25	72	56
Exchangeable Potassium, K	meq/100g	0.01	0.05	0.06	0.18	0.14
Exchangeable Potassium Percentage*	%	0.1	1.7	1.3	1.6	2.4
Exchangeable Calcium, Ca	mg/kg	2	210	310	830	460
Exchangeable Calcium, Ca	meq/100g	0.01	1.0	1.5	4.2	2.3
Exchangeable Calcium Percentage*	%	0.1	37.5	31.4	36.9	38.5
Exchangeable Magnesium, Mg	mg/kg	2	160	250	640	370
Exchangeable Magnesium, Mg	meq/100g	0.02	1.3	2.1	5.2	3.0
Exchangeable Magnesium Percentage*	%	0.1	46.9	42.5	46.6	50.6
Cation Exchange Capacity	meq/100g	0.02	2.8	4.9	11	6.0

METHOD

METHODOLOGY SUMMARY

AN122

Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.

AN122

The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100.

ESP can be used to categorise the sodicity of the soil as below:

ESP < 6%	non-sodic
ESP 6-15%	sodic
ESP >15%	strongly sodic

Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
		IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.

Note that in terms of units of radioactivity:

- 1 Bq is equivalent to 27 pCi
- 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here : <http://www.sgs.com.au/~media/Local/Australia/Documents/Technical%20Documents/MP-AU-ENV-QU-022%20QA%20QC%20Plan.pdf>

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STATEMENT OF QA/QC PERFORMANCE

SE173432B R0

CLIENT DETAILS

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Project **14130-1 Jamisontown Additional**
Order Number (Not specified)
Samples 50

LABORATORY DETAILS

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SGS Reference **SE173432B R0**
Date Received 18 Dec 2017
Date Reported 19 Dec 2017

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document and was supplied by the Client.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	4 Soil
Date documentation received	18/2/17@4:11pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Next Day		



HOLDING TIME SUMMARY

SE173432B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
TP3	SE173432B.003	LB138881	05 Dec 2017	18 Dec 2017	02 Jan 2018	19 Dec 2017	02 Jan 2018	19 Dec 2017
TP4	SE173432B.004	LB138881	05 Dec 2017	18 Dec 2017	02 Jan 2018	19 Dec 2017	02 Jan 2018	19 Dec 2017
TP15	SE173432B.015	LB138881	05 Dec 2017	18 Dec 2017	02 Jan 2018	19 Dec 2017	02 Jan 2018	19 Dec 2017
TP18	SE173432B.018	LB138881	05 Dec 2017	18 Dec 2017	02 Jan 2018	19 Dec 2017	02 Jan 2018	19 Dec 2017



SURROGATES

SE173432B R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.



METHOD BLANKS

SE173432B R0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB138881.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0



Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.



Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)**Method: ME-(AU)-[ENV]AN122**

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB138881.002	Exchangeable Sodium, Na	mg/kg	2	NA	72.68	80 - 120	99
	Exchangeable Potassium, K	mg/kg	2	NA	238.12	80 - 120	103
	Exchangeable Calcium, Ca	mg/kg	2	NA	692	80 - 120	94
	Exchangeable Magnesium, Mg	mg/kg	2	NA	134.2	80 - 120	110



Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub-sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.



MATRIX SPIKE DUPLICATES

SE173432B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: $RPD = | \text{OriginalResult} - \text{ReplicateResult} | \times 100 / \text{Mean}$

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: $MAD = 100 \times \text{SDL} / \text{Mean} + \text{LR}$

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifier when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.



Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here : <http://www.sgs.com.au/~media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf>

- * NATA accreditation does not cover the performance of this service .
 - ** Indicative data, theoretical holding time exceeded.
 - Sample not analysed for this analyte.
 - IS Insufficient sample for analysis.
 - LNR Sample listed, but not received.
 - LOR Limit of reporting.
 - QFH QC result is above the upper tolerance.
 - QFL QC result is below the lower tolerance.
-
- ① At least 2 of 3 surrogates are within acceptance criteria.
 - ② RPD failed acceptance criteria due to sample heterogeneity.
 - ③ Results less than 5 times LOR preclude acceptance criteria for RPD.
 - ④ Recovery failed acceptance criteria due to matrix interference.
 - ⑤ Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
 - ⑥ LOR was raised due to sample matrix interference.
 - ⑦ LOR was raised due to dilution of significantly high concentration of analyte in sample.
 - ⑧ Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
 - ⑨ Recovery failed acceptance criteria due to sample heterogeneity.
 - ⑩ LOR was raised due to high conductivity of the sample (required dilution).
 - † Refer to Analytical Report comments for further information.

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SAMPLE RECEIPT ADVICE

SE173432B

CLIENT DETAILS

Contact Anwar Barbhuyia
Client Geotechnique
Address P.O. Box 880
PENRITH NSW 2751

Telephone 02 4722 2700
Facsimile 02 4722 6161
Email anwar@geotech.com.au

Project **14130-1 Jamisontown Additional**
Order Number (Not specified)
Samples 50

LABORATORY DETAILS

Manager Huong Crawford
Laboratory SGS Alexandria Environmental
Address Unit 16, 33 Maddox St
Alexandria NSW 2015

Telephone +61 2 8594 0400
Facsimile +61 2 8594 0499
Email au.environmental.sydney@sgs.com

Samples Received Mon 18/12/2017
Report Due Tue 19/12/2017
SGS Reference **SE173432B**

SUBMISSION DETAILS

This is to confirm that 50 samples were received on Monday 18/12/2017. Results are expected to be ready by COB Tuesday 19/12/2017. Please quote SGS reference SE173432B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	4 Soil
Date documentation received	18/2/17@4:11pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Next Day		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE173432B

CLIENT DETAILS

Client **Geotechnique**

Project **14130-1 Jamisontown Additional**

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity
003	TP3 0.0-0.15	13
004	TP4 0.0-0.15	13
015	TP15 0.0-0.15	13
018	TP18 0.0-0.15	13

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

E-MAILED
18/12/17 @ 4.11 PM

GEOTECHNIQUE PTY LTD

1 LEMKO PLACE PENRITH NSW 2750

Tel: (02) 4722 2700

CHAIN OF CUSTODY

Results Required by:

19-Dec-17

Your Reference No.: SE173432

TO: SGS UNIT 16, 33 MADDOX STREET ALEXANDRIA NSW 2015 Tel: 02 8594 0400							Sampled By: JH Job No: 14130/1 Project Manager: AB Location: Jamisontown														
Location	Depth (m)	Date	Soil	Water	Material	Metals As Cd Cr Cu Pb Hg Ni Zn	pH	CEC	TRH & BTEX	PAH	OCP	OPP	PCB	Asbestos 0.001% w/w	Asbestos	BTEX	Phenols	Herbicides*			
TP1	0.0-0.15	05/12/17	SG																		
TP2	0.0-0.15	05/12/17	SG/SP																		
TP2	0.25-0.35	05/12/17	SG																		
3 TP3	0.0-0.15	05/12/17	SG/SP					✓													
TP3	0.45-0.55	05/12/17	SG																		
4 TP4	0.0-0.15	05/12/17	SG/SP					✓													
TP4	0.55-0.65	05/12/17	SG																		
TP5	0.0-0.15	05/12/17	SG/SP																		
TP5	0.5-0.8	05/12/17	SG/SP																		
TP5	1.05-1.15	05/12/17	SG																		
TP6	0.0-0.15	05/12/17	SG/SP																		
TP6	0.5-0.8	05/12/17	SG/SP																		
TP6	1.05-1.15	05/12/17	SG																		
TP7	0.0-0.15	05/12/17	SG/SP																		
TP7	0.5-0.8	05/12/17	SG/SP																		
TP7	1.05-1.15	05/12/17	SG																		
TP8	0.0-0.15	05/12/17	SG/SP																		
TP8	0.55-0.65	05/12/17	SG																		
TP9	0.0-0.15	05/12/17	SG																		
TP10	0.0-0.15	05/12/17	SG																		
TP11	0.0-0.15	05/12/17	SG																		
TP12	0.0-0.15	05/12/17	SG																		
TP13	0.0-0.15	05/12/17	SG																		
TP14	0.0-0.15	05/12/17	SG/SP																		
TP14	0.55-0.65	05/12/17	SG																		
15 TP15	0.0-0.15	05/12/17	SG/SP					✓													
TP15	0.55-0.65	05/12/17	SG																		
TP16	0.0-0.15	05/12/17	SG/SP																		
TP16	0.5-0.8	05/12/17	SG/SP																		
TP16	0.85-0.95	05/12/17	SG																		
TP17	0.0-0.15	05/12/17	SG/SP																		
TP17	0.5-0.8	05/12/17	SG/SP																		

