Page	: 7 of 16
Work Order	: ES1419212
Client	: AECOM Australia Pty Ltd
Project	: 60316172 TASK No 1 1 ESA CHARNWOOD

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074B: Oxygenated Compounds								
Soil Glass Jar - Unpreserved (EP074)								
S1,	S2,	**27-AUG-2014**	**29-AUG-2014**	03-SEP-2014	✓	**29-AUG-2014**	03-SEP-2014	✓
S3,	S4,							
S5,	S6,							
S7,	S8,							
S9,	S10,							
S11,	S12,							
S13,	S14,							
S15,	S16,							
S17,	S18,							
QC1,	SP1							
Soil Glass Jar - Unpreserved (EP074)								
SP2,	SP3,	**27-AUG-2014**	**29-AUG-2014**	03-SEP-2014	✓	**30-AUG-2014**	03-SEP-2014	✓
SP4,	SP5,							
SP6,	SP7,							
SP8,	SP9,							
SP10,	SP11,							
QC3,	QC4							
EP074C: Sulfonated Compounds								
Soil Glass Jar - Unpreserved (EP074)								
S1,	S2,	**27-AUG-2014**	**29-AUG-2014**	03-SEP-2014	✓	**29-AUG-2014**	03-SEP-2014	✓
S3,	S4,							
S5,	S6,							
S7,	S8,							
S9,	S10,							
S11,	S12,							
S13,	S14,							
S15,	S16,							
S17,	S18,							
QC1,	SP1							
Soil Glass Jar - Unpreserved (EP074)								
SP2,	SP3,	**27-AUG-2014**	**29-AUG-2014**	03-SEP-2014	✓	**30-AUG-2014**	03-SEP-2014	✓
SP4,	SP5,							
SP6,	SP7,							
SP8,	SP9,							
SP10,	SP11,							
QC3,	QC4							

Page	: 8 of 16
Work Order	: ES1419212
Client	: AECOM Australia Pty Ltd
Project	: 60316172 TASK No 1 1 ESA CHARNWOOD

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP074G: Trihalomethanes								
Soil Glass Jar - Unpreserved (EP074)								
S1,	S2,	**27-AUG-2014**	**29-AUG-2014**	03-SEP-2014	✓	**29-AUG-2014**	03-SEP-2014	✓
S3,	S4,							
S5,	S6,							
S7,	S8,							
S9,	S10,							
S11,	S12,							
S13,	S14,							
S15,	S16,							
S17,	S18,							
QC1,	SP1							
Soil Glass Jar - Unpreserved (EP074)								
SP2,	SP3,	**27-AUG-2014**	**29-AUG-2014**	03-SEP-2014	✓	**30-AUG-2014**	03-SEP-2014	✓
SP4,	SP5,							
SP6,	SP7,							
SP8,	SP9,							
SP10,	SP11,							
QC3,	QC4							
EP075(SIM)A: Phenolic Compounds								
Soil Glass Jar - Unpreserved (EP075(SIM))								
SP2,	SP3,	**27-AUG-2014**	**01-SEP-2014**	10-SEP-2014	✓	**01-SEP-2014**	11-OCT-2014	✓
SP4,	SP5,							
SP6,	SP7,							
SP8,	SP9,							
SP10,	SP11,							
QC3,	QC4							
Soil Glass Jar - Unpreserved (EP075(SIM))								
S1,	S2,	**27-AUG-2014**	**29-AUG-2014**	10-SEP-2014	✓	**01-SEP-2014**	08-OCT-2014	✓
S3,	S4,							
S5,	S6,							
S7,	S8,							
S9,	S10,							
S11,	S12,							
S13,	S14,							
S15,	S16,							
S17,	S18,							
QC1,	SP1							

Page	: 9 of 16
Work Order	: ES1419212
Client	: AECOM Australia Pty Ltd
Project	: 60316172 TASK No 1 1 ESA CHARNWOOD

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)		Sample Date	Extraction / Preparation			Analysis		
			Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons								
Soil Glass Jar - Unpreserved (EP075(SIM))								
SP2,	SP3,	**27-AUG-2014**	**01-SEP-2014**	10-SEP-2014	✓	**01-SEP-2014**	11-OCT-2014	✓
SP4,	SP5,							
SP6,	SP7,							
SP8,	SP9,							
SP10,	SP11,							
QC3,	QC4							
Soil Glass Jar - Unpreserved (EP075(SIM))								
S1,	S2,	**27-AUG-2014**	**29-AUG-2014**	10-SEP-2014	✓	**01-SEP-2014**	08-OCT-2014	✓
S3,	S4,							
S5,	S6,							
S7,	S8,							
S9,	S10,							
S11,	S12,							
S13,	S14,							
S15,	S16,							
S17,	S18,							
QC1,	SP1							
EP080: BTEXN								
Soil Glass Jar - Unpreserved (EP080)								
S1,	S2,	**27-AUG-2014**	**29-AUG-2014**	10-SEP-2014	✓	**29-AUG-2014**	10-SEP-2014	✓
S3,	S4,							
S5,	S6,							
S7,	S8,							
S9,	S10,							
S11,	S12,							
S13,	S14,							
S15,	S16,							
S17,	S18,							
QC1,	SP1							
Soil Glass Jar - Unpreserved (EP080)								
SP2,	SP3,	**27-AUG-2014**	**29-AUG-2014**	10-SEP-2014	✓	**30-AUG-2014**	10-SEP-2014	✓
SP4,	SP5,							
SP6,	SP7,							
SP8,	SP9,							
SP10,	SP11,							
QC3,	QC4							

Page	: 10 of 16
Work Order	: ES1419212
Client	: AECOM Australia Pty Ltd
Project	: 60316172 TASK No 1 1 ESA CHARNWOOD

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Soil Glass Jar - Unpreserved (EP080)							
S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, QC1, SP1	27-AUG-2014	29-AUG-2014	10-SEP-2014	✓	29-AUG-2014	10-SEP-2014	✓
Soil Glass Jar - Unpreserved (EP080)							
SP2, SP3, SP4, SP5, SP6, SP7, SP8, SP9, SP10, SP11, QC3, QC4	27-AUG-2014	29-AUG-2014	10-SEP-2014	✓	30-AUG-2014	10-SEP-2014	✓

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EG020T: Total Metals by ICP-MS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG020A-T)							
PW	27-AUG-2014	31-AUG-2014	23-FEB-2015	✓	01-SEP-2014	23-FEB-2015	✓
EG035T: Total Recoverable Mercury by FIMS							
Clear Plastic Bottle - Nitric Acid; Unfiltered (EG035T)							
PW	27-AUG-2014	---	---	---	01-SEP-2014	24-SEP-2014	✓
EP080/071: Total Petroleum Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP071)							
PW	27-AUG-2014	01-SEP-2014	03-SEP-2014	✓	01-SEP-2014	11-OCT-2014	✓
EP075(SIM)A: Phenolic Compounds							
Amber Glass Bottle - Unpreserved (EP075(SIM))							
PW	27-AUG-2014	01-SEP-2014	03-SEP-2014	✓	01-SEP-2014	11-OCT-2014	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Amber Glass Bottle - Unpreserved (EP075(SIM))							
PW	27-AUG-2014	01-SEP-2014	03-SEP-2014	✓	01-SEP-2014	11-OCT-2014	✓
EP080: BTEXN							
Amber VOC Vial - Sulfuric Acid (EP080)							
PW	27-AUG-2014	30-AUG-2014	10-SEP-2014	✓	30-AUG-2014	10-SEP-2014	✓

Page	: 11 of 16
Work Order	: ES1419212
Client	: AECOM Australia Pty Ltd
Project	: 60316172 TASK No 1 1 ESA CHARNWOOD

Matrix: **WATER**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP080/071: Total Petroleum Hydrocarbons							
Amber VOC Vial - Sulfuric Acid (EP080)							
PW	**27-AUG-2014**	**30-AUG-2014**	10-SEP-2014	✓	**30-AUG-2014**	10-SEP-2014	✓

Page	: 12 of 16
Work Order	: ES1419212
Client	: AECOM Australia Pty Ltd
Project	: 60316172 TASK No 1 1 ESA CHARNWOOD

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Moisture Content	EA055-103	4	40	10.0	10.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
PAH/Phenols (SIM)	EP075(SIM)	4	39	10.3	10.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	4	38	10.5	10.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	4	40	10.0	10.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH - Semivolatile Fraction	EP071	4	39	10.3	10.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	4	39	10.3	10.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	4	33	12.1	10.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	2	39	5.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	2	38	5.3	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	2	40	5.0	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH - Semivolatile Fraction	EP071	2	39	5.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	2	39	5.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	2	33	6.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	2	39	5.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	2	38	5.3	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	2	40	5.0	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH - Semivolatile Fraction	EP071	2	39	5.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	2	39	5.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	2	33	6.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	2	39	5.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	2	38	5.3	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	2	40	5.0	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH - Semivolatile Fraction	EP071	2	39	5.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	2	39	5.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Volatile Organic Compounds	EP074	2	33	6.1	5.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	Method	QC	Regular	Actual	Expected	Evaluation	
Laboratory Duplicates (DUP)							
Total Mercury by FIMS	EG035T	2	19	10.5	10.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	2	19	10.5	10.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	2	17	11.8	10.0	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement

Matrix: **WATER**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Control Samples (LCS)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	20	**5.0**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	19	**5.3**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	19	**5.3**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH - Semivolatile Fraction	EP071	1	17	**5.9**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	1	17	**5.9**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	1	20	**5.0**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	19	**5.3**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	19	**5.3**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH - Semivolatile Fraction	EP071	1	17	**5.9**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	1	17	**5.9**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
Total Mercury by FIMS	EG035T	1	19	**5.3**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-MS - Suite A	EG020A-T	1	19	**5.3**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	1	17	**5.9**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055-103	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 103-105 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
Total Metals by ICP-AES	EG005T	SOIL	(APHA 21st ed., 3120; USEPA SW 846 - 6010) (ICPAES) Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	AS 3550, APHA 21st ed., 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
TRH - Semivolatile Fraction	EP071	SOIL	(USEPA SW 846 - 8015A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
Volatile Organic Compounds	EP074	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 501)
PAH/Phenols (SIM)	EP075(SIM)	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 502 and 507)
TRH Volatiles/BTEX	EP080	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve.
Total Metals by ICP-MS - Suite A	EG020A-T	WATER	(APHA 21st ed., 3125; USEPA SW846 - 6020, ALS QWI-EN/EG020): The ICPMS technique utilizes a highly efficient argon plasma to ionize selected elements. Ions are then passed into a high vacuum mass spectrometer, which separates the analytes based on their distinct mass to charge ratios prior to their measurement by a discrete dynode ion detector.
Total Mercury by FIMS	EG035T	WATER	AS 3550, APHA 21st ed. 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. A bromate/bromide reagent is used to oxidise any organic mercury compounds in the unfiltered sample. The ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
TRH - Semivolatile Fraction	EP071	WATER	USEPA SW 846 - 8015A The sample extract is analysed by Capillary GC/FID and quantification is by comparison against an established 5 point calibration curve of n-Alkane standards. This method is compliant with the QC requirements of NEPM (2013) Schedule B(3)
PAH/Phenols (GC/MS - SIM)	EP075(SIM)	WATER	USEPA SW 846 - 8270D Sample extracts are analysed by Capillary GC/MS in SIM Mode and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3)

Analytical Methods	Method	Matrix	Method Descriptions
TRH Volatiles/BTEX	EP080	WATER	USEPA SW 846 - 8260B Water samples are directly purged prior to analysis by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. Alternatively, a sample is equilibrated in a headspace vial and a portion of the headspace determined by GCMS analysis. This method is compliant with the QC requirements of NEPM (2013) Schedule B(3)

Preparation Methods	Method	Matrix	Method Descriptions
Hot Block Digest for metals in soils sediments and sludges	EN69	SOIL	USEPA 200.2 Mod. Hot Block Acid Digestion 1.0g of sample is heated with Nitric and Hydrochloric acids, then cooled. Peroxide is added and samples heated and cooled again before being filtered and bulked to volume for analysis. Digest is appropriate for determination of selected metals in sludge, sediments, and soils. This method is compliant with NEPM (2013) Schedule B(3) (Method 202)
Methanolic Extraction of Soils for Purge and Trap	* ORG16	SOIL	(USEPA SW 846 - 5030A) 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids (Option B - Non-concentrating)	ORG17B	SOIL	In-house, Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 20mL 1:1 DCM/Acetone by end over end tumble. The solvent is transferred directly to a GC vial for analysis.
Digestion for Total Recoverable Metals	EN25	WATER	USEPA SW846-3005 Method 3005 is a Nitric/Hydrochloric acid digestion procedure used to prepare surface and ground water samples for analysis by ICPAES or ICPMS. This method is compliant with NEPM (2013) Schedule B(3)
Separatory Funnel Extraction of Liquids	ORG14	WATER	USEPA SW 846 - 3510B 100 mL to 1L of sample is transferred to a separatory funnel and serially extracted three times using 60mL DCM for each extract. The resultant extracts are combined, dehydrated and concentrated for analysis. This method is compliant with NEPM (2013) Schedule B(3) . ALS default excludes sediment which may be resident in the container.

Page	: 16 of 16
Work Order	: ES1419212
Client	: AECOM Australia Pty Ltd
Project	: 60316172 TASK No 1 1 ESA CHARNWOOD

Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QWI/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **SOIL**

Compound Group Name	Laboratory Sample ID	Client Sample ID	Analyte	CAS Number	Data	Limits	Comment
Matrix Spike (MS) Recoveries							
EG005T: Total Metals by ICP-AES	ES1418834-002	Anonymous	**Chromium**	7440-47-3	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**
EG005T: Total Metals by ICP-AES	ES1418834-002	Anonymous	**Nickel**	7440-02-0	Not Determined	----	**MS recovery not determined, background level greater than or equal to 4x spike level.**

- **For all matrices, no Method Blank value outliers occur.**
- **For all matrices, no Duplicate outliers occur.**
- **For all matrices, no Laboratory Control outliers occur.**

Regular Sample Surrogates

- **For all regular sample matrices, no surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

- **No Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- **No Quality Control Sample Frequency Outliers exist.**

11/9/14

AECOM

Form: 1 of 1

Chain of Custody & Analysis Request Form

AECOM - Canberra
Level 2, 60 Marcus Clarke Street
Canberra, ACT 2600
Tel: 02 6201 3000
Fax: 02 6201 3099
Email: [redacted]@aecom.com

Laboratory Details
Lab. Name: ALS Sydney
Lab. Address: Smithfield
Contact Name:
Lab. Ref:
Tel:
Fax:
Preliminary Report by:
Final Report by:
Lab Quote No: EN/004/13

Project Name: ESA Charnwood **Project Number:** 60316172 **Purchase Order Number:** Project 60316172, Task No. 1.1

Sample collected by: [redacted] **Sample Results to be returned to:** ALS Sydney

Submit Forward Lab / Split WO

Specifications:

	(Tick)		
1. Urgent TAT required? (please circle: 24hr 48hr ____days) STANDARD	☑ Yes	☐ No	☐ N/A
2. Fast TAT Guarantee Required?	☐ Yes	☐ No	☑ N/A
3. Is any sediment layer present in waters to be excluded from extractions?	☐ Yes	☐ No	☑ N/A
4. Special storage requirements?	☐ Yes	☐ No	☑ N/A
5. Preservation requirements?	☐ Yes	☐ No	☑ N/A
6. Other requirements? ☐ Fax ☐ Hard copy ☑ Email	☐ Yes	☐ No	☑ N/A

7. Report Format: 8. Project Manager: Marcus Sainsbury tel:

Analysis Request

Lab / Analysis Remarks & comments
Organised By / Date: 11-5
Relinquished By / Date:
Courier: Ashes 05
WO No: ES1420290
Attached / Internal Sheet

