CAULMERT LIMITED

Engineering, Environmental & Planning
Consultancy Services

Bryn Posteg Landfill Site

Potters Waste Management

Quarterly Monitoring Review

July – September 2017

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APPROVAL RECORD

Site: **Bryn Posteg Landfill**

Client: **Potters Waste Management**

Document Title: **Quarterly Monitoring Review, July – September 2017**

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DISCLAIMER

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2601. EMP.01 Environmental Monitoring Plan

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1.0 INTRODUCTION

1.1 Background

1.1.1 This report has been compiled in compliance with the Environmental Permit (EP) BU7766, Variation Notice Number EPR/BU7766IC/V004 for Bryn Posteg Landfill Site, which requires that the monitoring data collected at the site is reviewed quarterly. The data reviewed in this report was collected between the 1st of July and the 30th of September 2017.

1.1.2 This report records and reviews monitoring data for landfill gas, leachate, groundwater and surface water and discusses this data in relation to emission limits set in the latest EP variation. The data will also be included in an Annual Monitoring Review, as required by the EP. Third party information supplied by Potters Waste Management (Potters) has been used in good faith within this document. Caulmert Ltd has not attempted to verify the information.

1.2 Site Location and Surrounding Land-use

1.2.1 Bryn Posteg Landfill Site is located approximately 3 km south east of Llanidloes in Powys and is centered at National Grid Reference SN 971 822. The site is accessed via the B4518, Llanidloes to Tylwch road. The B4518 runs parallel with the western site boundary.

1.2.2 The landfill site was developed from the surface void of a former lead mine. Controlled landfilling has taken place since 1982.

1.2.3 Bryn Posteg is situated amongst predominantly agricultural land. There are four residential receptors located within approximately 325 m of the waste mass, these are:

- Valley View, 200 m to the north west;
- Rhoswen, 250 m to the east;
- Pant, 260 m to the east; and
- Penbryn Du, 325 m to the north.

2.0 LANDFILL GAS

2.1 Summary of Monitoring Results

2.1.1 Routine landfill gas (LFG) monitoring is required to be carried out on a weekly basis at 36 boreholes situated around the site perimeter. All boreholes have the prefix 'G' in the monitoring data. Concentrations of methane (CH_4) and carbon dioxide (CO_2) are measured alongside oxygen (O_2), relative pressure and atmospheric pressure on each visit.

2.1.2 Summary tables displaying all CH_4, CO_2 and O_2 monitoring data collected during this period are included in Appendix 1.

2.1.3 CH_4 concentrations exceeded the trigger level value of 1.0 %[1] on at least one occasion at 17 of the monitoring points (G01, G11, G12, G19, G20, G21, G22, G23, G24, G25, G27, G29, G30, G35, G38, G40 and G41). The maximum concentration was 76.2 %, detected at G20, on the 28th August 2017.

2.1.4 CO_2 concentrations exceeded the trigger level value of 1.5 % on at least one occasion at 29 monitoring locations – G01, G03, G07, G08, G10, G11, G12, G14, G15, G16, G19, G20, G21, G22, G23, G24, G25, G26, G27, G29, G30, G31, G35, G37, G38, G39, G40, G41 and G42. The maximum detected concentration was 36.3 % in G20 on the 15th August 2017.

2.2 Gas Collection Compound Data

2.2.1 Daily gas collection data is included in Appendix 1.

[1] All gas concentrations are expressed as % v/v

3.0 GROUNDWATER

3.1 Summary of Monitoring Results

3.1.1 Groundwater is sampled at locations W1 – W11. W10 and W11 are located on site, however W10 requires extending and W11 was dry for the duration of the review period. Samples were tested for a monthly suite of parameters and once, in September, for a larger quarterly suite. All monitoring data is included in Appendix 2.

3.1.2 Concentrations of all monthly parameters were below their respective trigger levels, except chloride at location W1 only. The maximum chloride concentration in W1 was 246 mg/l, which is similar to the maximum found in W1 during the last review period (257 mg/l).

3.1.3 None of the quarterly parameter trigger limits were exceeded at any of the eleven locations during this review period. Concentrations were similar to those detected in the previous quarter.

3.1.4 The parameters included in the quarterly suite that do not have trigger limits were considered to be within acceptable concentrations, with the majority of parameters remaining undetected.

3.2 Groundwater Levels

3.2.1 Groundwater levels were recorded monthly. The results indicated that groundwater elevation remained relatively stable over the review period.

4.0 LEACHATE

4.1 Summary of Monitoring Results

Monitoring of leachate sumps

4.1.1 Leachate levels are measured monthly in Sump 1, Sump 2, Sump 3, Sump 4, Sump 5, Sump 9c and Sump 9d. RLMP9A and RLMP9B are sealed to improve the gas management on site. The EP limit for the liquid level within the sumps is 1 m above base. All monitoring data can be found in Appendix 3.

4.1.2 Leachate levels remained below the 1 m trigger level in all locations throughout the review period.

4.1.3 Leachate samples were analysed in July, August and September for pH and ammoniacal nitrogen.

4.1.4 pH ranged from neutral to slightly alkaline throughout the review period, ranging between 6.9 and 8.4 while ammoniacal nitrogen ranged between 2 mg/l in Leachate 7 and 3630 mg/l in Leachate 2, with an average of 864 mg/l. This was lower than in the previous review period where average ammoniacal nitrate concentrations were 1241 mg/l and pH ranged between 5.2 and 8.5.

Treated leachate

4.1.5 Treated leachate (final discharge) was tested during July, August and September for pH, ammoniacal nitrogen, suspended solids, COD, Total Petroleum Hydrocarbons (C6 – C40), sulphate and dissolved methane.

4.1.6 Ammoniacal nitrogen, pH, sulphate and dissolved methane concentrations remained below their respective EP limit throughout the review period.

4.1.7 pH concentrations ranged between 6.0 in September and 7.9 in August.

4.1.8 COD concentrations were above the 1000 mg/l compliance limit on one occasion with a concentration of 2460 mg/l in August. Treated leachate was not discharged to sewer on this occasion.