SGS EHS Alexandria Laboratory



SE173432B COC

Received: 18 - Dec - 2017

Tel: (02) 4722 2700

Your Reference No.: SE173432

Document Set ID: 9204869
Version: 1, Version Date: 07/07/2020

CERTIFICATE OF ANALYSIS 181477

Client Details

Client	Geotechnique Pty Ltd
Attention	Anwar Barbhuyia
Address	PO Box 880, Penrith, NSW, 2751

Sample Details

Your Reference	<u>14130/1 Jamisontown</u>
Number of Samples	3 soils
Date samples received	06/12/2017
Date completed instructions received	06/12/2017

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

Date results requested by	13/12/2017
Date of Issue	11/12/2017
NATA Accreditation Number 2901. This document shall not be reproduced except in full.	
Accredited for compliance with ISO/IEC 17025 - Testing. Tests not covered by NATA are denoted with *	

Results Approved By

Dragana Tomas, Senior Chemist
Long Pham, Team Leader, Metals

Authorised By



David Springer, General Manager

Organochlorine Pesticides in soil		
Our Reference		181477-3
Your Reference	UNITS	Z3
Date Sampled		05/12/2017
Type of sample		soil
Date extracted	-	07/12/2017
Date analysed	-	08/12/2017
HCB	mg/kg	<0.1
alpha-BHC	mg/kg	<0.1
gamma-BHC	mg/kg	<0.1
beta-BHC	mg/kg	<0.1
Heptachlor	mg/kg	<0.1
delta-BHC	mg/kg	<0.1
Aldrin	mg/kg	<0.1
Heptachlor Epoxide	mg/kg	<0.1
gamma-Chlordane	mg/kg	<0.1
alpha-chlordane	mg/kg	<0.1
Endosulfan I	mg/kg	<0.1
pp-DDE	mg/kg	<0.1
Dieldrin	mg/kg	<0.1
Endrin	mg/kg	<0.1
pp-DDD	mg/kg	<0.1
Endosulfan II	mg/kg	<0.1
pp-DDT	mg/kg	<0.1
Endrin Aldehyde	mg/kg	<0.1
Endosulfan Sulphate	mg/kg	<0.1
Methoxychlor	mg/kg	<0.1
Total +ve DDT+DDD+DDE	mg/kg	<0.1
Surrogate TCMX	%	85

Acid Extractable metals in soil		
Our Reference		181477-3
Your Reference	UNITS	Z3
Date Sampled		05/12/2017
Type of sample		soil
Date prepared	-	07/12/2017
Date analysed	-	07/12/2017
Arsenic	mg/kg	<4
Cadmium	mg/kg	<0.4
Chromium	mg/kg	12
Copper	mg/kg	11
Lead	mg/kg	20
Mercury	mg/kg	<0.1
Nickel	mg/kg	4
Zinc	mg/kg	190

Moisture		
Our Reference		181477-3
Your Reference	UNITS	Z3
Date Sampled		05/12/2017
Type of sample		soil
Date prepared	-	07/12/2017
Date analysed	-	08/12/2017
Moisture	%	5.9

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES.
Metals-021	Determination of Mercury by Cold Vapour AAS.
Org-005	Soil samples are extracted with dichloromethane/acetone and waters with dichloromethane and analysed by GC with dual ECD's.
Org-005	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.