Lab. ID	Sample ID	Sampling Date	Sampling Time	Matrix: soil	water	other	Preservation: filt'ed	acid	ice	other	Container (No. & type)	TRH	BTEX	PAH	Phenols (Total)	Heavy Metals (8)	OCP/OPP	PCBS	Asbestos (presence/absence)
1	SOB1	4/09/2014		√					√		Jar	√	√	√	√	√	√	√	√
2	SOB2	4/09/2014		√					√		Jar	√	√	√	√	√	√	√	√
3	SOB3	4/09/2014		√					√		Jar	√	√	√	√	√	√	√	√
4	SOB4	4/09/2014		√					√		Jar	√	√	√	√	√	√	√	√
5	OBQA1	4/09/2014		√					√		Jar	√	√	√	√	√	√	√	√

TAT

Environmental Division
Sydney
Work Order
ES1420290
Telephone : +61-2-8784 8555

Relinquished By:
[redacted] Date: 27/08/2014
Time: 14:00
of: AECOM

Received by:
Name: [redacted] Date: 10/9/14
Time: 8:45
of: Als

Relinquished By:
Name: Date:
Time:
of:

Received by:
Name: Date:
Time:
of:

Received in good condition?	Yes/No/NA	Method of Shipment	☐ Courier ☐ Postal ☐ By Hand
Samples received chilled?	Yes/No/NA	Consignment Note No.	
	Yes/No/NA	Transport Co:	
Received in good condition?	Yes/No/NA	Method of Shipment	☐ Courier ☐ Postal ☐ By Hand
Samples received chilled?	Yes/No/NA	Consignment Note No.	
	Yes/No/NA	Transport Co:	

Printed copies of this document are uncontrolled

Revision: Oct 09
BMS-PM-DV-F046

Environment 6.8° 16-45 9/9/14

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **ES1420290**	Page	: 1 of 8
Client	: **AECOM Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: [redacted]	Contact	: Client Services
Address	: LEVEL 2 60 MARCUS CLARKE ST CANBERRA ACT, AUSTRALIA 2600	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: [redacted]@aecom.com	E-mail	: sydney@alsglobal.com
Telephone	: +61 02 6201 3017	Telephone	: +61-2-8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 60316172 ESA CHARNWOOD	QC Level	: NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Order number	: PROJECT 60316172,TASK NO.1.1		
C-O-C number	: ----	Date Samples Received	: 10-SEP-2014
Sampler	: AAS	Issue Date	: 11-SEP-2014
Site	: ----		
		No. of samples received	: 5
Quote number	: EN/004/14	No. of samples analysed	: 5

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Descriptive Results
- Surrogate Control Limits

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

WORLD RECOGNISED ACCREDITATION

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
[redacted]	[redacted]	Newcastle - Asbestos
[redacted]	[redacted]	Sydney Inorganics
[redacted]	[redacted]	Sydney Organics
[redacted]	[redacted]	Sydney Inorganics

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Where a result is required to meet compliance limits the associated uncertainty must be considered. Refer to the ALS Contact for details.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

- **Benzo(a)pyrene Toxicity Equivalent Quotient (TEQ) is the sum total of the concentration of the eight carcinogenic PAHs multiplied by their Toxicity Equivalence Factor (TEF) relative to Benzo(a)pyrene. TEF values are provided in brackets as follows: Benz(a)anthracene (0.1), Chrysene (0.01), Benzo(b+j) & Benzo(k)fluoranthene (0.1), Benzo(a)pyrene (1.0), Indeno(1.2.3.cd)pyrene (0.1), Dibenz(a.h)anthracene (1.0), Benzo(g.h.i)perylene (0.01). Less than LOR results for 'TEQ Zero' are treated as zero, for 'TEQ 1/2LOR' are treated as half the reported LOR, and for 'TEQ LOR' are treated as being equal to the reported LOR. Note: TEQ 1/2LOR and TEQ LOR will calculate as 0.6mg/Kg and 1.2mg/Kg respectively for samples with non-detects for all of the eight TEQ PAHs.**
- **EA200 Legend**
- **EA200 'Am' Amosite (brown asbestos)**
- **EA200 'Ch' Chrysotile (white asbestos)**
- **EA200 'Cr' Crocidolite (blue asbestos)**
- **EA200 'Trace' - Asbestos fibres ("Free Fibres") detected by trace analysis per AS4964. The result can be interpreted that the sample contains detectable 'respirable' asbestos fibres**
- **EA200: 'UMF' Unknown Mineral Fibres. "-" indicates fibres detected may or may not be asbestos fibres. Confirmation by alternative techniques is recommended.**
- **EA200: As only one sample container was submitted for multiple tests, at the client's request, sub sampling was conducted prior to Asbestos analysis. As this has the potential to understate detection, results should be scrutinised accordingly and NATA accreditation does not apply to analysis on these samples.**
- **EA200: Asbestos Identification Samples were analysed by Polarised Light Microscopy including dispersion staining.**
- **EA200: Negative results for vinyl tiles should be confirmed by an independent analytical technique.**
- **EA200N: ALS laboratory procedures and methods used for the identification and quantitation of asbestos are consistent with AS4964-2004 and the requirements of the 2013 NEPM for Assessment of Site Contamination**
- **EA200N: Asbestos weights and percentages are not covered under the Scope of NATA Accreditation.**
  Weights of Asbestos are based on extracted bulk asbestos, fibre bundles, and/or ACM and do not include respirable fibres (if present)
  The Friable Asbestos weight is calculated from the extracted Fibrous Asbestos and Asbestos Fines as an equivalent weight of 100% Asbestos
  Percentages for Asbestos content in ACM are based on the 2013 NEPM default values.
  All calculations of percentage Asbestos under this method are approximate and should be used as a guide only.

Page : 3 of 8
Work Order : ES1420290
Client : AECOM Australia Pty Ltd
Project : 60316172 ESA CHARNWOOD

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID	SOB1	SOB2	SOB3	SOB4	OBQA1
				Client sampling date / time	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00
					ES1420290-001	ES1420290-002	ES1420290-003	ES1420290-004	ES1420290-005
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	----	1.0	%		3.2	3.4	7.5	2.6	2.4
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples									
Asbestos Detected	1332-21-4	0.1	g/kg		No	No	No	No	No
Asbestos Type	1332-21-4	-	--		-	-	-	-	-
Sample weight (dry)	----	0.01	g		39.9	50.0	45.2	55.4	48.8
APPROVED IDENTIFIER:	----	-	--		G.MORGAN	G.MORGAN	G.MORGAN	G.MORGAN	G.MORGAN
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		<5	<5	<5	<5	<5
Cadmium	7440-43-9	1	mg/kg		<1	<1	<1	<1	<1
Chromium	7440-47-3	2	mg/kg		17	16	15	18	17
Copper	7440-50-8	5	mg/kg		12	12	13	16	14
Lead	7439-92-1	5	mg/kg		14	12	14	16	14
Nickel	7440-02-0	2	mg/kg		8	8	8	9	8
Zinc	7440-66-6	5	mg/kg		58	57	54	60	57
EG035T: Total Recoverable Mercury by FIMS									
Mercury	7439-97-6	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP066: Polychlorinated Biphenyls (PCB)									
Total Polychlorinated biphenyls	----	0.1	mg/kg		<0.1	<0.1	<0.1	<0.1	<0.1
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC	319-85-7	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC	58-89-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC	319-86-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor	76-44-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Aldrin	309-00-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Heptachlor epoxide	1024-57-3	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
^ Total Chlordane (sum)	----	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
trans-Chlordane	5103-74-2	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
alpha-Endosulfan	959-98-8	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
cis-Chlordane	5103-71-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
Dieldrin	60-57-1	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDE	72-55-9	0.05	mg/kg		<0.05	<0.05	<0.05	<0.05	<0.05

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)			Client sample ID	SOB1	SOB2	SOB3	SOB4	OBQA1
			Client sampling date / time	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00
Compound	CAS Number	LOR	Unit	ES1420290-001	ES1420290-002	ES1420290-003	ES1420290-004	ES1420290-005
EP068A: Organochlorine Pesticides (OC) - Continued								
Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Endosulfan (sum)	115-29-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
^ Sum of Aldrin + Dieldrin	309-00-2/60-57-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
^ Sum of DDD + DDE + DDT	----	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP068B: Organophosphorus Pesticides (OP)								
Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
EP075(SIM)A: Phenolic Compounds								
Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5

Page : 5 of 8
Work Order : ES1420290
Client : AECOM Australia Pty Ltd
Project : 60316172 ESA CHARNWOOD

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID	SOB1	SOB2	SOB3	SOB4	OBQA1
				Client sampling date / time	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00
					ES1420290-001	ES1420290-002	ES1420290-003	ES1420290-004	ES1420290-005
EP075(SIM)A: Phenolic Compounds - Continued									
2-Methylphenol	95-48-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
3- & 4-Methylphenol	1319-77-3	1	mg/kg		<1	<1	<1	<1	<1
2-Nitrophenol	88-75-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2.4-Dimethylphenol	105-67-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2.4-Dichlorophenol	120-83-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2.6-Dichlorophenol	87-65-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
4-Chloro-3-methylphenol	59-50-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	87-86-5	2	mg/kg		<2	<2	<2	<2	<2
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons									
Naphthalene	91-20-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthylene	208-96-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Acenaphthene	83-32-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluorene	86-73-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Phenanthrene	85-01-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Anthracene	120-12-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Fluoranthene	206-44-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Pyrene	129-00-0	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benz(a)anthracene	56-55-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Chrysene	218-01-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(b+j)fluoranthene	205-99-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(k)fluoranthene	207-08-9	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene	50-32-8	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Benzo(a)pyrene TEQ (half LOR)	----	0.5	mg/kg		0.6	0.6	0.6	0.6	0.6
^ Benzo(a)pyrene TEQ (LOR)	----	0.5	mg/kg		1.2	1.2	1.2	1.2	1.2
EP080/071: Total Petroleum Hydrocarbons									
C6 - C9 Fraction	----	10	mg/kg		<10	<10	<10	<10	<10

Page : 6 of 8
Work Order : ES1420290
Client : AECOM Australia Pty Ltd
Project : 60316172 ESA CHARNWOOD

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	SOB1	SOB2	SOB3	SOB4	OBQA1
				Client sampling date / time	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00
Compound	CAS Number	LOR	Unit		ES1420290-001	ES1420290-002	ES1420290-003	ES1420290-004	ES1420290-005
EP080/071: Total Petroleum Hydrocarbons - Continued									
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions									
C6 - C10 Fraction	C6_C10	10	mg/kg		<10	<10	<10	<10	<10
^ C6 - C10 Fraction minus BTEX (F1)	C6_C10-BTEX	10	mg/kg		<10	<10	<10	<10	<10
>C10 - C16 Fraction	>C10_C16	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
^ >C10 - C16 Fraction minus Naphthalene (F2)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080: BTEXN									
Benzene	71-43-2	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	108-88-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	100-41-4	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
ortho-Xylene	95-47-6	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
^ Sum of BTEX	----	0.2	mg/kg		<0.2	<0.2	<0.2	<0.2	<0.2
^ Total Xylenes	1330-20-7	0.5	mg/kg		<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	91-20-3	1	mg/kg		<1	<1	<1	<1	<1
EP066S: PCB Surrogate									
Decachlorobiphenyl	2051-24-3	0.1	%		**86.6**	**88.8**	**92.0**	**91.3**	**88.7**
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		**70.4**	**72.7**	**79.0**	**73.3**	**70.8**
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		**71.3**	**72.0**	**72.2**	**70.4**	**68.1**
EP075(SIM)S: Phenolic Compound Surrogates									
Phenol-d6	13127-88-3	0.1	%		**91.8**	**106**	**116**	**114**	**113**
2-Chlorophenol-D4	93951-73-6	0.1	%		**110**	**94.8**	**99.7**	**111**	**102**
2.4.6-Tribromophenol	118-79-6	0.1	%		**58.3**	**59.3**	**57.9**	**55.4**	**55.3**
EP075(SIM)T: PAH Surrogates									

Page	: 7 of 8
Work Order	: ES1420290
Client	: AECOM Australia Pty Ltd
Project	: 60316172 ESA CHARNWOOD

Analytical Results

Sub-Matrix: **SOIL** (Matrix: **SOIL**)

Compound	CAS Number	LOR	Unit	Client sample ID	SOB1	SOB2	SOB3	SOB4	OBQA1
				Client sampling date / time	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00	04-SEP-2014 15:00
					ES1420290-001	ES1420290-002	ES1420290-003	ES1420290-004	ES1420290-005
EP075(SIM)T: PAH Surrogates - Continued									
2-Fluorobiphenyl	321-60-8	0.1	%		93.4	93.0	92.7	92.8	94.9
Anthracene-d10	1719-06-8	0.1	%		114	111	116	113	116
4-Terphenyl-d14	1718-51-0	0.1	%		100	99.0	99.7	97.9	100
EP080S: TPH(V)/BTEX Surrogates									
1.2-Dichloroethane-D4	17060-07-0	0.1	%		107	108	106	109	107
Toluene-D8	2037-26-5	0.1	%		111	104	105	104	102
4-Bromofluorobenzene	460-00-4	0.1	%		112	106	108	106	103

Analytical Results

Descriptive Results

Sub-Matrix: **SOIL**

Method: Compound	Client sample ID - Client sampling date / time	Analytical Results
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples		
EA200: Description	SOB1 - 04-SEP-2014 15:00	Mid brown clay soil with a trace of vegetation.
EA200: Description	SOB2 - 04-SEP-2014 15:00	Mid brown clay soil with a trace of vegetation.
EA200: Description	SOB3 - 04-SEP-2014 15:00	Mid brown clay soil with a trace of vegetation.
EA200: Description	SOB4 - 04-SEP-2014 15:00	Mid brown clay soil with a trace of vegetation.
EA200: Description	OBQA1 - 04-SEP-2014 15:00	Mid brown clay soil with a trace of vegetation.