4.1.9 TPH concentrations exceeded the compliance level of 'nil' throughout the review period with a maximum concentration of 3510 µg/l recorded in July. The average concentration across the review period was 2800 µg/l. This is a decrease from the previous review period where there was a maximum concentration of 6100 µg/ and an average of 3380 µg/.

4.1.10 Potters Waste Management also undertakes daily in-situ testing of treated leachate in order to assess its suitability for discharge.

4.1.11 A total of 7638 m^3 of treated leachate was discharged between the 1st of July and the 30th of September 2017.

4.1.12 No leachate was removed from site by tanker for offsite treatment during this quarter.

5.0 SURFACE WATER

5.1 Summary of Monitoring Results

5.1.1 The permit requires monthly monitoring at monitoring points P1, P2 and SW3.

5.1.2 SW3 is the discharge point for the proposed reed bed which has not yet been commissioned, hence monitoring at this point has not commenced.

5.1.3 Surface water samples were collected at SW1 (P1) and SW2 (P2) during the review period. A summary table displaying surface water monitoring data is enclosed in Appendix 4.

5.1.4 Ammoniacal nitrogen was slightly above the detection limit in SW1 during July at 0.08 mg/l but decreased to below the detection limit for the remainder of the review period. The ammoniacal nitrogen concentration in SW2 was also slightly above the detection limit for the whole review period with concentrations ranging from 0.08 mg/l to 0.11 mg/l in August and September respectively.

5.1.5 Suspended solids concentration remained below the 50 mg/l trigger level at SW1 throughout the review period. Suspended solid concentration in SW2 was slightly above the trigger level in July with a concentration of 51 mg/l.

5.1.6 pH was relatively neutral at a value of 6.8 in SW1 throughout the review period concentrations in SW2 ranged from 7.4 in September to 7.6 in July.

5.1.7 Electrical conductivity ranged between 111 µS/cm and 113 µS/cm in SW1, and between 415 µS/cm and 457 µS/cm in SW2.

5.1.8 Chloride concentrations ranged between 9.1 mg/l and 13.3 mg/l in SW1, and between 24.4 mg/l and 33.3 mg/l in SW2.

5.1.9 BOD concentration was low with concentrations ranging from <1 mg/l to 3 mg/l in SW1, concentrations in SW2 ranged from <1 mg/l to 7 mg/l.

5.1.10 No petroleum hydrocarbons (PAHs) were detected in SW1 in throughout the review period. PAHs were detected in SW2 in July and September with concentrations of total petroleum hydrocarbon (EH >C6-C40) at 23 µg/l and 11 µg/l respectively.

6.0 DUST

6.1 Monitoring Results

6.1.1 Dust monitoring was undertaken between the 29th[th] of August to the 29[th] of September 2017 at **locations BP1, BP2 and BP3. The dust monitoring results, as supplied by the subcontracted laboratory, are summarised in Table 2 below. A Certificate of Analysis is enclosed in Appendix 5**

Period	29/08/2017 – 29/09/2017		
Location	Mass of Undissolved Solids mg	Result mg/m^2/day	Trigger Level mg/m^2/day
BP 1	5.2	<19	200
BP 2	21.5	17	200
BP 3	35.6	28	200

6.1.2 Dust concentrations remained below the trigger level at all locations during this review period.

7.0 SUMMARY

7.1 Landfill gas

7.1.1 The CH_4 trigger level was exceeded at 12 locations and the CO_2 trigger level was exceeded at 30 locations on a number of occasions during the monitoring period.

7.2 Groundwater

7.2.1 Groundwater levels remained relatively stable over the review period.

7.2.2 The concentrations of all parameters were below their respective trigger levels, except chloride in W1. Chloride concentrations have been detected above the EP compliance limit at this location since 2005. The trends in concentrations of ammoniacal nitrogen, chloride and sodium were compared in the correspondence referenced 3033-CAU-XX-XX-CO-V-9101-A0 C1 and submitted to NRW on the 24th April 2017. It is considered unlikely that the chloride concentrations at W1 are the result of contamination from landfill leachate. This location is potentially affected by road salt application. It is recommended that the EP compliance limit for chloride at W1 be removed as it is not reflective of any impact the landfill may have on the groundwater at this location.

7.3 Leachate

7.3.1 The reported leachate levels were below the trigger limit of 1.0 m above base in all locations throughout the review period. Overall, the monitoring data tentatively suggests a steadily decrease over this review period. The majority of the locations show an improvement in leachate extraction across the Site.