QUALITY CONTROL: Organochlorine Pesticides in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-4	[NT]
Date extracted	-			07/12/2017	[NT]	[NT]	[NT]	[NT]	07/12/2017	[NT]
Date analysed	-			08/12/2017	[NT]	[NT]	[NT]	[NT]	08/12/2017	[NT]
HCB	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	109	[NT]
gamma-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
beta-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	113	[NT]
Heptachlor	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	108	[NT]
delta-BHC	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Aldrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	107	[NT]
Heptachlor Epoxide	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	113	[NT]
gamma-Chlordane	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
alpha-chlordane	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan I	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDE	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	117	[NT]
Dieldrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	119	[NT]
Endrin	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	103	[NT]
pp-DDD	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	110	[NT]
Endosulfan II	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
pp-DDT	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endrin Aldehyde	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Endosulfan Sulphate	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	111	[NT]
Methoxychlor	mg/kg	0.1	Org-005	<0.1	[NT]	[NT]	[NT]	[NT]	[NT]	[NT]
Surrogate TCMX	%		Org-005	87	[NT]	[NT]	[NT]	[NT]	90	[NT]

QUALITY CONTROL: Acid Extractable metals in soil					Duplicate			Spike Recovery %		
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-6	[NT]
Date prepared	-			07/12/2017	[NT]	[NT]	[NT]	[NT]	07/12/2017	[NT]
Date analysed	-			07/12/2017	[NT]	[NT]	[NT]	[NT]	07/12/2017	[NT]
Arsenic	mg/kg	4	Metals-020	<4	[NT]	[NT]	[NT]	[NT]	107	[NT]
Cadmium	mg/kg	0.4	Metals-020	<0.4	[NT]	[NT]	[NT]	[NT]	105	[NT]
Chromium	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	106	[NT]
Copper	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	103	[NT]
Lead	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Mercury	mg/kg	0.1	Metals-021	<0.1	[NT]	[NT]	[NT]	[NT]	109	[NT]
Nickel	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	104	[NT]
Zinc	mg/kg	1	Metals-020	<1	[NT]	[NT]	[NT]	[NT]	117	[NT]

Result Definitions

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

Quality Control Definitions

Blank	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.
Duplicate	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.
Matrix Spike	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.
LCS (Laboratory Control Sample)	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.
Surrogate Spike	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: <5xPQL - any RPD is acceptable; >5xPQL - 0-50% RPD is acceptable.

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.

SAMPLE RECEIPT ADVICE

Client Details

Client	Geotechnique Pty Ltd
Attention	Anwar Barbhuyia

Sample Login Details

Your reference	14130/1 Jamisontown
Envirolab Reference	181477
Date Sample Received	06/12/2017
Date Instructions Received	06/12/2017
Date Results Expected to be Reported	13/12/2017

Sample Condition

Samples received in appropriate condition for analysis	YES
No. of Samples Provided	3 soils
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	10.4
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments

Nil

Please direct any queries to:

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

Analysis Underway, details on the following page:

**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	Organochlorine Pesticides in soil	Acid Extractable metals in soil	On Hold
Z1			✓
Z2			✓
Z3	✓	✓	

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

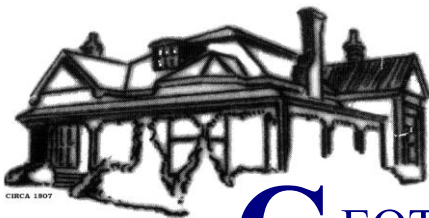
Additional Info

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.