Surrogate Control Limits

Sub-Matrix: SOIL		Recovery Limits (%)	
Compound	CAS Number	Low	High
EP066S: PCB Surrogate			
Decachlorobiphenyl	2051-24-3	39	149
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	147
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	35	143
EP075(SIM)S: Phenolic Compound Surrogates			
Phenol-d6	13127-88-3	63	123
2-Chlorophenol-D4	93951-73-6	66	122
2.4.6-Tribromophenol	118-79-6	40	138
EP075(SIM)T: PAH Surrogates			
2-Fluorobiphenyl	321-60-8	70	122
Anthracene-d10	1719-06-8	66	128
4-Terphenyl-d14	1718-51-0	65	129
EP080S: TPH(V)/BTEX Surrogates			
1.2-Dichloroethane-D4	17060-07-0	72.8	133.2
Toluene-D8	2037-26-5	73.9	132.1
4-Bromofluorobenzene	460-00-4	71.6	130.0

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **ES1420290**	Page	: 1 of 13
Client	: **AECOM Australia Pty Ltd**	Laboratory	: Environmental Division Sydney
Contact	: [redacted]	Contact	: Client Services
Address	: LEVEL 2 60 MARCUS CLARKE ST CANBERRA ACT, AUSTRALIA 2600	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: [redacted]@aecom.com	E-mail	: sydney@alsglobal.com
Telephone	: +61 02 6201 3017	Telephone	: +61-2-8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 60316172 ESA CHARNWOOD	QC Level	: NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Site	: ----		
C-O-C number	: ----	Date Samples Received	: 10-SEP-2014
Sampler	: AAS	Issue Date	: 11-SEP-2014
Order number	: PROJECT 60316172,TASK NO.1.1		
		No. of samples received	: 5
Quote number	: EN/004/14	No. of samples analysed	: 5

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

WORLD RECOGNISED ACCREDITATION

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out ir compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
[redacted]	[redacted]	Newcastle - Asbestos
		Sydney Inorganics
		Sydney Organics
		Sydney Inorganics

Page	: 2 of 13
Work Order	: ES1420290
Client	: AECOM Australia Pty Ltd
Project	: 60316172 ESA CHARNWOOD

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key :
Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Page	: 3 of 13
Work Order	: ES1420290
Client	: AECOM Australia Pty Ltd
Project	: 60316172 ESA CHARNWOOD

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR: No Limit; Result between 10 and 20 times LOR: 0% - 50%; Result > 20 times LOR: 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	LOR	Unit	Original Result	Duplicate Result	RPD (%)	Recovery Limits (%)
EA055: Moisture Content (QC Lot: 3626627)									
ES1419627-058	Anonymous	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	15.1	15.1	0.0	0% - 50%
ES1419627-077	Anonymous	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	10.9	10.9	0.0	0% - 50%
EA055: Moisture Content (QC Lot: 3626628)									
ES1420290-005	OBQA1	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	2.4	3.1	22.9	No Limit
EG005T: Total Metals by ICP-AES (QC Lot: 3626604)									
ES1419926-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	20	18	6.5	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	9	7	24.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	7	8	16.9	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	24	31	25.2	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	40	37	6.8	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	67	57	16.1	0% - 50%
ES1420038-003	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	37	43	13.2	0% - 20%
		EG005T: Nickel	7440-02-0	2	mg/kg	41	48	15.8	0% - 20%
		EG005T: Arsenic	7440-38-2	5	mg/kg	6	5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	44	38	14.7	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	63	63	0.0	0% - 50%
		EG005T: Zinc	7440-66-6	5	mg/kg	274	317	14.4	0% - 20%
EG035T: Total Recoverable Mercury by FIMS (QC Lot: 3626605)									
ES1419926-001	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	0.1	0.0	No Limit
ES1420038-003	Anonymous	EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP066: Polychlorinated Biphenyls (PCB) (QC Lot: 3626513)									
ES1420290-001	SOB1	EP066: Total Polychlorinated biphenyls	----	0.1	mg/kg	<0.1	<0.1	0.0	No Limit
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3626512)									
ES1420290-001	SOB1	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Page : 4 of 13
Work Order : ES1420290
Client : AECOM Australia Pty Ltd
Project : 60316172 ESA CHARNWOOD

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 3626512) - continued									
ES1420290-001	SOB1	EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP068B: Organophosphorus Pesticides (OP) (QC Lot: 3626512)									
ES1420290-001	SOB1	EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP075(SIM)A: Phenolic Compounds (QC Lot: 3626494)									
ES1420290-001	SOB1	EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 4-Chloro-3-m 'phenol	59-50-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Page : 5 of 13
Work Order : ES1420290
Client : AECOM Australia Pty Ltd
Project : 60316172 ESA CHARNWOOD

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP075(SIM)A: Phenolic Compounds (QC Lot: 3626494) - continued									
ES1420290-001	SOB1	EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1	mg/kg	<1	<1	0.0	No Limit
		EP075(SIM): Pentachlorophenol	87-86-5	2	mg/kg	<2	<2	0.0	No Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QC Lot: 3626494)									
ES1420290-001	SOB1	EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(b+j)fluoranthene	205-99-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Sum of polycyclic aromatic hydrocarbons	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP075(SIM): Benzo(a)pyrene TEQ (zero)	----	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3626493)									
ES1420290-001	SOB1	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 3626511)									
ES1420290-001	SOB1	EP080: C6 - C9 Fraction	----	10	mg/kg	<10	<10	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3626493)									
ES1420290-001	SOB1	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	>C10_C16	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QC Lot: 3626511)									
ES1420290-001	SOB1	EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	<10	0.0	No Limit
EP080: BTEXN (QC Lot: 3626511)									
ES1420290-001	SOB1	EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit

Page : 6 of 13
Work Order : ES1420290
Client : AECOM Australia Pty Ltd
Project : 60316172 ESA CHARNWOOD

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP080: BTEXN (QC Lot: 3626511) - continued									
ES1420290-001	SOB1	EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	<0.5	0.0	No Limit
		EP080: Naphthalene	91-20-3	1	mg/kg	<1	<1	0.0	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Spike (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 3626604)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	21.7 mg/kg	98.8	92	130
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	4.64 mg/kg	88.8	87	121
EG005T: Chromium	7440-47-3	2	mg/kg	<2	43.9 mg/kg	97.4	80	136
EG005T: Copper	7440-50-8	5	mg/kg	<5	32.0 mg/kg	106	93	127
EG005T: Lead	7439-92-1	5	mg/kg	<5	40.0 mg/kg	90.0	86	124
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.0 mg/kg	98.2	93	131
EG005T: Zinc	7440-66-6	5	mg/kg	<5	60.8 mg/kg	116	81	133
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3626605)								
EG035T: Mercury	7439-97-6	0.1	mg/kg	<0.1	2.57 mg/kg	90.1	70	105
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 3626513)								
EP066: Total Polychlorinated biphenyls	---	0.1	mg/kg	<0.1	1 mg/kg	106	57.4	117
EP068A: Organochlorine Pesticides (OC) (QCLot: 3626512)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	81.4	71	113
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	87.9	66	122
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	82.8	69	119
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.8	71	115
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	79.2	65	113
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	81.0	68	116
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	81.7	68	118
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	96.0	68	116
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	99.5	68	120
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	69	119
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	90.7	67	121
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	78.1	66	118
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	84.2	69	117
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	86.4	67	123
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	85.6	76	120
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	85.2	76	120
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	97.6	57.3	115
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	60	124
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	97.5	67	127
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	101	65	123
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	103	65	129
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3626512)								

Page : 8 of 13
Work Order : ES1420290
Client : AECOM Australia Pty Ltd
Project : 60316172 ESA CHARNWOOD

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
				Result	Concentration	LCS	Low	High
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3626512) - continued								
EP068: Dichlorvos	62-73-7	0.05	mg/kg	<0.05	0.5 mg/kg	87.0	56	126
EP068: Demeton-S-methyl	919-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	106	64	128
EP068: Monocrotophos	6923-22-4	0.2	mg/kg	<0.2	0.5 mg/kg	100	54	122
EP068: Dimethoate	60-51-5	0.05	mg/kg	<0.05	0.5 mg/kg	88.8	64	124
EP068: Diazinon	333-41-5	0.05	mg/kg	<0.05	0.5 mg/kg	106	73	117
EP068: Chlorpyrifos-methyl	5598-13-0	0.05	mg/kg	<0.05	0.5 mg/kg	97.0	55	119
EP068: Parathion-methyl	298-00-0	0.2	mg/kg	<0.2	0.5 mg/kg	77.8	69	123
EP068: Malathion	121-75-5	0.05	mg/kg	<0.05	0.5 mg/kg	88.5	70	120
EP068: Fenthion	55-38-9	0.05	mg/kg	<0.05	0.5 mg/kg	88.2	71	115
EP068: Chlorpyrifos	2921-88-2	0.05	mg/kg	<0.05	0.5 mg/kg	92.4	68	114
EP068: Parathion	56-38-2	0.2	mg/kg	<0.2	0.5 mg/kg	87.5	68	122
EP068: Pirimphos-ethyl	23505-41-1	0.05	mg/kg	<0.05	0.5 mg/kg	96.1	69	115
EP068: Chlorfenvinphos	470-90-6	0.05	mg/kg	<0.05	0.5 mg/kg	100	70	118
EP068: Bromophos-ethyl	4824-78-6	0.05	mg/kg	<0.05	0.5 mg/kg	90.2	68	116
EP068: Fenamiphos	22224-92-6	0.05	mg/kg	<0.05	0.5 mg/kg	102	64	120
EP068: Prothiofos	34643-46-4	0.05	mg/kg	<0.05	0.5 mg/kg	78.7	68	116
EP068: Ethion	563-12-2	0.05	mg/kg	<0.05	0.5 mg/kg	79.4	70	118
EP068: Carbophenothion	786-19-6	0.05	mg/kg	<0.05	0.5 mg/kg	104	67	123
EP068: Azinphos Methyl	86-50-0	0.05	mg/kg	<0.05	0.5 mg/kg	69.1	42	126
EP075(SIM)A: Phenolic Compounds (QCLot: 3626494)								
EP075(SIM): Phenol	108-95-2	0.5	mg/kg	<0.5	4 mg/kg	84.1	74	116
EP075(SIM): 2-Chlorophenol	95-57-8	0.5	mg/kg	<0.5	4 mg/kg	100	74	116
EP075(SIM): 2-Methylphenol	95-48-7	0.5	mg/kg	<0.5	4 mg/kg	96.7	72	116
EP075(SIM): 3- & 4-Methylphenol	1319-77-3	1.0	mg/kg	<1	8 mg/kg	100	69	123
EP075(SIM): 2-Nitrophenol	88-75-5	0.5	mg/kg	<0.5	4 mg/kg	87.4	60.3	117
EP075(SIM): 2.4-Dimethylphenol	105-67-9	0.5	mg/kg	<0.5	4 mg/kg	99.1	69	117
EP075(SIM): 2.4-Dichlorophenol	120-83-2	0.5	mg/kg	<0.5	4 mg/kg	82.6	68	112
EP075(SIM): 2.6-Dichlorophenol	87-65-0	0.5	mg/kg	<0.5	4 mg/kg	104	73	117
EP075(SIM): 4-Chloro-3-Methylphenol	59-50-7	0.5	mg/kg	<0.5	4 mg/kg	99.8	76.4	114
EP075(SIM): 2.4.6-Trichlorophenol	88-06-2	0.5	mg/kg	<0.5	4 mg/kg	81.2	57	111
EP075(SIM): 2.4.5-Trichlorophenol	95-95-4	0.5	mg/kg	<0.5	4 mg/kg	86.4	68.9	112
EP075(SIM): Pentachlorophenol	87-86-5	1.0	mg/kg	<1	8 mg/kg	32.2	10	57
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3626494)								
EP075(SIM): Naphthalene	91-20-3	0.5	mg/kg	<0.5	4 mg/kg	112	80	124
EP075(SIM): Acenaphthylene	208-96-8	0.5	mg/kg	<0.5	4 mg/kg	95.6	77	123
EP075(SIM): Acenaphthene	83-32-9	0.5	mg/kg	<0.5	4 mg/kg	107	79	123
EP075(SIM): Fluorene	86-73-7	0.5	mg/kg	<0.5	4 mg/kg	99.4	77	123
EP075(SIM): Phenanthrene	85-01-8	0.5	mg/kg	<0.5	4 mg/kg	103	79	123
EP075(SIM): Anthracene	120-12-7	0.5	mg/kg	<0.5	4 mg/kg	108	79	123

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3626494) - continued								
EP075(SIM): Fluoranthene	206-44-0	0.5	mg/kg	<0.5	4 mg/kg	105	79	123
EP075(SIM): Pyrene	129-00-0	0.5	mg/kg	<0.5	4 mg/kg	106	79	125
EP075(SIM): Benz(a)anthracene	56-55-3	0.5	mg/kg	<0.5	4 mg/kg	81.7	73	121
EP075(SIM): Chrysene	218-01-9	0.5	mg/kg	<0.5	4 mg/kg	109	81	123
EP075(SIM): Benzo(b+j)fluoranthene	205-99-2	0.5	mg/kg	<0.5	4 mg/kg	91.3	70	118
EP075(SIM): Benzo(k)fluoranthene	207-08-9	0.5	mg/kg	<0.5	4 mg/kg	96.6	77	123
EP075(SIM): Benzo(a)pyrene	50-32-8	0.5	mg/kg	<0.5	4 mg/kg	98.1	76	122
EP075(SIM): Indeno(1.2.3.cd)pyrene	193-39-5	0.5	mg/kg	<0.5	4 mg/kg	85.6	71	113
EP075(SIM): Dibenz(a.h)anthracene	53-70-3	0.5	mg/kg	<0.5	4 mg/kg	93.6	71.7	113
EP075(SIM): Benzo(g.h.i)perylene	191-24-2	0.5	mg/kg	<0.5	4 mg/kg	86.0	72.4	114
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3626493)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	200 mg/kg	103	71	131
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	300 mg/kg	110	74	138
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	200 mg/kg	99.1	64	128
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3626511)								
EP080: C6 - C9 Fraction	----	10	mg/kg	<10	26 mg/kg	119	68.4	128
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3626493)								
EP071: >C10 - C16 Fraction	>C10_C16	50	mg/kg	<50	250 mg/kg	105	70	130
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	350 mg/kg	107	74	138
EP071: >C34 - C40 Fraction	----	50	mg/kg	<100	150 mg/kg	81.5	63	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3626511)								
EP080: C6 - C10 Fraction	C6_C10	10	mg/kg	<10	31 mg/kg	114	68.4	128
EP080: BTEXN (QCLot: 3626511)								
EP080: Benzene	71-43-2	0.2	mg/kg	<0.2	1 mg/kg	112	62	116
EP080: Toluene	108-88-3	0.5	mg/kg	<0.5	1 mg/kg	102	62	128
EP080: Ethylbenzene	100-41-4	0.5	mg/kg	<0.5	1 mg/kg	98.9	58	118
EP080: meta- & para-Xylene	108-38-3 106-42-3	0.5	mg/kg	<0.5	2 mg/kg	99.3	60	120
EP080: ortho-Xylene	95-47-6	0.5	mg/kg	<0.5	1 mg/kg	105	60	120
EP080: Naphthalene	91-20-3	1	mg/kg	<1	1 mg/kg	96.8	62	138

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High

Page	: 10 of 13
Work Order	: ES1420290
Client	: AECOM Australia Pty Ltd
Project	: 60316172 ESA CHARNWOOD

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*Concentration*	*MS*	*Low*	*High*
EG005T: Total Metals by ICP-AES (QCLot: 3626604)							
ES1419926-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	92.9	70	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	87.5	70	130
		EG005T: Chromium	7440-47-3	50 mg/kg	93.0	70	130
		EG005T: Copper	7440-50-8	250 mg/kg	108	70	130
		EG005T: Lead	7439-92-1	250 mg/kg	88.4	70	130
		EG005T: Nickel	7440-02-0	50 mg/kg	88.0	70	130
		EG005T: Zinc	7440-66-6	250 mg/kg	101	70	130
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3626605)							
ES1419926-001	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	101	70	130
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 3626513)							
ES1420290-001	SOB1	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	106	70	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 3626512)							
ES1420290-001	SOB1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	106	70	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	83.4	70	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	108	70	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	94.6	70	130
		EP068: Endrin	72-20-8	2 mg/kg	87.3	70	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	88.3	70	130
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3626512)							
ES1420290-001	SOB1	EP068: Diazinon	333-41-5	0.5 mg/kg	85.7	70	130
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	80.3	70	130
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	100	70	130
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	89.3	70	130
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	98.6	70	130
EP075(SIM)A: Phenolic Compounds (QCLot: 3626494)							
ES1420290-001	SOB1	EP075(SIM): Phenol	108-95-2	10 mg/kg	102	70	130
		EP075(SIM): 2-Chlorophenol	95-57-8	10 mg/kg	115	70	130
		EP075(SIM): 2-Nitrophenol	88-75-5	10 mg/kg	76.8	60	130
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	92.5	70	130
		EP075(SIM): Pentachlorophenol	87-86-5	10 mg/kg	52.4	20	130
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3626494)							
ES1420290-001	SOB1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	115	70	130
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	118	70	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3626493)							
ES1420290-001	SOB1	EP071: C10 - C14 Fraction	----	560 mg/kg	83.1	73	137
		EP071: C15 - C28 Fraction	----	2370 mg/kg	91.3	53	131
		EP071: C29 - C36 Fraction	----	1695 mg/kg	101	52	132

Sub-Matrix: **SOIL**

				Matrix Spike (MS) Report			
				Spike	SpikeRecovery(%)	Recovery Limits (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	Low	High
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3626511)							
ES1420290-001	SOB1	EP080: C6 - C9 Fraction	----	32.5 mg/kg	127	70	130
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3626493)							
ES1420290-001	SOB1	EP071: >C10 - C16 Fraction	>C10_C16	902 mg/kg	83.5	73	137
		EP071: >C16 - C34 Fraction	----	3190 mg/kg	99.1	53	131
		EP071: >C34 - C40 Fraction	----	1087 mg/kg	91.1	52	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3626511)							
ES1420290-001	SOB1	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	120	70	130
EP080: BTEXN (QCLot: 3626511)							
ES1420290-001	SOB1	EP080: Benzene	71-43-2	2.5 mg/kg	109	70	130
		EP080: Toluene	108-88-3	2.5 mg/kg	100	70	130
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	97.1	70	130
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	97.8	70	130
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	101	70	130
		EP080: Naphthalene	91-20-3	2.5 mg/kg	90.7	70	130