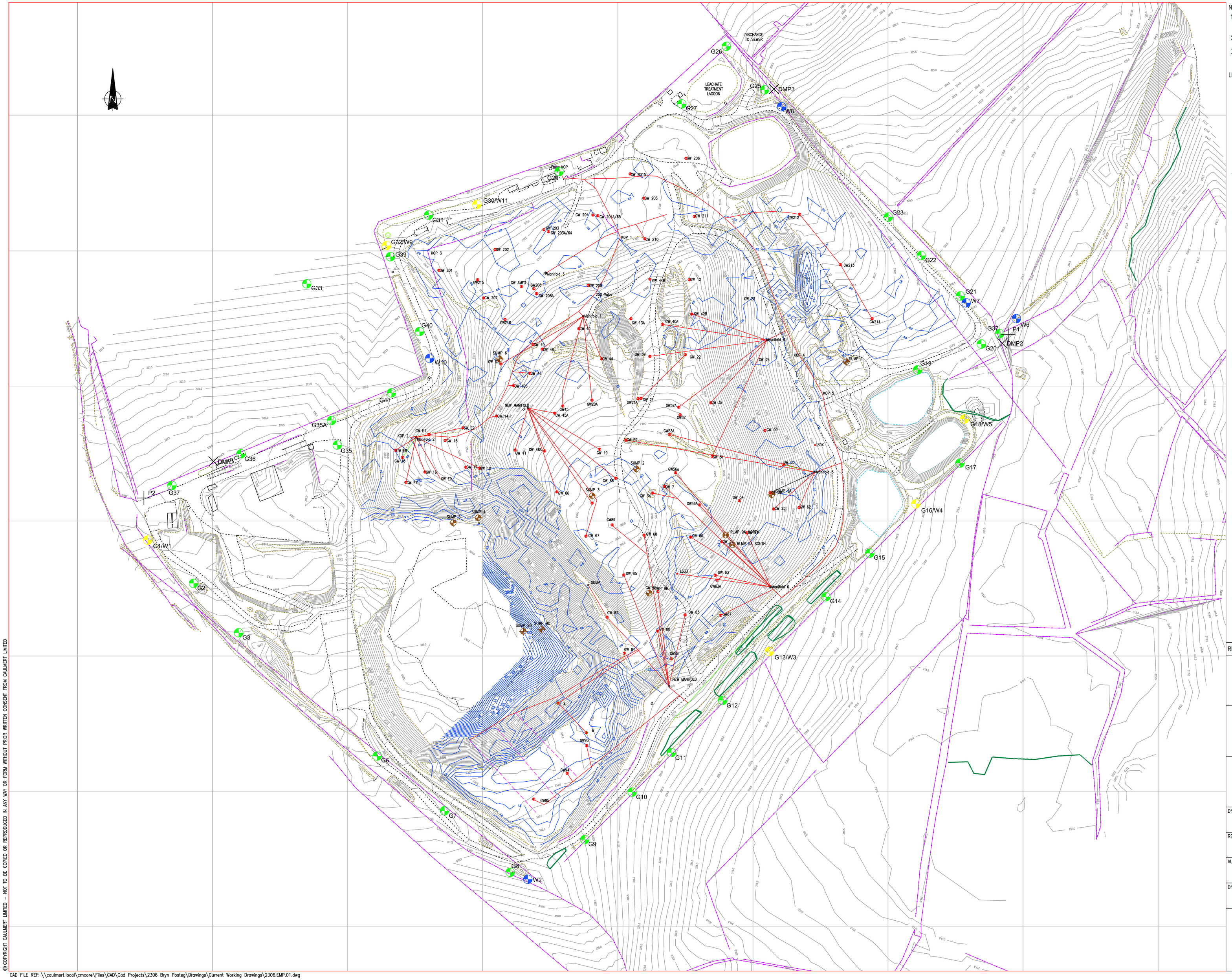
7.3.2 In the final discharge (treated leachate) quality data, exceedances of the compliance limits in suspended solids, COD and TPH were recorded.

7.4 Surface Water

7.4.1 Surface water samples were collected at SW1 and SW2 during the review period. Trigger level exceedances were recorded only for suspended solids in SW2.

7.5 Dust

7.5.1 Dust concentrations remained below the 200 mg/m_2/day trigger level at all locations during this review period.



NOTES

1. SURVEY INFORMATION PROVIDED BY POTTERS WASTE MANAGEMENT. SURVEY DATED 12.01.2016
2. ALL LEVELS IN METRES ABOVE ORDNANCE DATUM.
3. DO NOT SCALE FROM THIS DRAWING

LEGEND

- IN WASTE GAS WELL
- GAS MONITORING BOREHOLE
- GROUNDWATER MONITORING BOREHOLE
- GAS MONITORING BOREHOLE WITH GROUNDWATER MONITORING BOREHOLE
- EXISTING LEACHATE COLLECTION POINT
- IN WASTE GAS WELL
- APPROXIMATE POSITION OF SURFACE WATER MONITORING POINT
- APPROXIMATE POSITION OF DUST MONITORING POINT

SURFACE WATER MONITORING POINTS

P1 NANT-Y-BRADNANT

P2 AFON DULAS

DUST MONITORING POINTS

DMP1 VALLEY VIEW

DMP2 RHOSWEN AND PANT

DMP3 PENBRYNDU

REV	MODIFICATIONS	BY	RE	AP	DATE

POTTERS WASTE MANAGEMENT

BRYN POSTEG LANDFILL SITE

ENVIRONMENTAL MONITORING PLAN

DRAWN BY	DATE	
RWG	12.02.2016	
REVIEWED BY	SCALE @ A1	
JMC	1:1250	
AUTHORISED BY	ISSUE	REVISION
JMC	P	P1

DRAWING NUMBER

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CAD FILE REF: \\caulmert.local\cmcore\Files\CAD\Cad Projects\2306 Bryn Posteg\Drawings\Current Working Drawings\2306.EMP.01.dwg

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APPENDIX 1 – LANDFILL GAS

Table 1: Landfill Gas Monitoring Data (exceedances highlighted yellow)

Borehole	Date	Methane	Carbon Dioxide	Oxygen
		% v/v	% v/v	% v/v
		Trigger - 1.0	Trigger - 1.5	N/A
G01	04/07/2017	0.0	0.9	19.1
	11/07/2017	0.1	0.0	20.4
	18/07/2017	0.2	0.2	19.6
	15/08/2017	0.1	0.0	20.2
	21/08/2017	0.1	0.2	20.2
	28/08/2017	1.4	2.3	15.7
	04/09/2017	0.1	0.9	18.6
	09/09/2017	0.1	0.8	18.3
	22/09/2017	0.2	0.5	19.3
G02	04/07/2017	0.0	0.0	20.7
	11/07/2017	0.0	0.0	20.4
	18/07/2017	0.1	0.0	20.4
	15/08/2017	0.1	0.0	20.4
	21/08/2017	0.0	0.0	20.7
	28/08/2017	0.1	0.0	20.2
	04/09/2017	0.1	0.0	20.6
	09/09/2017	0.1	0.0	20.5
	22/09/2017	0.2	0.0	20.4
G03	04/07/2017	0.3	1.7	18.7
	11/07/2017	0.0	1.3	18.8
	18/07/2017	0.1	2.6	16.8
	15/08/2017	0.1	2.9	16.4
	21/08/2017	0.0	2.4	17.5
	28/08/2017	0.1	1.3	18.4
	04/09/2017	0.1	2.2	17.6
	09/09/2017	0.1	3.2	15.4
	22/09/2017	0.2	1.8	17.5
G07	04/07/2017	0.0	0.2	20.6
	11/07/2017	0.0	3.5	17.9
	18/07/2017	0.1	0.8	19.9
	15/08/2017	0.1	0.8	19.9
	21/08/2017	0.0	2.0	19.2
	28/08/2017	0.1	2.2	18.8
	04/09/2017	0.1	2.3	19.1
	09/09/2017	0.1	2.0	19.4
	22/09/2017	0.2	1.5	19.8