APPENDIX I

UNEXPECTED FINDS MANAGEMENT PROTOCOL



GEOTECHNIQUE[®]
PTY LTD

ARN 64 002 841 063



UNEXPECTED FINDS MANAGEMENT PROTOCOL

LOT 111 IN DP1035909 121-133 BLAIKIE ROAD, JAMISONTOWN

In the event that unexpected finds and/or suspect materials (identified by unusual staining, odour, discolouration or inclusions such as building rubble, asbestos sheeting/pieces/pipes, ash material, imported fill, etc.) are encountered during future earthworks/demolitions or in between sampling locations, the following actions are to be undertaken.

Management of unexpected finds and/or suspect materials

If unexpected finds and/or suspect materials are encountered:

- Works are to be ceased.
- An Environmental consultant is to be engaged to take appropriate action.
- If contamination is identified, the contaminated materials must be disposed of at an EPA licensed landfill facility with an appropriate waste classification.

Management of bonded asbestos containing material (ACM)

If ACM is encountered, the following measures are implemented:

- Engage a Class B Licence for bonded asbestos contractor.
- Removal of the asbestos waste must be carried out in accordance with the requirements of the regulators, such as SafeWork NSW and NSW EPA.
- A competent personnel or a SafeWork NSW Licensed Asbestos Assessor or a Professional Hygienist should be engaged to provide a clearance certificate.

Management of friable asbestos within the soil

It is recommended that the following measures are implemented if friable asbestos is encountered:

- Engage a Class A licensed contractor for friable asbestos
- Removal of the asbestos waste must be carried out in accordance with the requirements of the regulators, such as SafeWork NSW and NSW EPA
- A SafeWork NSW Licensed Asbestos Assessor or a Professional Hygienist must be engaged to provide a clearance certificate

APPENDIX J

ENVIRONMENTAL NOTES

IMPORTANT INFORMATION REGARDING YOUR ENVIRONMENTAL SITE ASSESSMENT

These notes have been prepared by Geotechnique Pty Ltd, using guidelines prepared by the ASFE (Associated Soil and Foundation Engineers). The notes are offered to assist in the interpretation of your environmental site assessment report.

REASONS FOR AN ENVIRONMENTAL ASSESSMENT

Environmental site assessments are typically, though not exclusively, performed in the following circumstances:

- As a pre-acquisition assessment on behalf of a purchaser or a vendor, when a property is to be sold
- As a pre-development assessment, when a property or area of land is to be redeveloped, or the land use has changed, e.g. from a factory to a residential subdivision
- As a pre-development assessment of greenfield sites, to establish baseline conditions and assess environmental, geological and hydrological constraints to the development of e.g. a landfill
- As an audit of the environmental effects of previous and present site usage

Each circumstance requires a specific approach to assessment of soil and groundwater contamination. In all cases the objective is to identify and if possible quantify the risks that unrecognised contamination poses to the ongoing proposed activity. Such risks may be financial (clean-up costs or limitations in site use) and physical (health risks to site users or the public).

ENVIRONMENTAL SITE ASSESSMENT LIMITATIONS

Although information provided by an environmental site assessment can reduce exposure to the risk of the presence of contamination, no environmental site assessment can eliminate the risk. Even a rigorous professional assessment might not detect all contamination within a site. Contaminants could be present in areas that were not surveyed or sampled, or migrate to areas that did not show signs of contamination when sampled. Contaminant analysis cannot possibly cover every type of contaminant that may occur; only the most likely contaminants are screened.

AN ENVIRONMENTAL SITE ASSESSMENT REPORT IS BASED ON A UNIQUE SET OF PROJECT SPECIFIC FACTORS

In the following events and in order to avoid cost problems, you should ask your consultant to assess any changes in the conclusion and recommendations made in the assessment:

- When the nature of the proposed development is changed e.g. if a residential development is proposed, rather than a commercial development
- When the size or configuration of the proposed development is altered e.g. if a basement is added
- When the location or orientation of the proposed structure is modified
- When there is a change of land ownership, or
- For application to an adjacent site