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

The quality control term Matrix Spike (MS) and Matrix Spike Duplicate (MSD) refers to intralaboratory split samples spiked with a representative set of target analytes. The purpose of these QC parameters are to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	MSD	Low	High	Value	Control Limit
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3626493)										
ES1420290-001	SOB1	EP071: C10 - C14 Fraction	----	560 mg/kg	83.1	----	73	137	----	----
		EP071: C15 - C28 Fraction	----	2370 mg/kg	91.3	----	53	131	----	----
		EP071: C29 - C36 Fraction	----	1695 mg/kg	101	----	52	132	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3626493)										
ES1420290-001	SOB1	EP071: >C10 - C16 Fraction	>C10_C16	902 mg/kg	83.5	----	73	137	----	----
		EP071: >C16 - C34 Fraction	----	3190 mg/kg	99.1	----	53	131	----	----
		EP071: >C34 - C40 Fraction	----	1087 mg/kg	91.1	----	52	132	----	----
EP075(SIM)A: Phenolic Compounds (QCLot: 3626494)										
ES1420290-001	SOB1	EP075(SIM): Phenol	108-95-2	10 mg/kg	102	----	70	130	----	----
		EP075(SIM): 2-Chlorophenol	95-57-8	10 mg/kg	115	----	70	130	----	----
		EP075(SIM): 2-Nitrophenol	88-75-5	10 mg/kg	76.8	----	60	130	----	----
		EP075(SIM): 4-Chloro-3-methylphenol	59-50-7	10 mg/kg	92.5	----	70	130	----	----
		EP075(SIM): Pentachlorophenol	87-86-5	10 mg/kg	52.4	----	20	130	----	----

Page	: 12 of 13
Work Order	: ES1420290
Client	: AECOM Australia Pty Ltd
Project	: 60316172 ESA CHARNWOOD

Sub-Matrix: **SOIL**

				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	MSD	Low	High	Value	Control Limit
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons (QCLot: 3626494)										
ES1420290-001	SOB1	EP075(SIM): Acenaphthene	83-32-9	10 mg/kg	115	----	70	130	----	----
		EP075(SIM): Pyrene	129-00-0	10 mg/kg	118	----	70	130	----	----
EP080/071: Total Petroleum Hydrocarbons (QCLot: 3626511)										
ES1420290-001	SOB1	EP080: C6 - C9 Fraction	----	32.5 mg/kg	127	----	70	130	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions (QCLot: 3626511)										
ES1420290-001	SOB1	EP080: C6 - C10 Fraction	C6_C10	37.5 mg/kg	120	----	70	130	----	----
EP080: BTEXN (QCLot: 3626511)										
ES1420290-001	SOB1	EP080: Benzene	71-43-2	2.5 mg/kg	109	----	70	130	----	----
		EP080: Toluene	108-88-3	2.5 mg/kg	100	----	70	130	----	----
		EP080: Ethylbenzene	100-41-4	2.5 mg/kg	97.1	----	70	130	----	----
		EP080: meta- & para-Xylene	108-38-3 106-42-3	2.5 mg/kg	97.8	----	70	130	----	----
		EP080: ortho-Xylene	95-47-6	2.5 mg/kg	101	----	70	130	----	----
		EP080: Naphthalene	91-20-3	2.5 mg/kg	90.7	----	70	130	----	----
EP068A: Organochlorine Pesticides (OC) (QCLot: 3626512)										
ES1420290-001	SOB1	EP068: gamma-BHC	58-89-9	0.5 mg/kg	106	----	70	130	----	----
		EP068: Heptachlor	76-44-8	0.5 mg/kg	83.4	----	70	130	----	----
		EP068: Aldrin	309-00-2	0.5 mg/kg	108	----	70	130	----	----
		EP068: Dieldrin	60-57-1	0.5 mg/kg	94.6	----	70	130	----	----
		EP068: Endrin	72-20-8	2 mg/kg	87.3	----	70	130	----	----
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	88.3	----	70	130	----	----
EP068B: Organophosphorus Pesticides (OP) (QCLot: 3626512)										
ES1420290-001	SOB1	EP068: Diazinon	333-41-5	0.5 mg/kg	85.7	----	70	130	----	----
		EP068: Chlorpyrifos-methyl	5598-13-0	0.5 mg/kg	80.3	----	70	130	----	----
		EP068: Pirimphos-ethyl	23505-41-1	0.5 mg/kg	100	----	70	130	----	----
		EP068: Bromophos-ethyl	4824-78-6	0.5 mg/kg	89.3	----	70	130	----	----
		EP068: Prothiofos	34643-46-4	0.5 mg/kg	98.6	----	70	130	----	----
EP066: Polychlorinated Biphenyls (PCB) (QCLot: 3626513)										
ES1420290-001	SOB1	EP066: Total Polychlorinated biphenyls	----	1 mg/kg	106	----	70	130	----	----
EG005T: Total Metals by ICP-AES (QCLot: 3626604)										
ES1419926-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	92.9	----	70	130	----	----
		EG005T: Cadmium	7440-43-9	50 mg/kg	87.5	----	70	130	----	----
		EG005T: Chromium	7440-47-3	50 mg/kg	93.0	----	70	130	----	----
		EG005T: Copper	7440-50-8	250 mg/kg	108	----	70	130	----	----
		EG005T: Lead	7439-92-1	250 mg/kg	88.4	----	70	130	----	----
		EG005T: Nickel	7440-02-0	50 mg/kg	88.0	----	70	130	----	----
		EG005T: Zinc	7440-66-6	250 mg/kg	101	----	70	130	----	----
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3626605)										

Page	: 13 of 13
Work Order	: ES1420290
Client	: AECOM Australia Pty Ltd
Project	: 60316172 ESA CHARNWOOD

Sub-Matrix: **SOIL**

				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	MSD	Low	High	Value	Control Limit
EG035T: Total Recoverable Mercury by FIMS (QCLot: 3626605) - continued										
ES1419926-001	Anonymous	EG035T: Mercury	7439-97-6	5 mg/kg	101	----	70	130	----	----

ALS Environmental

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: **ES1420290**	Page	: 1 of 6
Client	: AECOM Australia Pty Ltd	Laboratory	: Environmental Division Sydney
Contact	: [redacted]	Contact	: Client Services
Address	: LEVEL 2 60 MARCUS CLARKE ST CANBERRA ACT, AUSTRALIA 2600	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: [redacted]@aecom.com	E-mail	: sydney@alsglobal.com
Telephone	: +61 02 6201 3017	Telephone	: +61-2-8784 8555
Facsimile	: ----	Facsimile	: +61-2-8784 8500
Project	: 60316172 ESA CHARNWOOD	QC Level	: NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Site	: ----		
C-O-C number	: ----	Date Samples Received	: 10-SEP-2014
Sampler	: AAS	Issue Date	: 11-SEP-2014
Order number	: PROJECT 60316172,TASK NO.1.1		
		No. of samples received	: 5
Quote number	: EN/004/14	No. of samples analysed	: 5

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers

Page	: 2 of 6
Work Order	: ES1420290
Client	: AECOM Australia Pty Ltd
Project	: 60316172 ESA CHARNWOOD

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with recommended holding times (USEPA SW 846, APHA, AS and NEPM) based on the sample container provided. Dates reported represent first date of extraction or analysis and preclude subsequent dilutions and reruns. A listing of breaches (if any) is provided herein.

Holding time for leachate methods (e.g. TCLP) vary according to the analytes reported. Assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These are: organics 14 days, mercury 28 days & other metals 180 days. A recorded breach does not guarantee a breach for all non-volatile parameters.

Holding times for ***VOC in soils*** vary according to analytes of interest. Vinyl Chloride and Styrene holding time is 7 days; others 14 days. A recorded breach does not guarantee a breach for all VOC analytes and should be verified in case the reported breach is a false positive or Vinyl Chloride and Styrene are not key analytes of interest/concern.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content							
Soil Glass Jar - Unpreserved (EA055-103)							
SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	----	----	----	**10-SEP-2014**	18-SEP-2014	✓
EA200: AS 4964 - 2004 Identification of Asbestos in bulk samples							
Snap Lock Bag - Asbestos bag subsampled by ALS (EA200)							
SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	---	03-MAR-2015	----	**11-SEP-2014**	03-MAR-2015	✓
EG005T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	**10-SEP-2014**	03-MAR-2015	✓	**11-SEP-2014**	03-MAR-2015	✓
EG035T: Total Recoverable Mercury by FIMS							
Soil Glass Jar - Unpreserved (EG035T)							
SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	**10-SEP-2014**	02-OCT-2014	✓	**10-SEP-2014**	02-OCT-2014	✓
EP066: Polychlorinated Biphenyls (PCB)							
Soil Glass Jar - Unpreserved (EP066)							
SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	**10-SEP-2014**	18-SEP-2014	✓	**10-SEP-2014**	20-OCT-2014	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	**10-SEP-2014**	18-SEP-2014	✓	**10-SEP-2014**	20-OCT-2014	✓

Page	: 3 of 6
Work Order	: ES1420290
Client	: AECOM Australia Pty Ltd
Project	: 60316172 ESA CHARNWOOD

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EP068B: Organophosphorus Pesticides (OP)							
Soil Glass Jar - Unpreserved (EP068) SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	**10-SEP-2014**	18-SEP-2014	✓	**10-SEP-2014**	20-OCT-2014	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP071) SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	**10-SEP-2014**	18-SEP-2014	✓	**10-SEP-2014**	20-OCT-2014	✓
EP075(SIM)A: Phenolic Compounds							
Soil Glass Jar - Unpreserved (EP075(SIM)) SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	**10-SEP-2014**	18-SEP-2014	✓	**10-SEP-2014**	20-OCT-2014	✓
EP075(SIM)B: Polynuclear Aromatic Hydrocarbons							
Soil Glass Jar - Unpreserved (EP075(SIM)) SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	**10-SEP-2014**	18-SEP-2014	✓	**10-SEP-2014**	20-OCT-2014	✓
EP080: BTEXN							
Soil Glass Jar - Unpreserved (EP080) SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	**10-SEP-2014**	18-SEP-2014	✓	**10-SEP-2014**	18-SEP-2014	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2013 Fractions							
Soil Glass Jar - Unpreserved (EP080) SOB1, SOB2, SOB3, SOB4, OBQA1	**04-SEP-2014**	**10-SEP-2014**	18-SEP-2014	✓	**10-SEP-2014**	18-SEP-2014	✓

Page	: 4 of 6
Work Order	: ES1420290
Client	: AECOM Australia Pty Ltd
Project	: 60316172 ESA CHARNWOOD

Quality Control Parameter Frequency Compliance

The following report summarises the frequency of laboratory QC samples analysed within the analytical lot(s) in which the submitted sample(s) was(where) processed. Actual rate should be greater than or equal to the expected rate. A listing of breaches is provided in the Summary of Outliers.

Matrix: **SOIL**

Evaluation: × = Quality Control frequency not within specification ; ✓ = Quality Control frequency within specification.

Quality Control Sample Type		Count		Rate (%)			Quality Control Specification
Analytical Methods	*Method*	*QC*	*Regular*	***Actual***	***Expected***	*Evaluation*	
Laboratory Duplicates (DUP)							
Moisture Content	EA055-103	3	23	**13.0**	**10.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
PAH/Phenols (SIM)	EP075(SIM)	1	8	**12.5**	**10.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Pesticides by GCMS	EP068	1	5	**20.0**	**10.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.0**	**10.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	2	18	**11.1**	**10.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	2	20	**10.0**	**10.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH - Semivolatile Fraction	EP071	1	8	**12.5**	**10.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	1	8	**12.5**	**10.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Laboratory Control Samples (LCS)							
PAH/Phenols (SIM)	EP075(SIM)	1	8	**12.5**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Pesticides by GCMS	EP068	1	5	**20.0**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.0**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	18	**5.6**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	**5.0**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH - Semivolatile Fraction	EP071	1	8	**12.5**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	1	8	**12.5**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Method Blanks (MB)							
PAH/Phenols (SIM)	EP075(SIM)	1	8	**12.5**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Pesticides by GCMS	EP068	1	5	**20.0**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.0**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	18	**5.6**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	**5.0**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH - Semivolatile Fraction	EP071	1	8	**12.5**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	1	8	**12.5**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Matrix Spikes (MS)							
PAH/Phenols (SIM)	EP075(SIM)	1	8	**12.5**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Pesticides by GCMS	EP068	1	5	**20.0**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Polychlorinated Biphenyls (PCB)	EP066	1	5	**20.0**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Mercury by FIMS	EG035T	1	18	**5.6**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
Total Metals by ICP-AES	EG005T	1	20	**5.0**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH - Semivolatile Fraction	EP071	1	8	**12.5**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement
TRH Volatiles/BTEX	EP080	1	8	**12.5**	**5.0**	✓	NEPM 2013 Schedule B(3) and ALS QCS3 requirement

Page	: 5 of 6
Work Order	: ES1420290
Client	: AECOM Australia Pty Ltd
Project	: 60316172 ESA CHARNWOOD

Brief Method Summaries

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the US EPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request. The following report provides brief descriptions of the analytical procedures employed for results reported in the Certificate of Analysis. Sources from which ALS methods have been developed are provided within the Method Descriptions.

Analytical Methods	Method	Matrix	Method Descriptions
Moisture Content	EA055-103	SOIL	A gravimetric procedure based on weight loss over a 12 hour drying period at 103-105 degrees C. This method is compliant with NEPM (2013) Schedule B(3) Section 7.1 and Table 1 (14 day holding time).
Asbestos Identification in bulk solids	EA200	SOIL	AS 4964 - 2004 Method for the qualitative identification of asbestos in bulk samples Analysis by Polarised Light Microscopy including dispersion staining
Total Metals by ICP-AES	EG005T	SOIL	(APHA 21st ed., 3120; USEPA SW 846 - 6010) (ICPAES) Metals are determined following an appropriate acid digestion of the soil. The ICPAES technique ionises samples in a plasma, emitting a characteristic spectrum based on metals present. Intensities at selected wavelengths are compared against those of matrix matched standards. This method is compliant with NEPM (2013) Schedule B(3)
Total Mercury by FIMS	EG035T	SOIL	AS 3550, APHA 21st ed., 3112 Hg - B (Flow-injection (SnCl2)(Cold Vapour generation) AAS) FIM-AAS is an automated flameless atomic absorption technique. Mercury in solids are determined following an appropriate acid digestion. Ionic mercury is reduced online to atomic mercury vapour by SnCl2 which is then purged into a heated quartz cell. Quantification is by comparing absorbance against a calibration curve. This method is compliant with NEPM (2013) Schedule B(3)
Polychlorinated Biphenyls (PCB)	EP066	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 504)
Pesticides by GCMS	EP068	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS and quantification is by comparison against an established 5 point calibration curve. This technique is compliant with NEPM (2013) Schedule B(3) (Method 504,505)
TRH - Semivolatile Fraction	EP071	SOIL	(USEPA SW 846 - 8015A) Sample extracts are analysed by Capillary GC/FID and quantified against alkane standards over the range C10 - C40.
PAH/Phenols (SIM)	EP075(SIM)	SOIL	(USEPA SW 846 - 8270B) Extracts are analysed by Capillary GC/MS in Selective Ion Mode (SIM) and quantification is by comparison against an established 5 point calibration curve. This method is compliant with NEPM (2013) Schedule B(3) (Method 502 and 507)
TRH Volatiles/BTEX	EP080	SOIL	(USEPA SW 846 - 8260B) Extracts are analysed by Purge and Trap, Capillary GC/MS. Quantification is by comparison against an established 5 point calibration curve.