APPENDIX 1 – LANDFILL GAS

Borehole	Date	Methane	Carbon Dioxide	Oxygen
		% v/v	% v/v	% v/v
		Trigger - 1.0	Trigger - 1.5	N/A
G08	04/07/2017	0.1	0.0	20.7
	04/07/2017	0.1	0.0	20.7
	11/07/2017	0.1	0.0	20.6
	18/07/2017	0.1	0.0	20.7
	15/08/2017	0.1	0.0	20.7
	21/08/2017	0.0	0.0	20.8
	28/08/2017	0.1	0.0	20.5
	04/09/2017	0.1	0.0	20.6
	09/09/2017	0.1	0.0	20.9
	22/09/2017	0.2	0.0	20.7
G09	04/07/2017	0.0	0.0	20.8
	11/07/2017	0.0	0.0	20.6
	18/07/2017	0.1	0.0	20.8
	15/08/2017	0.1	0.0	20.8
	21/08/2017	0.0	0.0	20.9
	28/08/2017	0.1	0.0	20.5
	04/09/2017	0.1	0.0	20.7
	09/09/2017	0.1	0.0	21.0
	22/09/2017	0.2	0.0	20.7
G10	04/07/2017	0.3	5.0	16.4
	11/07/2017	0.2	4.1	17.3
	11/07/2017	0.0	2.0	18.3
	18/07/2017	0.5	6.5	14.7
	15/08/2017	0.2	7.9	13.5
	21/08/2017	0.1	5.7	16.2
	28/08/2017	0.1	4.6	16.8
	04/09/2017	0.3	5.9	16.1
	09/09/2017	0.4	8.9	13.0
	22/09/2017	0.3	7.8	14.4
G11	04/07/2017	0.0	1.5	19.3
	11/07/2017	45.2	3.5	7.7
	18/07/2017	0.1	1.9	18.6
	15/08/2017	0.1	1.5	19.7
	21/08/2017	0.0	1.8	19.5
	28/08/2017	0.1	0.2	20.4
	04/09/2017	0.1	1.1	20.0
	09/09/2017	0.1	1.6	20.0
	22/09/2017	0.2	1.8	19.6

APPENDIX 1 – LANDFILL GAS

Borehole	Date	Methane	Carbon Dioxide	Oxygen
		% v/v	% v/v	% v/v
		Trigger - 1.0	Trigger - 1.5	N/A
G12	04/07/2017	47.0	3.2	7.9
	11/07/2017	33.4	2.7	11.2
	18/07/2017	48.4	3.5	6.7
	15/08/2017	51.6	3.8	6.0
	21/08/2017	52.5	3.7	6.6
	28/08/2017	48.9	3.2	8.0
	04/09/2017	66.6	3.9	3.7
	09/09/2017	52.3	3.2	6.7
	22/09/2017	47.7	3.1	8.4
G13	04/07/2017	0.0	0.0	20.8
	11/07/2017	0.1	0.0	20.7
	18/07/2017	0.1	0.0	20.9
	15/08/2017	0.1	0.0	20.8
	21/08/2017	0.0	0.3	20.8
	28/08/2017	0.1	0.0	20.7
	04/09/2017	0.1	0.1	20.7
	09/09/2017	0.1	0.0	21.0
	22/09/2017	0.2	0.1	20.9
G14	04/07/2017	0.0	2.7	17.9
	11/07/2017	0.0	2.5	18.1
	18/07/2017	0.1	2.6	18.2
	15/08/2017	0.1	3.1	17.4
	21/08/2017	0.0	3.4	17.1
	28/08/2017	0.1	3.0	16.5
	04/09/2017	0.1	3.0	16.7
	09/09/2017	0.1	3.6	16.0
	22/09/2017	0.2	3.2	17.8
G15	04/07/2017	0.0	0.6	19.6
	11/07/2017	0.0	0.9	19.2
	18/07/2017	0.1	1.5	18.8
	15/08/2017	0.1	1.6	18.9
	21/08/2017	0.0	1.5	19.1
	28/08/2017	0.1	2.0	18.4
	04/09/2017	0.1	2.1	18.2
	09/09/2017	0.1	1.9	18.2
	22/09/2017	0.2	1.9	18.4

APPENDIX 1 – LANDFILL GAS

Borehole	Date	Methane	Carbon Dioxide	Oxygen
		% v/v	% v/v	% v/v
		Trigger - 1.0	Trigger - 1.5	N/A
G16	04/07/2017	0.0	0.0	20.8
	11/07/2017	0.1	0.0	20.6
	18/07/2017	0.1	0.0	21.0
	15/08/2017	0.1	0.0	20.9
	21/08/2017	0.0	0.0	21.0
	28/08/2017	0.1	0.0	20.7
	04/09/2017	0.1	0.0	20.9
	09/09/2017	0.1	0.0	21.1
	22/09/2017	0.2	0.0	21.1
G17	04/07/2017	0.0	0.0	20.8
	11/07/2017	0.0	0.0	20.6
	18/07/2017	0.1	0.0	21.0
	15/08/2017	0.1	0.0	20.9
	21/08/2017	0.0	0.0	21.0
	28/08/2017	0.1	0.0	20.6
	04/09/2017	0.1	0.1	20.8
	09/09/2017	0.1	0.2	21.0
	22/09/2017	0.2	0.0	21.1
G18	04/07/2017	0.0	0.0	20.8
	11/07/2017	0.0	0.0	20.6
	18/07/2017	0.1	0.0	21.0
	15/08/2017	0.1	0.0	21.0
	21/08/2017	0.0	0.0	21.0
	28/08/2017	0.1	0.0	20.7
	04/09/2017	0.1	0.0	20.9
	09/09/2017	0.1	0.0	21.1
	22/09/2017	0.2	0.1	21.2
G19	04/07/2017	66.3	35.3	0.2
	11/07/2017	63.8	34.4	1.0
	18/07/2017	67.1	36.4	0.2
	15/08/2017	68.1	37.0	0.2
	21/08/2017	64.8	35.4	0.8
	28/08/2017	71.9	31.4	0.2
	04/09/2017	71.7	32.4	0.2
	09/09/2017	70.4	33.7	0.2
	22/09/2017	75.1	30.3	0.2