ENVIRONMENTAL SITE ASSESSMENT FINDINGS ARE PROFESSIONAL ESTIMATES

Site assessment identifies actual sub-surface conditions only at those points where samples are taken, when they are taken. Data obtained from the sampling and subsequent laboratory analyses are interpreted by geologists, engineers or scientists and opinions are drawn about the overall sub-surface conditions, the nature and extent of contamination, the likely impact on any proposed development and appropriate remediation measures. Actual conditions may differ from those inferred, because no professional, no matter how qualified and no sub-surface exploration program, no matter how comprehensive, can reveal what is hidden by earth, rock and time. The actual interface between materials may be far more gradual or abrupt than an assessment indicates. Actual conditions in areas not sampled may differ from predictions. Nothing can be done to prevent the unanticipated, however, steps can be taken to help minimise the impact. For this reason site owners should retain the services of their consultants throughout the development stages of the project in order to identify variances, conduct additional tests that may be necessary and to recommend solutions to problems encountered on site.

Soil and groundwater contamination is a field in which legislation and interpretation of legislation by government departments is changing rapidly. Whilst every attempt is made by Geotechnique Pty Ltd to be familiar with current policy, our interpretation of the investigation findings should not be taken to be that of the relevant authority. When approval from a statutory authority is required for a project, approval should be directly sought.

STABILITY OF SUB-SURFACE CONDITIONS

Sub-surface conditions can change by natural processes and site activities. As an environmental site assessment is based on conditions existing at the time of the investigation, project decisions should not be based on environmental site assessment data that may have been affected by time. The consultant should be requested to advise if additional tests are required.

ENVIRONMENTAL SITE ASSESSMENTS ARE PERFORMED FOR SPECIFIC PURPOSES AND CLIENTS

Environmental site assessments are prepared in response to a specific scope of work required to meet the specific needs of specific individuals e.g. an assessment prepared for a consulting civil engineer may not be adequate to a construction contractor or another consulting civil engineer.

An assessment should not be used by other persons for any purpose or by the client for a different purpose. No individual, other than the client, should apply an assessment, even for its intended purpose, without first conferring with the consultant. No person should apply an assessment for any purpose other than that originally contemplated, without first conferring with the consultant.

MISINTERPRETATION OF ENVIRONMENTAL SITE ASSESSMENTS

Costly problems can occur when design professionals develop plans based on misinterpretation of an environmental site assessment. In order to minimise problems, the environmental consultant should be retained to work with appropriate design professionals, to explain relevant findings and to review the adequacy of plans and specifications relative to contamination issues.

LOGS SHOULD NOT BE SEPARATED FROM THE REPORT

Borehole and test pit logs are prepared by environmental scientists, engineers or geologists, based upon interpretation of field conditions and laboratory evaluation of field samples. Logs are normally provided in our reports and these would not be redrawn for inclusion in site remediation or other design drawings, as subtle but significant drafting errors or omissions may occur in the transfer process. Photographic reproduction can eliminate this problem, however, contractors can still misinterpret the logs during bid preparation if separated from the text of the assessment. Should this occur, delays and disputes, or unanticipated costs may result.

To reduce the likelihood of borehole and test pit log misinterpretation, the complete assessment should be available to persons or organisations involved in the project, such as contractors, for their use. Denial of such access and disclaiming responsibility for the accuracy of sub-surface information does not insulate an owner from the attendant liability. It is critical that the site owner provides all available site information to persons and organisations, such as contractors.

READ RESPONSIBILITY CLAUSES CLOSELY

An environmental site assessment is based extensively on judgement and opinion; therefore, it is necessarily less exact than other disciplines. This situation has resulted in wholly unwarranted claims being lodged against consultants. In order to aid in prevention of this problem, model clauses have been developed for use in written transmittals. These are definitive clauses, designed to indicate consultant responsibility. Their use helps all parties involved recognise individual responsibilities and formulate appropriate action. Some of these definitive clauses are likely to appear in the environmental site assessment and you are encouraged to read them closely. Your consultant will be happy to give full and frank answers to any questions you may have.