Preparation Methods	Method	Matrix	Method Descriptions
Methanolic Extraction of Soils for Purge and Trap	* ORG16	SOIL	(USEPA SW 846 - 5030A) 5g of solid is shaken with surrogate and 10mL methanol prior to analysis by Purge and Trap - GC/MS.
Tumbler Extraction of Solids (Option A - Concentrating)	ORG17A	SOIL	In-house, Mechanical agitation (tumbler). 20g of sample, Na2SO4 and surrogate are extracted with 150mL 1:1 DCM/Acetone by end over end tumble. The solvent is decanted, dehydrated and concentrated (by KD) to the desired volume for analysis.
Tumbler Extraction of Solids (Option B - Non-concentrating)	ORG17B	SOIL	In-house, Mechanical agitation (tumbler). 10g of sample, Na2SO4 and surrogate are extracted with 20mL 1:1 DCM/Acetone by end over end tumble. The solvent is transferred directly to a GC vial for analysis.

Page	: 6 of 6
Work Order	: ES1420290
Client	: AECOM Australia Pty Ltd
Project	: 60316172 ESA CHARNWOOD

Summary of Outliers

Outliers : Quality Control Samples

The following report highlights outliers flagged in the Quality Control (QC) Report. Surrogate recovery limits are static and based on USEPA SW846 or ALS-QWI/EN/38 (in the absence of specific USEPA limits). This report displays QC Outliers (breaches) only.

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

- **For all matrices, no Method Blank value outliers occur.**
- **For all matrices, no Duplicate outliers occur.**
- **For all matrices, no Laboratory Control outliers occur.**
- **For all matrices, no Matrix Spike outliers occur.**

Regular Sample Surrogates

- **For all regular sample matrices, no surrogate recovery outliers occur.**

Outliers : Analysis Holding Time Compliance

This report displays Holding Time breaches only. Only the respective Extraction / Preparation and/or Analysis component is/are displayed.

- **No Analysis Holding Time Outliers exist.**

Outliers : Frequency of Quality Control Samples

The following report highlights breaches in the Frequency of Quality Control Samples.

- **No Quality Control Sample Frequency Outliers exist.**

Appendix D

Disposal Documentation

NSW EPA

Starting TC No. : 2T00567052

Bulk printing for Transport Certificate

NSW Environment Protection Authority - Online Waste Tracking System
TRANSPORT CERTIFICATE - No. 2T00567052

Created by: [redacted] 10-Sep-2014 2:01 pm **Status:** Created
CA no: 2C00089276 **CA start date:** 10-Sep-2014 **CA end date:** 09-Sep-2015

PART 1 (this part to be completed by consignor at pickup)

CONSIGNOR

Capital Works & Infrastructure
180 London Circuit
Canberra City, ACT 2601

Contact: [redacted] **Role:** Producer
Phone: (02) 6205 3086 **Email:** N/A
ABN: 98 636 852 025 **Fax:** N/A **Emergency:** (02) 6205 3086
ANZSIC code: 0 **Licence no.:** n/a

Pickup details: Cnr Lhotsky St & Florey Dr, Charnwood ACT

WASTE

Waste code: N220 - Asbestos
Description: Asbestos
Form: Solid **Liquid waste levy applies:** No
Proposed treatment: Landfill **Classification:** General solid (non-putrescible)
Contaminants: N/A
Dangerous goods class: N/A **Subsidiary risk class:** N/A **UN no.:** N/A
Packaging type: N/A **Packing group no:** N/A **No. package:** N/A

PICKUP

Waste amount at pickup: ..... (required - Yes)
I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 2 - TRANSPORTER (this part to be completed by the transporter at pickup)

BULK TRANSPORT SOLUTIONS
6A/1345 THE HORSLEY DRIVE
WETHERILL PARK, NSW 2164

Contact: [redacted] **Email:** N/A
Phone: (13) 0033 7477 **Fax :** N/A **Transit state:** N/A
Licence no.: 13340 **Vehicle reg:** TBA **Transport type:** Road

I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 3 - RECEIVING FACILITY (this part to be completed by the receiving facility)

VEOLIA ES - WOODLAWN LANDFILL
COLLECTOR RD
TARAGO, NSW 2580

Contact: [redacted] **Email:** [redacted]@veoliaes.com.au
Phone: (02) 9841 2926 **Fax:** (02) 9841 2995
Licence no.: 11436 **Receiving facility ref no.:** N/A

Waste amount at arrival: ..... Date waste arrived at the facility : .....

ACCEPT / REJECT THE WASTE

☐ The receiving facility accepted the waste - Date accepted: ..... Date Processed: ..... Treatment: .....
☐ The receiving facility rejected the waste (complete section below)
Reason for rejection: .....
Rejected waste sent to - Name: .....
Address: .....

I declare that to the best of my knowledge and belief the above information is true and correct - complete if accepted or rejected:
Name and Position (Block letters) .....
Signature ..... Date .....

NOTE

Bulk Transport Charnwood - Contaminated Soil - Not containing Asbestos

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567052

NOTE: The Protection of the Environment Operations (Waste) Regulation 2005 ("the Regulation") requires that an approved transport certificate accompany certain wastes when transported into, out of or within NSW. This transport certificate is in the approved form and meets the requirements of the Regulation provided that:

(a) the consignor certifies, by signing this certificate, that the information in Part 1 of the certificate is correct;

(b) the transporter certifies, by signing the certificate, that the information in Part 2 of the certificate is correct; and

(c) the receiving facility (receiver) certifies, by signing this certificate, that the information in Part 3 of the certificate is correct; and

(d) the receiving facility records any discrepancies between the waste received and the information recorded on this certificate in the EPA online waste tracking system.

If any of the information in Parts 1 and 2 of the certificate is not correct and it is not practical at the time to change the information in the EPA online tracking system and print a new version of the certificate, the consignor or transporter must write and initial any corrections on the certificate. The receiving facility must ensure these corrections are entered into the EPA online system as soon as is practicable afterwards.

The receiving facility must retain this certificate for four years.

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567053

Created by: [redacted] 10-Sep-2014 2:01 pm **Status:** Created

CA no: 2C00089276 **CA start date:** 10-Sep-2014 **CA end date:** 09-Sep-2015

PART 1 (this part to be completed by consignor at pickup)

CONSIGNOR

Capital Works & Infrastructure
180 London Circuit
Canberra City, ACT 2601

Contact: [redacted] **Role:** Producer
Email: N/A
Phone: (02) 6205 3086 **Fax:** N/A **Emergency:** (02) 6205 3086
ABN: 98 636 852 025 **ANZSIC code:** 0 **Licence no.:** n/a

Pickup details: Cnr Lhotsky St & Florey Dr, Charnwood ACT

WASTE

Waste code: N220 - Asbestos
Description: Asbestos
Form: Solid **Liquid waste levy applies:** No
Proposed treatment: Landfill **Classification:** General solid (non-putrescible)
Contaminants: N/A
Dangerous goods class: N/A **Subsidiary risk class:** N/A **UN no.:** N/A
Packaging type: N/A **Packing group no:** N/A **No. package:** N/A

PICKUP

Waste amount at pickup: ..... (required - Yes)
I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 2 - TRANSPORTER (this part to be completed by the transporter at pickup)

BULK TRANSPORT SOLUTIONS
6A/1345 THE HORSLEY DRIVE
WETHERILL PARK, NSW 2164

Contact: [redacted] **Email:** N/A
Phone: (13) 0033 7477 **Fax :** N/A **Transit state:** N/A
Licence no.: 13340 **Vehicle reg:** TBA **Transport type:** Road

I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 3 - RECEIVING FACILITY (this part to be completed by the receiving facility)

VEOLIA ES - WOODLAWN LANDFILL
COLLECTOR RD
TARAGO, NSW 2580

Contact: [redacted] **Email:** [redacted]@veoliaes.com.au
Phone: (02) 9841 2926 **Fax:** (02) 9841 2995
Licence no.: 11436 **Receiving facility ref no.:** N/A

Waste amount at arrival: ..... Date waste arrived at the facility : .....

ACCEPT / REJECT THE WASTE

☐ The receiving facility accepted the waste - Date accepted: ..... Date Processed: ..... Treatment: .....
☐ The receiving facility rejected the waste (complete section below)
Reason for rejection: .....
Rejected waste sent to - Name: .....
Address: .....

I declare that to the best of my knowledge and belief the above information is true and correct - complete if accepted or rejected:
Name and Position (Block letters) .....
Signature ..... Date .....

NOTE

Bulk Transport Charnwood - Contaminated Soil - Not containing Asbestos

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567053

NOTE: The Protection of the Environment Operations (Waste) Regulation 2005 ("the Regulation") requires that an approved transport certificate accompany certain wastes when transported into, out of or within NSW. This transport certificate is in the approved form and meets the requirements of the Regulation provided that:

(a) the consignor certifies, by signing this certificate, that the information in Part 1 of the certificate is correct;

(b) the transporter certifies, by signing the certificate, that the information in Part 2 of the certificate is correct; and

(c) the receiving facility (receiver) certifies, by signing this certificate, that the information in Part 3 of the certificate is correct; and

(d) the receiving facility records any discrepancies between the waste received and the information recorded on this certificate in the EPA online waste tracking system.

If any of the information in Parts 1 and 2 of the certificate is not correct and it is not practical at the time to change the information in the EPA online tracking system and print a new version of the certificate, the consignor or transporter must write and initial any corrections on the certificate. The receiving facility must ensure these corrections are entered into the EPA online system as soon as is practicable afterwards.

The receiving facility must retain this certificate for four years.

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567054

Created by: [redacted] 10-Sep-2014 2:01 pm **Status:** Created
CA no: 2C00089276 **CA start date:** 10-Sep-2014 **CA end date:** 09-Sep-2015

PART 1 (this part to be completed by consignor at pickup)

CONSIGNOR

Capital Works & Infrastructure
180 London Circuit
Canberra City, ACT 2601

Contact: [redacted] **Role:** Producer
Phone: (02) 6205 3086 **Email:** N/A
ABN: 98 636 852 025 **Fax:** N/A **Emergency:** (02) 6205 3086
ANZSIC code: 0 **Licence no.:** n/a

Pickup details: Cnr Lhotsky St & Florey Dr, Charnwood ACT

WASTE

Waste code: N220 - Asbestos
Description: Asbestos
Form: Solid **Liquid waste levy applies:** No
Proposed treatment: Landfill **Classification:** General solid (non-putrescible)
Contaminants: N/A
Dangerous goods class: N/A **Subsidiary risk class:** N/A **UN no.:** N/A
Packaging type: N/A **Packing group no:** N/A **No. package:** N/A

PICKUP

Waste amount at pickup: ..... (required - Yes)
I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 2 - TRANSPORTER (this part to be completed by the transporter at pickup)

BULK TRANSPORT SOLUTIONS
6A/1345 THE HORSLEY DRIVE
WETHERILL PARK, NSW 2164

Contact: [redacted] **Email:** N/A
Phone: (13) 0033 7477 **Fax :** N/A **Transit state:** N/A
Licence no.: 13340 **Vehicle reg:** TBA **Transport type:** Road

I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 3 - RECEIVING FACILITY (this part to be completed by the receiving facility)

VEOLIA ES - WOODLAWN LANDFILL
COLLECTOR RD
TARAGO, NSW 2580

Contact: [redacted] **Email:** [redacted]e@veoliaes.com.au
Phone: (02) 9841 2926 **Fax:** (02) 9841 2995
Licence no.: 11436 **Receiving facility ref no.:** N/A

Waste amount at arrival: ..... Date waste arrived at the facility : .....

ACCEPT / REJECT THE WASTE

☐ The receiving facility accepted the waste - Date accepted: ..... Date Processed: ..... Treatment: .....
☐ The receiving facility rejected the waste (complete section below)
Reason for rejection: .....
Rejected waste sent to - Name: .....
Address: .....

I declare that to the best of my knowledge and belief the above information is true and correct - complete if accepted or rejected:
Name and Position (Block letters) .....
Signature ..... Date .....

NOTE

Bulk Transport Charnwood - Contaminated Soil - Not containing Asbestos

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567054

NOTE: The Protection of the Environment Operations (Waste) Regulation 2005 ("the Regulation") requires that an approved transport certificate accompany certain wastes when transported into, out of or within NSW. This transport certificate is in the approved form and meets the requirements of the Regulation provided that:

(a) the consignor certifies, by signing this certificate, that the information in Part 1 of the certificate is correct;

(b) the transporter certifies, by signing the certificate, that the information in Part 2 of the certificate is correct; and

(c) the receiving facility (receiver) certifies, by signing this certificate, that the information in Part 3 of the certificate is correct; and

(d) the receiving facility records any discrepancies between the waste received and the information recorded on this certificate in the EPA online waste tracking system.

If any of the information in Parts 1 and 2 of the certificate is not correct and it is not practical at the time to change the information in the EPA online tracking system and print a new version of the certificate, the consignor or transporter must write and initial any corrections on the certificate. The receiving facility must ensure these corrections are entered into the EPA online system as soon as is practicable afterwards.

The receiving facility must retain this certificate for four years.

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567055

Created by: [redacted] 10-Sep-2014 2:01 pm **Status:** Created

CA no: 2C00089276 **CA start date:** 10-Sep-2014 **CA end date:** 09-Sep-2015

PART 1 (this part to be completed by consignor at pickup)

CONSIGNOR

Capital Works & Infrastructure
180 London Circuit
Canberra City, ACT 2601

Contact: [redacted] **Role:** Producer
Email: N/A
Phone: (02) 6205 3086 **Fax:** N/A **Emergency:** (02) 6205 3086
ABN: 98 636 852 025 **ANZSIC code:** 0 **Licence no.:** n/a

Pickup details: Cnr Lhotsky St & Florey Dr, Charnwood ACT

WASTE

Waste code: N220 - Asbestos
Description: Asbestos
Form: Solid **Liquid waste levy applies:** No
Proposed treatment: Landfill **Classification:** General solid (non-putrescible)
Contaminants: N/A
Dangerous goods class: N/A **Subsidiary risk class:** N/A **UN no.:** N/A
Packaging type: N/A **Packing group no:** N/A **No. package:** N/A

PICKUP

Waste amount at pickup: ..... (required - Yes)
I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 2 - TRANSPORTER (this part to be completed by the transporter at pickup)

BULK TRANSPORT SOLUTIONS
6A/1345 THE HORSLEY DRIVE
WETHERILL PARK, NSW 2164

Contact: [redacted] **Email:** N/A
Phone: (13) 0033 7477 **Fax :** N/A **Transit state:** N/A
Licence no.: 13340 **Vehicle reg:** TBA **Transport type:** Road

I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 3 - RECEIVING FACILITY (this part to be completed by the receiving facility)

VEOLIA ES - WOODLAWN LANDFILL
COLLECTOR RD
TARAGO, NSW 2580

Contact: [redacted] **Email:** [redacted]@veoliaes.com.au
Phone: (02) 9841 2926 **Fax:** (02) 9841 2995
Licence no.: 11436 **Receiving facility ref no.:** N/A

Waste amount at arrival: ..... Date waste arrived at the facility : .....

ACCEPT / REJECT THE WASTE

☐ The receiving facility accepted the waste - Date accepted: ..... Date Processed: ..... Treatment: .....
☐ The receiving facility rejected the waste (complete section below)
Reason for rejection: .....
Rejected waste sent to - Name: .....
Address: .....

I declare that to the best of my knowledge and belief the above information is true and correct - complete if accepted or rejected:
Name and Position (Block letters) .....
Signature ..... Date .....

NOTE

Bulk Transport Charnwood - Contaminated Soil - Not containing Asbestos

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567055

NOTE: The Protection of the Environment Operations (Waste) Regulation 2005 ("the Regulation") requires that an approved transport certificate accompany certain wastes when transported into, out of or within NSW. This transport certificate is in the approved form and meets the requirements of the Regulation provided that:

(a) the consignor certifies, by signing this certificate, that the information in Part 1 of the certificate is correct;

(b) the transporter certifies, by signing the certificate, that the information in Part 2 of the certificate is correct; and

(c) the receiving facility (receiver) certifies, by signing this certificate, that the information in Part 3 of the certificate is correct; and

(d) the receiving facility records any discrepancies between the waste received and the information recorded on this certificate in the EPA online waste tracking system.