APPENDIX 1 – LANDFILL GAS

Borehole	Date	Methane	Carbon Dioxide	Oxygen
		% v/v	% v/v	% v/v
		Trigger - 1.0	Trigger - 1.5	N/A
G20	04/07/2017	65.0	36.9	0.1
	11/07/2017	65.1	36.5	0.2
	18/07/2017	67.6	36.0	0.1
	15/08/2017	66.6	39.2	0.1
	21/08/2017	65.2	39.1	0.1
	28/08/2017	76.2	25.6	0.5
	04/09/2017	72.1	32.7	0.1
	09/09/2017	70.1	34.5	0.1
	22/09/2017	62.1	38.5	0.2
G21	04/07/2017	3.3	2.3	19.6
	11/07/2017	29.4	12.7	9.5
	18/07/2017	63.8	25.4	0.1
	15/08/2017	67.5	20.4	0.1
	21/08/2017	54.9	20.2	2.2
	28/08/2017	69.2	23.9	0.8
	04/09/2017	65.2	14.2	0.1
	09/09/2017	57.6	11.8	0.1
	22/09/2017	60.7	15.3	0.1
G22	04/07/2017	67.5	24.4	1.4
	11/07/2017	70.4	24.8	0.9
	18/07/2017	70.8	25.3	0.1
	15/08/2017	73.3	27.6	0.1
	21/08/2017	72.9	27.2	0.1
	28/08/2017	72.7	27.6	0.9
	04/09/2017	72.5	28.3	0.1
	09/09/2017	71.9	28.3	0.1
	22/09/2017	72.9	31.3	0.1
G23	04/07/2017	0.9	12.8	3.3
	11/07/2017	4.1	11.0	0.1
	18/07/2017	13.1	9.3	0.1
	15/08/2017	24.5	11.3	0.1
	21/08/2017	29.2	12.1	0.1
	28/08/2017	31.0	9.6	0.1
	04/09/2017	26.4	11.3	0.1
	09/09/2017	12.9	12.6	0.9
	22/09/2017	25.3	14.0	0.1

APPENDIX 1 – LANDFILL GAS

Borehole	Date	Methane	Carbon Dioxide	Oxygen
		% v/v	% v/v	% v/v
		Trigger - 1.0	Trigger - 1.5	N/A
G24	04/07/2017	52.0	24.4	5.1
	11/07/2017	39.8	21.9	7.8
	18/07/2017	28.6	14.5	10.0
	15/08/2017	31.1	9.7	9.1
	21/08/2017	41.6	14.8	7.0
	28/08/2017	37.3	16.6	8.7
	04/09/2017	18.9	8.9	13.0
	09/09/2017	10.6	5.5	15.5
	22/09/2017	6.2	4.3	16.5
G25	04/07/2017	47.3	12.7	0.2
	11/07/2017	50.2	11.0	0.2
	18/07/2017	51.9	10.4	0.2
	15/08/2017	61.2	12.4	0.2
	21/08/2017	62.7	10.1	0.7
	28/08/2017	58.1	19.8	0.6
	04/09/2017	49.7	21.4	2.3
	09/09/2017	44.8	20.5	2.1
	22/09/2017	50.7	21.8	0.5
	22/09/2017	50.5	21.9	2.2
G26	04/07/2017	0.0	0.8	20.4
	11/07/2017	0.1	2.8	18.6
	18/07/2017	0.1	1.6	20.0
	15/08/2017	0.1	1.7	20.0
	21/08/2017	0.1	1.9	19.7
	28/08/2017	0.1	2.3	18.8
	04/09/2017	0.1	3.2	16.9
	09/09/2017	0.1	3.8	16.3
	22/09/2017	0.2	2.1	19.9
G27	04/07/2017	0.0	0.4	20.6
	11/07/2017	0.1	0.5	20.4
	18/07/2017	0.1	0.5	20.7
	15/08/2017	0.1	0.6	20.7
	21/08/2017	0.1	2.7	19.9
	28/08/2017	0.1	0.5	20.3
	04/09/2017	0.1	2.1	19.9
	09/09/2017	0.1	3.0	19.3
	22/09/2017	0.2	2.8	20.0

APPENDIX 1 – LANDFILL GAS

Borehole	Date	Methane	Carbon Dioxide	Oxygen
		% v/v	% v/v	% v/v
		Trigger - 1.0	Trigger - 1.5	N/A
G29	04/07/2017	0.2	3.2	13.4
	11/07/2017	0.8	4.8	3.5
	18/07/2017	2.0	4.3	8.7
	15/08/2017	6.1	7.3	3.3
	21/08/2017	7.0	8.1	1.8
	28/08/2017	7.1	5.5	7.9
	04/09/2017	4.3	4.1	12.3
	09/09/2017	1.9	2.7	16.6
	22/09/2017	3.5	4.1	12.2
G30	04/07/2017	13.0	3.2	13.2
	11/07/2017	9.3	1.9	16.4
	18/07/2017	4.1	2.1	17.5
	15/08/2017	1.2	1.3	19.2
	21/08/2017	6.4	3.7	14.2
	28/08/2017	12.5	2.5	14.3
	04/09/2017	0.3	0.1	20.7
	09/09/2017	6.5	3.3	13.5
	22/09/2017	19.0	3.1	12.9
G31	04/07/2017	0.0	4.2	16.9
	11/07/2017	0.1	4.8	14.8
	18/07/2017	0.1	2.9	19.0
	15/08/2017	0.1	5.2	16.6
	21/08/2017	0.1	6.2	15.2
	28/08/2017	0.1	9.8	5.3
	04/09/2017	0.1	7.4	12.0
	09/09/2017	0.1	4.7	17.0
	22/09/2017	0.2	4.7	17.7
G32	04/07/2017	0.0	0.0	21.0
	11/07/2017	0.1	0.0	20.8
	18/07/2017	0.1	0.0	20.8
	15/08/2017	0.1	0.3	20.7
	21/08/2017	0.0	0.5	20.6
	28/08/2017	0.1	0.5	20.0
	04/09/2017	0.1	0.8	20.3
	09/09/2017	0.1	0.5	20.0
	22/09/2017	0.2	0.3	20.9

APPENDIX 1 – LANDFILL GAS

Borehole	Date	Methane	Carbon Dioxide	Oxygen
		% v/v	% v/v	% v/v
		Trigger - 1.0	Trigger - 1.5	N/A
G35	04/07/2017	72.5	23.4	0.7
	11/07/2017	64.6	25.4	1.6
	18/07/2017	71.7	31.0	0.1
	15/08/2017	73.0	29.3	0.1
	21/08/2017	73.8	27.7	0.2
	28/08/2017	66.7	37.0	0.1
	04/09/2017	67.5	37.1	0.1
	09/09/2017	64.3	35.8	0.3
	22/09/2017	31.5	23.3	6.7
G36	04/07/2017	0.0	0.2	20.9
	11/07/2017	0.1	0.3	20.5
	18/07/2017	0.1	0.3	20.5
	15/08/2017	0.1	0.3	20.5
	21/08/2017	0.1	0.4	20.4
	28/08/2017	0.1	0.3	20.2
	04/09/2017	0.1	0.6	20.2
	09/09/2017	0.1	0.5	20.1
	22/09/2017	0.2	0.5	20.7
G37	04/07/2017	0.0	0.2	21.0
	11/07/2017	0.1	0.2	20.6
	18/07/2017	0.1	0.4	20.5
	15/08/2017	0.1	3.5	15.6
	20/08/2017	0.1	3.6	17.4
	28/08/2017	0.1	2.7	19.2
	04/09/2017	0.1	1.7	20.1
	09/09/2017	0.1	1.5	20.1
	22/09/2017	0.2	1.4	20.6
G38	04/07/2017	30.3	27.1	2.9
	11/07/2017	18.1	16.4	8.0
	18/07/2017	47.7	32.2	0.3
	15/08/2017	48.7	35.3	1.4
	21/08/2017	38.5	32.7	1.3
	28/08/2017	64.1	35.5	0.1
	04/09/2017	57.9	33.5	0.1
	09/09/2017	63.0	33.4	0.1
	09/09/2017	62.9	33.4	0.2
	22/09/2017	55.8	34.6	0.1

APPENDIX 1 – LANDFILL GAS

Borehole	Date	Methane	Carbon Dioxide	Oxygen
		% v/v	% v/v	% v/v
		Trigger - 1.0	Trigger - 1.5	N/A
G39	04/07/2017	0.0	0.0	20.9
	11/07/2017	0.0	0.4	20.5
	18/07/2017	0.1	2.2	19.5
	15/08/2017	0.1	2.7	19.2
	21/08/2017	0.0	0.8	20.3
	28/08/2017	0.1	0.1	20.4
	04/09/2017	0.1	1.6	19.7
	09/09/2017	0.1	2.4	19.1
	22/09/2017	0.2	1.9	20.0
G40	04/07/2017	0.6	0.3	20.8
	11/07/2017	0.1	0.0	21.0
	18/07/2017	7.7	16.1	4.2
	15/08/2017	2.9	10.1	9.1
	21/08/2017	0.1	0.0	20.9
	28/08/2017	46.7	32.4	0.8
	04/09/2017	33.6	30.5	0.6
	09/09/2017	9.5	17.2	3.9
	22/09/2017	13.7	20.5	5.1
G41	04/07/2017	0.7	6.3	12.3
	11/07/2017	0.1	6.0	12.0
	18/07/2017	0.9	6.7	2.6
	15/08/2017	23.9	17.2	1.1
	21/08/2017	14.0	13.9	5.9
	28/08/2017	1.9	5.9	1.7
	04/09/2017	0.6	6.3	2.2
	09/09/2017	24.0	15.2	1.0
	22/09/2017	9.8	17.7	3.2
G42	04/07/2017	0.1	1.3	20.2
	11/07/2017	0.1	0.6	20.6
	18/07/2017	0.1	0.3	20.7
	15/08/2017	0.1	3.4	18.1
	21/08/2017	0.1	1.3	20.2
	28/08/2017	0.1	0.6	20.3
	04/09/2017	0.1	0.5	20.3
	09/09/2017	0.1	0.0	20.8
	22/09/2017	0.2	0.0	21.2