If any of the information in Parts 1 and 2 of the certificate is not correct and it is not practical at the time to change the information in the EPA online tracking system and print a new version of the certificate, the consignor or transporter must write and initial any corrections on the certificate. The receiving facility must ensure these corrections are entered into the EPA online system as soon as is practicable afterwards.

The receiving facility must retain this certificate for four years.

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567056

Created by: [redacted] 10-Sep-2014 2:01 pm **Status:** Created

CA no: 2C00089276 **CA start date:** 10-Sep-2014 **CA end date:** 09-Sep-2015

PART 1 (this part to be completed by consignor at pickup)

CONSIGNOR

Capital Works & Infrastructure
180 London Circuit
Canberra City, ACT 2601

Contact: [redacted] **Role:** Producer
Phone: (02) 6205 3086 **Email:** N/A
ABN: 98 636 852 025 **Fax:** N/A **ANZSIC code:** 0 **Emergency:** (02) 6205 3086 **Licence no.:** n/a

Pickup details: Cnr Lhotsky St & Florey Dr, Charnwood ACT

WASTE

Waste code: N220 - Asbestos
Description: Asbestos
Form: Solid **Liquid waste levy applies:** No
Proposed treatment: Landfill **Classification:** General solid (non-putrescible)
Contaminants: N/A
Dangerous goods class: N/A **Subsidiary risk class:** N/A **UN no.:** N/A
Packaging type: N/A **Packing group no:** N/A **No. package:** N/A

PICKUP

Waste amount at pickup: ..... (required - Yes)
I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 2 - TRANSPORTER (this part to be completed by the transporter at pickup)

BULK TRANSPORT SOLUTIONS
6A/1345 THE HORSLEY DRIVE
WETHERILL PARK, NSW 2164

Contact: [redacted] **Email:** N/A
Phone: (13) 0033 7477 **Fax :** N/A **Transit state:** N/A
Licence no.: 13340 **Vehicle reg:** TBA **Transport type:** Road

I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 3 - RECEIVING FACILITY (this part to be completed by the receiving facility)

VEOLIA ES - WOODLAWN LANDFILL
COLLECTOR RD
TARAGO, NSW 2580

Contact: [redacted] **Email:** [redacted]@veoliaes.com.au
Phone: (02) 9841 2926 **Fax:** (02) 9841 2995
Licence no.: 11436 **Receiving facility ref no.:** N/A

Waste amount at arrival: ..... Date waste arrived at the facility : .....

ACCEPT / REJECT THE WASTE

☐ The receiving facility accepted the waste - Date accepted: ..... Date Processed: ..... Treatment: .....
☐ The receiving facility rejected the waste (complete section below)
Reason for rejection: .....
Rejected waste sent to - Name: .....
Address: .....

I declare that to the best of my knowledge and belief the above information is true and correct - complete if accepted or rejected:
Name and Position (Block letters) .....
Signature ..... Date .....

NOTE

Bulk Transport Charnwood - Contaminated Soil - Not containing Asbestos

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567056

NOTE: The Protection of the Environment Operations (Waste) Regulation 2005 ("the Regulation") requires that an approved transport certificate accompany certain wastes when transported into, out of or within NSW. This transport certificate is in the approved form and meets the requirements of the Regulation provided that:

(a) the consignor certifies, by signing this certificate, that the information in Part 1 of the certificate is correct;

(b) the transporter certifies, by signing the certificate, that the information in Part 2 of the certificate is correct; and

(c) the receiving facility (receiver) certifies, by signing this certificate, that the information in Part 3 of the certificate is correct; and

(d) the receiving facility records any discrepancies between the waste received and the information recorded on this certificate in the EPA online waste tracking system.

If any of the information in Parts 1 and 2 of the certificate is not correct and it is not practical at the time to change the information in the EPA online tracking system and print a new version of the certificate, the consignor or transporter must write and initial any corrections on the certificate. The receiving facility must ensure these corrections are entered into the EPA online system as soon as is practicable afterwards.

The receiving facility must retain this certificate for four years.

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567057

Created by: [redacted] 10-Sep-2014 2:01 pm **Status:** Created

CA no: 2C00089276 **CA start date:** 10-Sep-2014 **CA end date:** 09-Sep-2015

PART 1 (this part to be completed by consignor at pickup)

CONSIGNOR

Capital Works & Infrastructure
180 London Circuit
Canberra City, ACT 2601

Contact: [redacted] **Role:** Producer
Phone: (02) 6205 3086 **Email:** N/A
ABN: 98 636 852 025 **Fax:** N/A **ANZSIC code:** 0 **Emergency:** (02) 6205 3086 **Licence no.:** n/a

Pickup details: Cnr Lhotsky St & Florey Dr, Charnwood ACT

WASTE

Waste code: N220 - Asbestos
Description: Asbestos
Form: Solid **Liquid waste levy applies:** No
Proposed treatment: Landfill **Classification:** General solid (non-putrescible)
Contaminants: N/A
Dangerous goods class: N/A **Subsidiary risk class:** N/A **UN no.:** N/A
Packaging type: N/A **Packing group no:** N/A **No. package:** N/A

PICKUP

Waste amount at pickup: ..... (required - Yes)
I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 2 - TRANSPORTER (this part to be completed by the transporter at pickup)

BULK TRANSPORT SOLUTIONS
6A/1345 THE HORSLEY DRIVE
WETHERILL PARK, NSW 2164

Contact: [redacted] **Email:** N/A
Phone: (13) 0033 7477 **Fax :** N/A **Transit state:** N/A
Licence no.: 13340 **Vehicle reg:** TBA **Transport type:** Road

I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 3 - RECEIVING FACILITY (this part to be completed by the receiving facility)

VEOLIA ES - WOODLAWN LANDFILL
COLLECTOR RD
TARAGO, NSW 2580

Contact: [redacted] **Email:** [redacted]@veoliaes.com.au
Phone: (02) 9841 2926 **Fax:** (02) 9841 2995
Licence no.: 11436 **Receiving facility ref no.:** N/A

Waste amount at arrival: ..... Date waste arrived at the facility : .....

ACCEPT / REJECT THE WASTE

☐ The receiving facility accepted the waste - Date accepted: ..... Date Processed: ..... Treatment: .....
☐ The receiving facility rejected the waste (complete section below)
Reason for rejection: .....
Rejected waste sent to - Name: .....
Address: .....

I declare that to the best of my knowledge and belief the above information is true and correct - complete if accepted or rejected:
Name and Position (Block letters) .....
Signature ..... Date .....

NOTE

Bulk Transport Charnwood - Contaminated Soil - Not containing Asbestos

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567057

NOTE: The Protection of the Environment Operations (Waste) Regulation 2005 ("the Regulation") requires that an approved transport certificate accompany certain wastes when transported into, out of or within NSW. This transport certificate is in the approved form and meets the requirements of the Regulation provided that:

(a) the consignor certifies, by signing this certificate, that the information in Part 1 of the certificate is correct;

(b) the transporter certifies, by signing the certificate, that the information in Part 2 of the certificate is correct; and

(c) the receiving facility (receiver) certifies, by signing this certificate, that the information in Part 3 of the certificate is correct; and

(d) the receiving facility records any discrepancies between the waste received and the information recorded on this certificate in the EPA online waste tracking system.

If any of the information in Parts 1 and 2 of the certificate is not correct and it is not practical at the time to change the information in the EPA online tracking system and print a new version of the certificate, the consignor or transporter must write and initial any corrections on the certificate. The receiving facility must ensure these corrections are entered into the EPA online system as soon as is practicable afterwards.

The receiving facility must retain this certificate for four years.

NSW Environment Protection Authority - Online Waste Tracking System
TRANSPORT CERTIFICATE - No. 2T00567058

Created by: [redacted] 10-Sep-2014 2:01 pm **Status:** Created
CA no: 2C00089276 **CA start date:** 10-Sep-2014 **CA end date:** 09-Sep-2015

PART 1 (this part to be completed by consignor at pickup)

CONSIGNOR

Capital Works & Infrastructure
180 London Circuit
Canberra City, ACT 2601

Contact: [redacted] **Role:** Producer
Phone: (02) 6205 3086 **Email:** N/A
ABN: 98 636 852 025 **Fax:** N/A **ANZSIC code:** 0 **Emergency:** (02) 6205 3086 **Licence no.:** n/a

Pickup details: Cnr Lhotsky St & Florey Dr, Charnwood ACT

WASTE

Waste code: N220 - Asbestos
Description: Asbestos
Form: Solid **Liquid waste levy applies:** No
Proposed treatment: Landfill **Classification:** General solid (non-putrescible)
Contaminants: N/A
Dangerous goods class: N/A **Subsidiary risk class:** N/A **UN no.:** N/A
Packaging type: N/A **Packing group no:** N/A **No. package:** N/A

PICKUP

Waste amount at pickup: ..... (required - Yes)
I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 2 - TRANSPORTER (this part to be completed by the transporter at pickup)

BULK TRANSPORT SOLUTIONS
6A/1345 THE HORSLEY DRIVE
WETHERILL PARK, NSW 2164

Contact: [redacted] **Email:** N/A
Phone: (13) 0033 7477 **Fax :** N/A **Transit state:** N/A
Licence no.: 13340 **Vehicle reg:** TBA **Transport type:** Road

I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 3 - RECEIVING FACILITY (this part to be completed by the receiving facility)

VEOLIA ES - WOODLAWN LANDFILL
COLLECTOR RD
TARAGO, NSW 2580

Contact: [redacted] **Email:** [redacted]@veoliaes.com.au
Phone: (02) 9841 2926 **Fax:** (02) 9841 2995
Licence no.: 11436 **Receiving facility ref no.:** N/A

Waste amount at arrival: ..... Date waste arrived at the facility : .....

ACCEPT / REJECT THE WASTE

☐ The receiving facility accepted the waste - Date accepted: ..... Date Processed: ..... Treatment: .....
☐ The receiving facility rejected the waste (complete section below)
Reason for rejection: .....
Rejected waste sent to - Name: .....
Address: .....

I declare that to the best of my knowledge and belief the above information is true and correct - complete if accepted or rejected:
Name and Position (Block letters) .....
Signature ..... Date .....

NOTE

Bulk Transport Charnwood - Contaminated Soil - Not containing Asbestos

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567058

NOTE: The Protection of the Environment Operations (Waste) Regulation 2005 ("the Regulation") requires that an approved transport certificate accompany certain wastes when transported into, out of or within NSW. This transport certificate is in the approved form and meets the requirements of the Regulation provided that:

(a) the consignor certifies, by signing this certificate, that the information in Part 1 of the certificate is correct;

(b) the transporter certifies, by signing the certificate, that the information in Part 2 of the certificate is correct; and

(c) the receiving facility (receiver) certifies, by signing this certificate, that the information in Part 3 of the certificate is correct; and

(d) the receiving facility records any discrepancies between the waste received and the information recorded on this certificate in the EPA online waste tracking system.

If any of the information in Parts 1 and 2 of the certificate is not correct and it is not practical at the time to change the information in the EPA online tracking system and print a new version of the certificate, the consignor or transporter must write and initial any corrections on the certificate. The receiving facility must ensure these corrections are entered into the EPA online system as soon as is practicable afterwards.

The receiving facility must retain this certificate for four years.

NSW Environment Protection Authority - Online Waste Tracking System
TRANSPORT CERTIFICATE - No. 2T00567059

Created by: [redacted] 10-Sep-2014 2:01 pm **Status:** Created
CA no: 2C00089276 **CA start date:** 10-Sep-2014 **CA end date:** 09-Sep-2015

PART 1 (this part to be completed by consignor at pickup)

CONSIGNOR

Capital Works & Infrastructure
180 London Circuit
Canberra City, ACT 2601

Contact: [redacted] **Role:** Producer
Phone: (02) 6205 3086 **Email:** N/A
ABN: 98 636 852 025 **Fax:** N/A **ANZSIC code:** 0 **Emergency:** (02) 6205 3086 **Licence no.:** n/a

Pickup details: Cnr Lhotsky St & Florey Dr, Charnwood ACT

WASTE

Waste code: N220 - Asbestos
Description: Asbestos
Form: Solid **Liquid waste levy applies:** No
Proposed treatment: Landfill **Classification:** General solid (non-putrescible)
Contaminants: N/A
Dangerous goods class: N/A **Subsidiary risk class:** N/A **UN no.:** N/A
Packaging type: N/A **Packing group no:** N/A **No. package:** N/A

PICKUP

Waste amount at pickup: ..... (required - Yes)
I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 2 - TRANSPORTER (this part to be completed by the transporter at pickup)

BULK TRANSPORT SOLUTIONS
6A/1345 THE HORSLEY DRIVE
WETHERILL PARK, NSW 2164

Contact: [redacted] **Email:** N/A
Phone: (13) 0033 7477 **Fax :** N/A **Transit state:** N/A
Licence no.: 13340 **Vehicle reg:** TBA **Transport type:** Road

I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 3 - RECEIVING FACILITY (this part to be completed by the receiving facility)

VEOLIA ES - WOODLAWN LANDFILL
COLLECTOR RD
TARAGO, NSW 2580

Contact: [redacted] **Email:** [redacted]@veoliaes.com.au
Phone: (02) 9841 2926 **Fax:** (02) 9841 2995
Licence no.: 11436 **Receiving facility ref no.:** N/A

Waste amount at arrival: ..... Date waste arrived at the facility : .....

ACCEPT / REJECT THE WASTE

☐ The receiving facility accepted the waste - Date accepted: ..... Date Processed: ..... Treatment: .....
☐ The receiving facility rejected the waste (complete section below)
Reason for rejection: .....
Rejected waste sent to - Name: .....
Address: .....

I declare that to the best of my knowledge and belief the above information is true and correct - complete if accepted or rejected:
Name and Position (Block letters) .....
Signature ..... Date .....

NOTE

Bulk Transport Charnwood - Contaminated Soil - Not containing Asbestos

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567059

NOTE: The Protection of the Environment Operations (Waste) Regulation 2005 ("the Regulation") requires that an approved transport certificate accompany certain wastes when transported into, out of or within NSW. This transport certificate is in the approved form and meets the requirements of the Regulation provided that:

(a) the consignor certifies, by signing this certificate, that the information in Part 1 of the certificate is correct;
(b) the transporter certifies, by signing the certificate, that the information in Part 2 of the certificate is correct; and
(c) the receiving facility (receiver) certifies, by signing this certificate, that the information in Part 3 of the certificate is correct; and
(d) the receiving facility records any discrepancies between the waste received and the information recorded on this certificate in the EPA online waste tracking system.

If any of the information in Parts 1 and 2 of the certificate is not correct and it is not practical at the time to change the information in the EPA online tracking system and print a new version of the certificate, the consignor or transporter must write and initial any corrections on the certificate. The receiving facility must ensure these corrections are entered into the EPA online system as soon as is practicable afterwards.

The receiving facility must retain this certificate for four years.

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567060

Created by: [redacted] 10-Sep-2014 2:01 pm **Status:** Created

CA no: 2C00089276 **CA start date:** 10-Sep-2014 **CA end date:** 09-Sep-2015

PART 1 (this part to be completed by consignor at pickup)

CONSIGNOR

Capital Works & Infrastructure
180 London Circuit
Canberra City, ACT 2601

Contact: [redacted] **Role:** Producer
Phone: (02) 6205 3086 **Email:** N/A
ABN: 98 636 852 025 **Fax:** N/A **ANZSIC code:** 0 **Emergency:** (02) 6205 3086 **Licence no.:** n/a

Pickup details: Cnr Lhotsky St & Florey Dr, Charnwood ACT

WASTE

Waste code: N220 - Asbestos
Description: Asbestos
Form: Solid **Liquid waste levy applies:** No
Proposed treatment: Landfill **Classification:** General solid (non-putrescible)
Contaminants: N/A
Dangerous goods class: N/A **Subsidiary risk class:** N/A **UN no.:** N/A
Packaging type: N/A **Packing group no:** N/A **No. package:** N/A

PICKUP

Waste amount at pickup: ..... (required - Yes)
I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 2 - TRANSPORTER (this part to be completed by the transporter at pickup)

BULK TRANSPORT SOLUTIONS
6A/1345 THE HORSLEY DRIVE
WETHERILL PARK, NSW 2164

Contact: [redacted] **Email:** N/A
Phone: (13) 0033 7477 **Fax :** N/A **Transit state:** N/A
Licence no.: 13340 **Vehicle reg:** TBA **Transport type:** Road

I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 3 - RECEIVING FACILITY (this part to be completed by the receiving facility)

VEOLIA ES - WOODLAWN LANDFILL
COLLECTOR RD
TARAGO, NSW 2580

Contact: [redacted] **Email:** [redacted]@veoliaes.com.au
Phone: (02) 9841 2926 **Fax:** (02) 9841 2995
Licence no.: 11436 **Receiving facility ref no.:** N/A

Waste amount at arrival: ..... Date waste arrived at the facility : .....

ACCEPT / REJECT THE WASTE

☐ The receiving facility accepted the waste - Date accepted: ..... Date Processed: ..... Treatment: .....
☐ The receiving facility rejected the waste (complete section below)
Reason for rejection: .....
Rejected waste sent to - Name: .....
Address: .....

I declare that to the best of my knowledge and belief the above information is true and correct - complete if accepted or rejected:
Name and Position (Block letters) .....
Signature ..... Date .....

NOTE

Bulk Transport Charnwood - Contaminated Soil - Not containing Asbestos

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567060

NOTE: The Protection of the Environment Operations (Waste) Regulation 2005 ("the Regulation") requires that an approved transport certificate accompany certain wastes when transported into, out of or within NSW. This transport certificate is in the approved form and meets the requirements of the Regulation provided that:

(a) the consignor certifies, by signing this certificate, that the information in Part 1 of the certificate is correct;

(b) the transporter certifies, by signing the certificate, that the information in Part 2 of the certificate is correct; and

(c) the receiving facility (receiver) certifies, by signing this certificate, that the information in Part 3 of the certificate is correct; and

(d) the receiving facility records any discrepancies between the waste received and the information recorded on this certificate in the EPA online waste tracking system.

If any of the information in Parts 1 and 2 of the certificate is not correct and it is not practical at the time to change the information in the EPA online tracking system and print a new version of the certificate, the consignor or transporter must write and initial any corrections on the certificate. The receiving facility must ensure these corrections are entered into the EPA online system as soon as is practicable afterwards.

The receiving facility must retain this certificate for four years.

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567061

Created by: [redacted] 10-Sep-2014 2:01 pm **Status:** Created
CA no: 2C00089276 **CA start date:** 10-Sep-2014 **CA end date:** 09-Sep-2015

PART 1 (this part to be completed by consignor at pickup)

CONSIGNOR

Capital Works & Infrastructure
180 London Circuit
Canberra City, ACT 2601

Contact: [redacted] **Role:** Producer
Phone: (02) 6205 3086 **Email:** N/A
ABN: 98 636 852 025 **Fax:** N/A **ANZSIC code:** 0 **Emergency:** (02) 6205 3086 **Licence no.:** n/a

Pickup details: Cnr Lhotsky St & Florey Dr, Charnwood ACT

WASTE

Waste code: N220 - Asbestos
Description: Asbestos
Form: Solid **Liquid waste levy applies:** No
Proposed treatment: Landfill **Classification:** General solid (non-putrescible)
Contaminants: N/A
Dangerous goods class: N/A **Subsidiary risk class:** N/A **UN no.:** N/A
Packaging type: N/A **Packing group no:** N/A **No. package:** N/A

PICKUP

Waste amount at pickup: ..... (required - Yes)
I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 2 - TRANSPORTER (this part to be completed by the transporter at pickup)

BULK TRANSPORT SOLUTIONS
6A/1345 THE HORSLEY DRIVE
WETHERILL PARK, NSW 2164

Contact: [redacted] **Email:** N/A
Phone: (13) 0033 7477 **Fax :** N/A **Transit state:** N/A
Licence no.: 13340 **Vehicle reg:** TBA **Transport type:** Road

I declare that to the best of my knowledge and belief the above information is true and correct.
Name and Position (Block letters) .....
Signature ..... Date .....

PART 3 - RECEIVING FACILITY (this part to be completed by the receiving facility)

VEOLIA ES - WOODLAWN LANDFILL
COLLECTOR RD
TARAGO, NSW 2580

Contact: [redacted] **Email:** [redacted]@veoliaes.com.au
Phone: (02) 9841 2926 **Fax:** (02) 9841 2995
Licence no.: 11436 **Receiving facility ref no.:** N/A

Waste amount at arrival: ..... Date waste arrived at the facility : .....

ACCEPT / REJECT THE WASTE

☐ The receiving facility accepted the waste - Date accepted: ..... Date Processed: ..... Treatment: .....
☐ The receiving facility rejected the waste (complete section below)
Reason for rejection: .....
Rejected waste sent to - Name: .....
Address: .....

I declare that to the best of my knowledge and belief the above information is true and correct - complete if accepted or rejected:
Name and Position (Block letters) .....
Signature ..... Date .....

NOTE

Bulk Transport Charnwood - Contaminated Soil - Not containing Asbestos

NSW Environment Protection Authority - Online Waste Tracking System

TRANSPORT CERTIFICATE - No. 2T00567061

NOTE: The Protection of the Environment Operations (Waste) Regulation 2005 ("the Regulation") requires that an approved transport certificate accompany certain wastes when transported into, out of or within NSW. This transport certificate is in the approved form and meets the requirements of the Regulation provided that:

(a) the consignor certifies, by signing this certificate, that the information in Part 1 of the certificate is correct;

(b) the transporter certifies, by signing the certificate, that the information in Part 2 of the certificate is correct; and

(c) the receiving facility (receiver) certifies, by signing this certificate, that the information in Part 3 of the certificate is correct; and

(d) the receiving facility records any discrepancies between the waste received and the information recorded on this certificate in the EPA online waste tracking system.

If any of the information in Parts 1 and 2 of the certificate is not correct and it is not practical at the time to change the information in the EPA online tracking system and print a new version of the certificate, the consignor or transporter must write and initial any corrections on the certificate. The receiving facility must ensure these corrections are entered into the EPA online system as soon as is practicable afterwards.

The receiving facility must retain this certificate for four years.

NSW EPA

End TC No. : 2T00567061

Bulk printing for Transport Certificate

- End -

ENVIROPACIFIC SERVICES

Storage Tank Destruction Certificate

Enviropacific Services Pty Ltd hereby confirm that the following storage tank has been appropriately destroyed in accordance with **AS 4976-2008** *The removal and disposal of underground petroleum storage tanks.*

Storage tank type	Above ground ☐ Under ground ☒
Tank reference number	UST 3 - Petrol.
Tank size (litres)	10,000
Site address/location of storage tank removed	Former West Belconnen fire station, Charnwood ACT

Enviropacific Services Pty Ltd hereby releases J.C.S.D/Aecom from any loss, damage, expenses or costs incurred and hereby indemnify J.C.S.D/Aecom against any actions, suits, proceedings, claims or demands whatsoever which any third party might claim against J.C.S.D/Aecom in respect of any loss, damage, expenses or costs arising out of or connected in any way whatsoever with the above mentioned storage tank.

[redacted]
Name

[redacted]
Signature

27-8-14
Date

ENVIROPACIFIC SERVICES

Storage Tank Destruction Certificate

Enviropacific Services Pty Ltd hereby confirm that the following storage tank has been appropriately destroyed in accordance with **AS 4976-2008** *The removal and disposal of underground petroleum storage tanks.*

Storage tank type	Above ground ☐ Under ground ☒
Tank reference number	UST 1. - Heating oil
Tank size (litres)	4500 L
Site address/location of storage tank removed	Former West Belconnen Fire station, Chornwood ACT

Enviropacific Services Pty Ltd hereby releases J.C.S.D/Ascom from any loss, damage, expenses or costs incurred and hereby indemnify J.C.S.D/Ascom against any actions, suits, proceedings, claims or demands whatsoever which any third party might claim against J.C.S.D/Ascom in respect of any loss, damage, expenses or costs arising out of or connected in any way whatsoever with the above mentioned storage tank.

[redacted]

Name [redacted]

Signature

27-8-14

Date

ENVIROPACIFIC SERVICES

Storage Tank Destruction Certificate

Enviropacific Services Pty Ltd hereby confirm that the following storage tank has been appropriately destroyed in accordance with **AS 4976-2008** *The removal and disposal of underground petroleum storage tanks.*

Storage tank type	Above ground ☐ Under ground ☒
Tank reference number	VST 2 - Diesel
Tank size (litres)	10 000 L.
Site address/location of storage tank removed	former West Belconnen Fire Station, Charnwood ACT

Enviropacific Services Pty Ltd hereby releases J.C.S.D/AECOM from any loss, damage, expenses or costs incurred and hereby indemnify J.C.S.D/AECOM against any actions, suits, proceedings, claims or demands whatsoever which any third party might claim against J.C.S.D/AECOM in respect of any loss, damage, expenses or costs arising out of or connected in any way whatsoever with the above mentioned storage tank.

[redacted]

Name

[redacted]

Signature

27-8-14

Date

VEOLIA

Horsley Park Waste Management Facility
A.B.N. 73 068 567 371
716 - 736 Wallgrove Road, Horsley Park NSW 2175

Date: **10/09/2014**

Waste Facility	Date	Time	Rego #	Docket #	Customer #	Customer Name	Waste Description	Tonnes
W-2WOOLAN	10.09.2014	15:56:27	DIV033	121855662	20058707	Bulk Transport - Charnwood	Contaminated Soil (GSW)	34.44
W-2WOOLAN	10.09.2014	15:59:42	DIV032	121855663	20058707	Bulk Transport - Charnwood	Contaminated Soil (GSW)	35.62
						Bulk Transport - Charnwood		**70.06**

Boral Country Concrete & Quarries
BORAL RESOURCES (COUNTRY) PTY LIMITED
ABN 51 000 187 002
PO Box 42
Wentworthville NSW 2145
Telephone: (02) 9033 5070
Facsimile: (02) 9033 5295

DELIVERY DOCKET

No: HA326488

Date:
Time:
Batched:

Customer: ENVIROPACIFIC SERVICES PTY LTD

Customer Number: 600121-129967

Order No:

Deliver to:

Job Dist. Truck Map Ref

Product:

Spec: UNPROCESSED UNSPECIFIED SIZE SELECT FILL

Product Number:

Quantity:

Ordered	Progress Job	Progress Today	This Load

WARNING:
Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with the eyes and skin. Wash exposed skin areas thoroughly with water immediately. If any cement mixture gets into eyes, rinse with water continuously for 10 minutes and get prompt medical treatment. Wear suitable protective clothing and gloves.
Dust generated by drilling, sawing or chasing hardened concrete or handling, storage and placement of quarry products may contain crystalline silica, which can cause lung disease. Avoid breathing in dust and use adequate dust prevention and extraction methods. Wear suitable protective clothing, gloves, safety goggles and a dust mask that conforms to Australian Standards. If dust gets into the eyes, rinse with water continuously for 10 minutes. If dust is inhaled, move immediately to fresh air and seek prompt medical advice.
Contact Boral for more information and a Material Safety Data Sheet.

Additives/Extras:

On Site:

				Cust. Intials
Time on Site		Time off Site		Waiting Time		
Water Added	Litres			Tests		
Additives						
Return Cartage	Metres					

Customer Signature: X

Customer accepts the product and the on-site adjustments as documented on this docket, subject to the conditions of sale overleaf.

Cash Collected $

Prev. Docket:

Driver Instructions:

4843843

YELLOW - Office Copy GREEN - Plant Copy BLUE - Carters Copy PINK - Customer Copy

BORAL®

Boral Country Concrete & Quarries

BORAL RESOURCES (COUNTRY) PTY LIMITED
ABN 51 000 187 002

PO Box 42
Wentworthville NSW 2145
Telephone: (02) 9033 5070
Facsimile: (02) 9033 5295

INTERNATIONAL QUALITY MANAGEMENT SYSTEM

DELIVERY DOCKET

No: HA326477

Date:
Time:
Batched:

Customer: ENVIROPACIFIC SERVICES PTY LTD

Customer Number: 600121-12996

Order No:

Deliver to:

Job | Dist. | Truck | Map Ref

Product: UNPROCESSED UNSPECIFIED SIZE SELECT FILL

Spec:

Product Number:

Quantity:

Ordered	Progress Job	Progress Today	This Load

Gross:48.7 Tare:16.7 Net:32 TN

WARNING:
Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with the eyes and skin. Wash exposed skin areas thoroughly with water immediately. If any cement mixture gets into eyes, rinse with water continuously for 10 minutes and get prompt medical treatment. Wear suitable protective clothing and gloves.
Dust generated by drilling, sawing or chasing hardened concrete or handling, storage and placement of quarry products may contain crystalline silica, which can cause lung disease. Avoid breathing in dust and use adequate dust prevention and extraction methods. Wear suitable protective clothing, gloves, safety goggles and a dust mask that conforms to Australian Standards. If dust gets into the eyes, rinse with water continuously for 10 minutes. If dust is inhaled, move immediately to fresh air and seek prompt medical advice.
Contact Boral for more information and a Material Safety Data Sheet.

Additives/Extras:

On Site:

				Cust. Initials
Time on Site		Time off Site		Waiting Time		
Water Added	Litres			Tests		
Additives						
Return Cartage	Metres					

Customer Signature: X

Customer accepts the product and the on-site adjustments as documented on this docket, subject to the conditions of sale overleaf.

Cash Collected $

Prev. Docket:

Driver Instructions:

4843832

YELLOW - Office Copy GREEN - Plant Copy BLUE - Carters Copy PINK - Customer Copy

Boral Country Concrete & Quarries
BORAL RESOURCES (COUNTRY) PTY LIMITED
ABN 51 000 187 002
PO Box 42
Wentworthville NSW 2145
Telephone: (02) 9033 5070
Facsimile: (02) 9033 5295

12:01

INTERNATIONAL QUALITY MANAGEMENT SYSTEM

DELIVERY DOCKET

No: HA326472

Date:
Time:
Batched:

Customer: ENVIROPACIFIC SERVICES PTY LTD

Customer Number: 600121-12996?

Order No:

Deliver to:

Job | Dist. | Truck | Map Ref

Product: UNPROCESSED UNSPECIFIED SIZE SELECT FILL

Spec:

Product Number:

Quantity:

Ordered	Progress Job	Progress Today	This Load

Gross:48.7 Tare:16.7 Net:32 IN

WARNING:
Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with the eyes and skin. Wash exposed skin areas thoroughly with water immediately. If any cement mixture gets into eyes, rinse with water continuously for 10 minutes and get prompt medical treatment. Wear suitable protective clothing and gloves.
Dust generated by drilling, sawing or chasing hardened concrete or handling, storage and placement of quarry products may contain crystalline silica, which can cause lung disease. Avoid breathing in dust and use adequate dust prevention and extraction methods. Wear suitable protective clothing, gloves, safety goggles and a dust mask that conforms to Australian Standards. If dust gets into the eyes, rinse with water continuously for 10 minutes. If dust is inhaled, move immediately to fresh air and seek prompt medical advice.
Contact Boral for more information and a Material Safety Data Sheet.

Additives/Extras:

On Site:

				Cust. Initials
Time on Site		Time off Site		Waiting Time		
Water Added	Litres			Tests		
Additives						
Return Cartage	Metres					

Customer Signature: X

Customer accepts the product and the on-site adjustments as documented on this docket, subject to the conditions of sale overleaf.