APPENDIX 1 – LANDFILL GAS

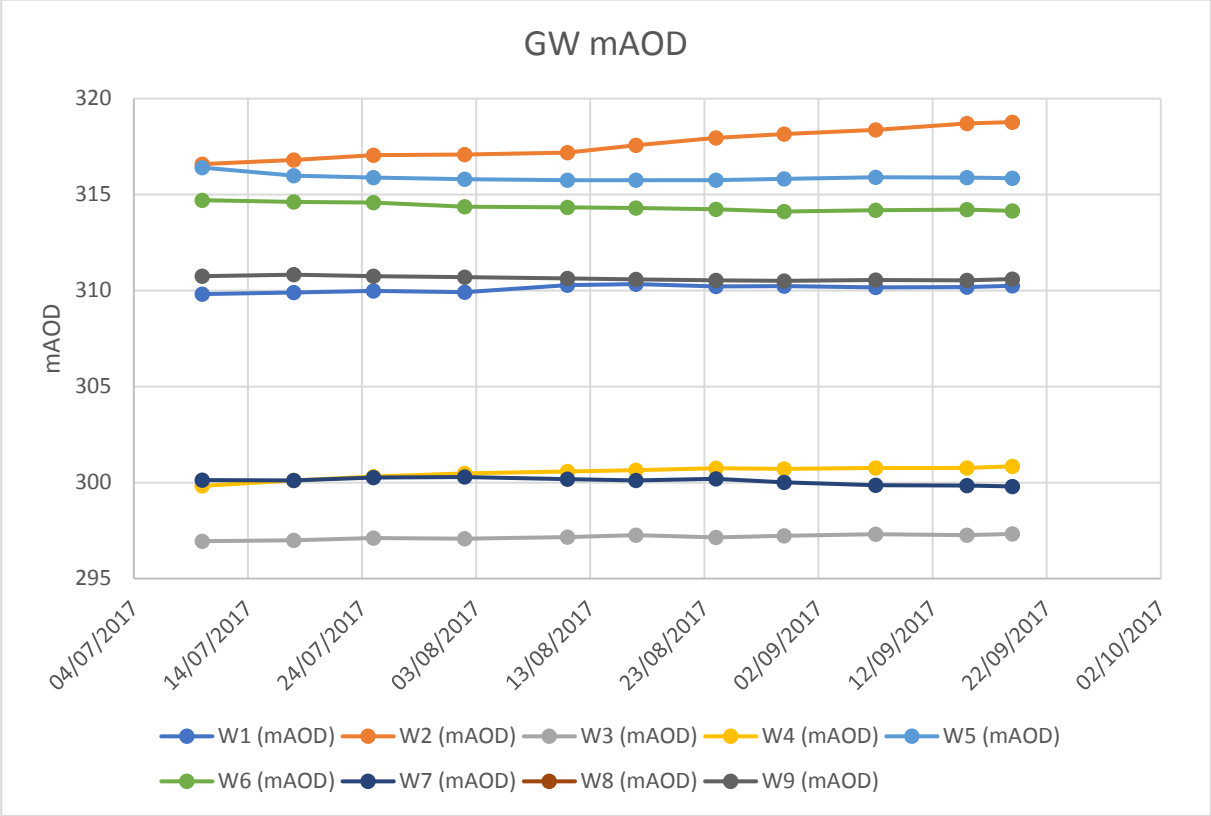
Table 2: Daily gas collection monitoring data

Date	HRS RUN	TEMP	CUBIC MTS	CH4=	O2=
03-Jul-17	30433	275	740	49.4%	1.39%
04-Jul-17	30410	256	710	50.6%	1.67%
05-Jul-17	30385	336	740	50.2%	1.80%
06-Jul-17	30361	375	730	50.8%	1.67%
07-Jul-17	30336	235	550	56.0%	0.66%
10-Jul-17	30265	288	520	58.0%	0.37%
11-Jul-17	30242	246	520	57.8%	0.42%
12-Jul-17	30223	244	0	45.9%	2.52%
17-Jul-17	30103	258	550	54.5%	0.97%
18-Jul-17	30079	317	550	55.8%	0.91%
19-Jul-17	30055	284	720	55.8%	0.94%
20-Jul-17	30031	345	560	55.1%	0.92%
21-Jul-17	30007	229	550	55.5%	0.88%
24-Jul-17	29935	331	610	54.7%	0.58%
25-Jul-17	29911	266	630	53.2%	0.60%
26-Jul-17	29887	263	550	56.5%	0.52%
27-Jul-17	29863	276	550	56.0%	0.52%
28-Jul-17	29832	217	650	48.7%	2.05%
31-Jul-17	29767	303	530	57.0%	0.83%
01-Aug-17	29743	300	520	55.9%	0.89%
02-Aug-17	29719	134	520	56.9%	0.72%
03-Aug-17	29695	603	108	52.4%	1.39%
04-Aug-17	29671	413	760	50.5%	1.50%
07-Aug-17	29599	424	730	52.3%	1.15%
08-Aug-17	29575	943	350	52.6%	1.22%
09-Aug-17	29550	252	570	54.4%	1.11%
10-Aug-17	29572	255	580	53.6%	1.15%
11-Aug-17	29503	227	570	53.7%	1.67%
14-Aug-17	29431	160	560	54.2%	1.71%
15-Aug-17	29407	291	540	56.7%	0.90%
16-Aug-17	29383	151	550	55.9%	0.84%
17-Aug-17	29359	326	520	58.8%	0.25%
18-Aug-17	29335	354	550	56.8%	0.50%
21-Aug-17	29263	1039	390	53.1%	0.99%
22-Aug-17	29239	421	720	53.4%	1.07%
23-Aug-17	29215	411	710	53.4%	1.12%
24-Aug-17	29191	393	720	51.8%	1.56%
25-Aug-17	29167	405	730	51.6%	1.47%
29-Aug-17	29071	403	740	52.2%	1.53%
30-Aug-17	29047	179	110	45.3%	2.44%
31-Aug-17	29023	276	510	53.9%	1.24%
01-Sep-17	28999	267	570	54.6%	1.40%
04-Sep-17	28927	311	0	61.9%	0.00%
05-Sep-17	28903	286	540	57.0%	0.97%
06-Sep-17	28879	251	530	56.2%	1.19%
07-Sep-17	28855	322	520	56.6%	0.99%
08-Sep-17	28831	280	520	62.3%	0.00%
11-Sep-17	28759	406	700	55.6%	0.53%
12-Sep-17	18	334	630	54.8%	0.77%
13-Sep-17	42	336	640	53.5%	0.89%
14-Sep-17	302	207	620	5182.0%	1.07%
15-Sep-17	37409	269	520	57.1%	0.23%
18-Sep-17	37481	255	570	53.6%	0.54%
19-Sep-17	37505	168	112	45.5%	1.84%
20-Sep-17	37529	264	420	59.0%	0.00%
21-Sep-17	37553	532	610	53.0%	0.84%
22-Sep-17	37577	278	640	54.5%	0.97%
25-Sep-17	37649	244	640	53.8%	0.84%
26-Sep-17	37673	264	640	54.2%	0.84%
27-Sep-17	37697	270	650	53.6%	1.11%

APPENDIX 2 – GROUNDWATER

Table 1: Weekly level data (measured as metres above ordinance datum)