Cash Collected $

Prev. Docket:

Driver Instructions:

4843827

YELLOW - Office Copy **GREEN** - Plant Copy **BLUE** - Carters Copy **PINK** - Customer Copy

BORAL®

Boral Country Concrete & Quarries

BORAL RESOURCES (COUNTRY) PTY LIMITED
ABN 51 000 187 002

PO Box 42
Wentworthville NSW 2145
Telephone: (02) 9033 5070
Facsimile: (02) 9033 5295

INTERNATIONAL QUALITY MANAGEMENT SYSTEM

DELIVERY DOCKET

No: HA326484

Date:
Time:
Batched:

Customer: ENVIROPACIFIC SERVICES PTY LTD

Customer Number: 600121-129967

Order No:

Deliver to:

Job | Dist. | Truck | Map Ref

Product:

Spec: UNPROCESSED UNSPECIFIED SIZE SELECT FILL

Product Number:

Quantity:

Ordered	Progress: Job	Progress: Today	This Load

Gross:48.7 Tare:16.7 Net:32 TN

WARNING:
Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with the eyes and skin. Wash exposed skin areas thoroughly with water immediately. If any cement mixture gets into eyes, rinse with water continuously for 10 minutes and get prompt medical treatment. Wear suitable protective clothing and gloves.
Dust generated by drilling, sawing or chasing hardened concrete or handling, storage and placement of quarry products may contain crystalline silica, which can cause lung disease. Avoid breathing in dust and use adequate dust prevention and extraction methods. Wear suitable protective clothing, gloves, safety goggles and a dust mask that conforms to Australian Standards. If dust gets into the eyes, rinse with water continuously for 10 minutes. If dust is inhaled, move immediately to fresh air and seek prompt medical advice.
Contact Boral for more information and a Material Safety Data Sheet.

Additives/Extras:

On Site:

				Cust. Initials
Time on Site		Time off Site		Waiting Time		
Water Added	Litres			Tests		
Additives						
Return Cartage	Metres					

Customer Signature: X

Customer accepts the product and the on-site adjustments as documented on this docket, subject to the conditions of sale overleaf.

Cash Collected $

Prev. Docket:

Driver Instructions:

4843839

YELLOW - Office Copy **GREEN** - Plant Copy **BLUE** - Carters Copy **PINK** - Customer Copy

LOADSHEET - IMPORT

PROJECT: Charnwood. JOB No: ETR4080 DATE:

ENVIROPACIFIC SERVICES

Import Source: Hall Quarry - Boral

Date: 25/9/14

Destination on Site: former UST excavation

Materials Classification / Approvals obtained ☑

Material Type

VENM ☑ ENM ☐ CRUSHED CONCRETE ☐ GRAVEL ☐ ROADBASE ☐

CONCRETE ☐ CEMENT ☐ FLYASH ☐ ASHPALT ☐ OTHER..... ☐

TRUCK DETAILS				LOAD TIME														TOTAL TONNAGE ESTIMATE
No	Truck Rego.	Est. Tonnage for each load	Signed Truck driver Induction Y/N?	1	2	3	4	5	6	7	8	9	10	11	12	13	14	128
1	YGF60E	32.	Y.	10:01.	11:10	12:40	2:30											128.
2																		
3																		
4																		
5																		
6																		
7																		
8																		
9																		
10																		
11																		
12																		
13																		
14																		
15																		
16																		
17																		
18																		
19																		
20																		
21																		
22																		
																	TOTAL	128

NSW Environment Protection Authority - Online Waste Tracking System

Consignment Authorisation - No. 2C00089276

Created by: JOANNE HELMS, 10-Sep-2014 1:58 pm **Status:** Current

Note: This consignment authorisation has been issued using the NSW Environment Protection Authority (EPA)'s online waste tracking system. The Protection of the Environment Operations (Waste) Regulation 2005 ("the Regulation") places obligations on the consignor, transporter and receiving facility with respect to the transport of waste under this consignment authorisation. This consignment authorisation may be revoked in accordance with the provisions of the Regulation.

SECTION A

Details in this section form part of the legal requirements of the consignment authorisation and cannot be varied except by the EPA to correct errors. If you identify any errors in this section, please advise the EPA.

CA start date:	10-Sep-2014	**CA end date:**	9-Sep-2015
Consignor:	Capital Works & Infrastructure 180 London Circuit Canberra City, ACT 2601	**Role:** **ABN:** **ANZSIC code:** **Licence no.:**	Producer 98 636 852 025 0 n/a
Pickup details:	Cnr Lhotsky St & Florey Dr, Charnwood ACT		
Waste code:	N220 - Asbestos		
Receiving Facility:	VEOLIA ES - WOODLAWN LANDFILL COLLECTOR RD TARAGO, NSW 2580	**Licence no.:**	11436

SECTION B

Details in this section are not part of the legal requirements of the consignment authorisation. They are default values which are automatically entered onto transport certificates created using this consignment authorisation. These details can be varied by the entity which issued the consignment authorisation or by the EPA.

Consignor:	**Contact:** [redacted]	**Phone:** **Fax:** **Emergency:** **Email:**	(02) 6205 3086 N/A (02) 6205 3086 N/A		
Waste:	**Description:** Asbestos **Form:** Solid **Classification:** Solid (non-putres.) **Dangerous goods class:** N/A **Packaging type:** N/A **Contaminants:** N/A	**Liquid waste levy applies:** **Proposed treatment:** **Subsidiary risk class:** **Packing group no.:**	No Landfill N/A N/A	**SIA no.:** N/A **UN no.:** N/A	
Transport:	**Type:** Road **Waste amount picked up must be recorded:** Yes	**Proposed delivery period:** 5 day(s)			
Receiving facility	**Contact:** [redacted] **Receiving facility ref no.:** N/A	**Phone:** **Fax:** **Email:**	(02) 9841 2926 (02) 9841 2995 [redacted]@veoliaes		
Note:	Bulk Transport Charnwood - Contaminated Soil - Not containing Asbestos				

Appendix E

Calibration Records

ThermoFisher SCIENTIFIC

The world leader in serving science

RENTALS

Equipment Report - MINIRAE 3000 PID

This PID has been performance checked / calibrated* as follows:

Calibration	Actual Value	Reading	Pass?		
Zero – fresh air	0.0 ppm	0.0 ppm	☑		
Span – Isobutylene	10.3 ppm	10.3 ppm	☑		
Set Alarm limits to	High	100 ppm	Low	50 ppm	
Operations Check					
☑ Performance Check (pump, lamp, sensor & battery voltage check)					
☑ Battery Charged	☑ Filters Check	☑ Spare battery Voltage (5.5v minimum) 5.6 V			
☑ Electrical Safety Tag attached (AS/NZS 3760)	Tag No: TFR022	Valid to: 30/09/2015			
☑ Bump test / Date: 26/08/2014					

** Calibration gas traceability information is available upon request.*

Date: 26/08/2014 Checke[redacted]

Signed: [redacted]

Please check that the following items are received and t[redacted] are cleaned and decontaminated before return. A minimum $20 cleaning / service / repair charge may be applied to any unclean or damaged items. Items not returned will be billed for at the full replacement cost.

Sent	Returned	Item
☑	☐	MiniRae 3000 PID / Operational Check, plus Battery Voltage @ 10.0 V/0
☑	☐	Lamp Voltage @ 10.6eV Compound Set to: ISOBUTYLENE C/factor: 1
☑	☐	Protective yellow rubber boot
☑	☐	Inlet probe (attached to PID)
☑	☐	Spare water trap filter(s) Qty 1
☑	☐	Charger 240V to 12V 500mA
☑	☐	Instruction Manual behind foam on the lid of case
☑	☐	Quick Guide Sheet behind foam on the lid of case
☑	☐	Spare Alkaline Battery Compartment with batteries
☒	☐	Inline Moisture trap Filter Guide Laminated
☒	☐	Calibration regulator & tubing (optional)
☑	☐	Carry Case
	☐	Check to confirm electrical safety (tag must be valid)
☐	☐	

Processors Signature/ Initials MS

Quote Reference	CS001249	Condition on return
Customer Ref		
Equipment ID	PID 3000SG	
Equipment serial no.	592909228	
Return Date	/ /	
Return Time		

Appendix F

Sampling Forms

AECOM

16;#Australia New Zealand|a541b326-6e42-45fc-a7d5-d797f3cb72ce

Site Contamination Analysis PID Screening Register

Q4AN(EV)-336-FM14

Job No.: 60316172 Site: ESA Charnwood

Personnel: [redacted] Date: 27/08/2014

Sample Location	Sample Depth	Hand or Bag Test H/B	PID Reading (ppm)	Visual Contamination (Y:N)	Odour (Y:N)	Other Comments / Observations
S1		B	71.3	N	Y	Gravel, poorly graded, dark brown, angular, wet
						medium dense, traces of stones, [redacted]
S2		B	103.6	N	Y	Gravel, poorly graded, dark brown mottled orange and white
						dry, subangular, loose.
S3		B	63.7	N	Y	Clay, silty clay, dark brown, mottled orange + white,
						(CL), medium plasticity, traces of rock. Dry, soft.
S4		B	144.3	N	Y	Clay, silty clay, dark brown, mottled orange + white,
						(CL), medium plasticity, traces of rock. Moist, firm
S5		B	524.4	N [redacted]	Y (Strong)	As above No mottled white [redacted]. Traces of stones. Moist, stiff.
S6		B	24.5	N	Y	Silty [redacted], dark brown, moist, soft, traces of
						Moist, Silty Clay (CH), light brown, high plasticity, firm
(QC1) S7		B	90.2	N	Y	Gravel, silty gravel, dark brown, subangular,
						moist, traces of stones, loose.
S8		B	69.4	N	Y	Gravel, silty gravel, dark brown, subangular,
						moist, traces of stones, loose

AECOM

16;#Australia New Zealand|a541b326-6e42-45fc-a7d5-d797f3cb72ce

Site Contamination Analysis PID Screening Register

Q4AN(EV)-336-FM14

Job No.: 60316172 Site: ESA Charnwood

Personnel: [redacted] Date: 27/8/2014

Sample Location	Sample Depth	Hand or Bag Test H/B	PID Reading (ppm)	Visual Contamination (Y:N)	Odour (Y:N)	Other Comments / Observations
S9 (RC2)		B	12.4	N	Y	As above. ~~Moist~~ ~~[redacted]~~ Moist.
S10		B	19.1	N	~~[redacted]~~ Y	~~[redacted]~~ ~~[redacted]~~ Silty clay, dark brown, medium
						plasticity, mottled orange, soft.
S11		B	3.4	N	N	As above
S12		B	80.7	N	Y	~~[redacted]~~ As above.
S13		B	47.8	N	Y	Same as S6. ~~[redacted]~~ Root matter.
S14		B	78.9	N	Y	Same as S6. ~~[redacted]~~ ~~[redacted]~~
S15		~~[redacted]~~ B	116.0	N	Y	Same as S6
S16		B	73.2	N	Y	Same as S2.

AECOM

16;#Australia New Zealand|a541b326-6e42-45fc-a7d5-d797f3cb72ce

Site Contamination Analysis PID Screening Register

Q4AN(EV)-336-FM14

Job No.: 60316172 Site: ESA Charnwood

Personnel: [redacted] Date: 27/08/2014

Sample Location	Sample Depth	Hand or Bag Test H/B	PID Reading (ppm)	Visual Contamination (Y:N)	Odour (Y:N)	Other Comments / Observations
S17		B	160.3	N	Y	As above
S18		B	39.4	N	Y	Same as S4 but with root matter
SP1		B	171.5	N	Y	Sand (topsoil), dark brown, very loose,
						green plant matter including roots, dry, no ACM.
SP2		B	123.1	N	Y	Same as S1
SP3		B	121.4	N	Y	Same as S2
SP4		B	680.1	N	Y (Strong)	Same as S12.
SP5		B	354.2	N	Y	Same as S12.
SP6		B	165.8	N	Y	Silt (ML), dark brown, moist, soft, trace of
						root matter.

AECOM

16;#Australia New Zealand|a541b326-6e42-45fc-a7d5-d797f3cb72ce

Site Contamination Analysis PID Screening Register

Q4AN(EV)-336-FM14

Job No.: 60316172 Site: ESA Charnwood

Personnel: [redacted] Date: 27/08/2014

Sample Location	Sample Depth	Hand or Bag Test H/B	PID Reading (ppm)	Visual Contamination (Y:N)	Odour (Y:N)	Other Comments / Observations
SP7		B	197.3	N	Y	Same as SP5
SP8		B	13.3	N	Y	Same as SP5.
SP9		B	39.8	N	Y	Same as S2 but wet
SP10		B	211.3	N	Y	As above
SP11		B	86.8	N	Y	As above.

Appendix G

Site Photographs

AECOM

PHOTOGRAPHIC LOG

Site Name: Former West Belconnen Fire Station	Site Location: Belconnen, ACT	Project No: 60316172

Plate No. 1	Date: 26 August 14

Direction Photo Taken:

North

Description:

Exposed tank pits

Plate No. 2	Date: 26 August 14

Direction Photo Taken:

South west

Description:

Stockpile location and skip bin in courtyard

AECOM

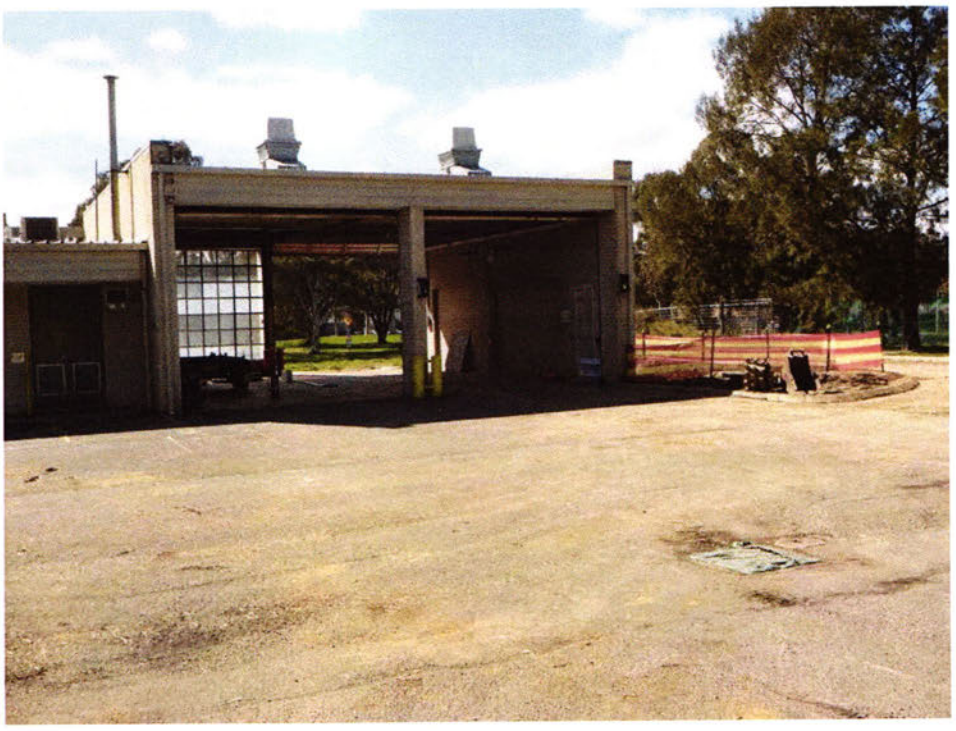
Plate No. 3	Date: 26 August 14
Direction Photo Taken: South east	
Description: Purged tanks	

Plate No. 4	Date: 27 August 14
Direction Photo Taken: North	
Description: Excavator assisting with taking validation samples	

AECOM

Plate No. 5	Date: 27 August 14
Direction Photo Taken: South west	
Description: Stockpiles	

Plate No. 6	Date: 27 August 14
Direction Photo Taken: North	
Description: Fire Station Building.	



AECOM

Plate No. 7	Date: 25 September 14
Direction Photo Taken: South	
Description: Backfill material imported to site.	

Plate No. 8	Date: 25 September 14
Direction Photo Taken: North	
Description: Compaction roller. Material compacted in 300 mm layers