Date	W1 (mAOD)	W2 (mAOD)	W3 (mAOD)	W4 (mAOD)	W5 (mAOD)	W6 (mAOD)	W7 (mAOD)	W9 (mAOD)
10/07/2017	309.82	316.59	296.95	299.83	316.41	314.71	300.13	310.76
18/07/2017	309.9	316.8	296.99	300.12	315.98	314.62	300.12	310.83
25/07/2017	309.99	317.06	297.11	300.32	315.88	314.58	300.26	310.75
02/08/2017	309.91	317.09	297.08	300.48	315.81	314.37	300.29	310.71
11/08/2017	310.29	317.19	297.16	300.58	315.75	314.34	300.18	310.64
17/08/2017	310.34	317.58	297.26	300.64	315.75	314.31	300.12	310.58
24/08/2017	310.22	317.95	297.14	300.75	315.76	314.23	300.19	310.54
30/08/2017	310.23	318.16	297.23	300.71	315.82	314.12	300.02	310.51
07/09/2017	310.17	318.38	297.31	300.77	315.9	314.18	299.86	310.55
15/09/2017	310.19	318.7	297.26	300.76	315.89	314.22	299.85	310.54
19/09/2017	310.25	318.78	297.33	300.85	315.85	314.15	299.8	310.6



APPENDIX 2 – GROUNDWATER

Table 2: Groundwater Monthly monitoring data

Parameter	Trigger Limit	Date	W 1	W 2	W 3	W 4	W 5	W 6	W 7	W 8	W 9	W 10	W 11
Ammoniacal Nitrogen (mg/l)	2	31/07/2017	<0.41	<0.41	<0.41	1.37	<0.41	<0.41	<0.41	0.77	<0.41	-	-
		29/08/2017	<0.41	<0.41	<0.41	2.49	<0.41	<0.41	<0.41	<0.41	<0.41	-	-
		29/09/2017	<0.41	<0.41	<0.41	1.93	<0.41	<0.41	<0.41	<0.41	<0.41	-	-
Chloride (mg/l)	69	31/07/2017	168.0	32.2	<3.7	22.4	20.2	4.7	11.8	17.1	13.7	-	-
		29/08/2017	246.0	30.4	10.0	23.8	19.5	11.9	13.6	30.7	14.6	24.8	71.9
		29/09/2017	107.0	31.2	11.4	27.2	24.3	4.2	14.1	16.5	12.8	-	-
Electrical Conductivity (µS/cm)	-	31/07/2017	845	178	319	323	194	98	316	386	156	142.0	483.0
		29/08/2017	671	182	105	341	213	79	324	323	170	-	-
		29/09/2017	461	177	305	357	230	59	326	290	164	-	-
Cyanide (mg/l)	-	31/07/2017	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
		29/08/2017	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	-	-
		29/09/2017	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	-	-
pH	-	31/07/2017	5.9	7.5	7.1	6.4	5.5	5.7	7.0	5.9	6.0	6.4	6.4
		29/08/2017	6.1	7.3	5.9	6.6	5.7	5.7	7.1	6.2	6.1	-	-
		29/09/2017	6.2	6.9	7.1	6.7	5.9	5.9	7.3	6.9	6.4	-	-
Sulphate (mg/l)	-	31/07/2017	28.8	<4.4	<4.4	30.2	40.5	<4.4	26.2	19.9	25.8	12.4	31.1
		29/08/2017	12.1	<4.4	22.3	12.4	41.5	<4.4	26.0	23.5	24.8	-	-
		29/09/2017	5.3	<4.4	<4.4	14.1	43.6	<4.4	31.7	21.5	21.2	-	-

APPENDIX 2 – GROUNDWATER

Table 3: Groundwater Quarterly monitoring data

Reference	Unit	Trigger	W1	W2	W3	W4	W5	W6	W7	W8	W9
Ammoniacal Nitrogen	**mg/l**	**2**	<0.41	<0.41	<0.41	1.93	<0.41	<0.41	<0.41	<0.41	<0.41
Cadmium , Total as Cd	**mg/l**	**0.0056**	0.0022	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006
Nickel , Total as Ni	**mg/l**	**0.12**	0.016	<0.003	0.008	0.008	0.020	0.004	<0.003	0.004	<0.003
Toluene	**µg/l**	**4**	<0.10	0.41	0.28	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Xylenes	**µg/l**	**3**	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Zinc, Total as Zn	**mg/l**	**0.85**	0.08	<0.018	0.05	0.03	0.106	0.07	<0.018	<0.018	0.03
Ethyl Benzene	**µg/l**	**1**	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Mecoprop	**µg/l**	**0.1**	<0.40	<0.04	<0.04	0.06	0.11	<0.04	<0.04	<0.04	<0.04
2,4 - D	**µg/l**	**0.1**	<0.50	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05

APPENDIX 2 – GROUNDWATER

Table 4: Groundwater Quarterly monitoring data (no EP trigger levels)

Reference	Unit	W1	W2	W3	W4	W5	W6	W7	W8	W9
Acenaphthene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Alkalinity as CaCO3	mg/l	57.6	42.4	162	136	24	9.6	125	110	33.6
Anthracene	ug/l	<0.41	<0.41	<0.41	1.93	<0.41	<0.41	<0.41	<0.41	<0.41
Antimony Ultra Low Total as Sb	mg/l	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012
Arsenic, Ultra Low Total as As	mg/l	0.042	<0.0010	0.059	0.013	0.0014	0.0034	0.006	0.0019	<0.0010
Benzene	ug/l	<0.10	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Benzo (a) anthracene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (a) pyrene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (b) fluoranthene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (g,h,i) perylene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (k) fluoranthene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Bicarbonate Alkalinity	mg/l	57.6	42.4	162	136	24	9.6	125	110	33.6
Calcium , Total as Ca	mg/l	13.3	9.74	39.2	36.6	12.8	9.41	39.7	36	11.6
Chloride as Cl	mg/l	6.21	10.4	42.3	43.7	17.2	4.4	40.6	39.4	13.4
Chromium , Total as Cr	mg/l	107	31.2	11.4	27.2	24.3	4.2	14.1	16.5	12.8
Chrysene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Conductivity- Electrical 20C	uS/cm	461	177	305	357	230	58.8	326	290	164
Copper, Total as Cu	mg/l	0.059	<0.009	0.036	<0.009	0.037	0.01	<0.009	<0.009	<0.009
Cyanide, Total as CN	mg/l	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Dibenz (a,h) anthracene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Dissolved Oxygen, Fixed	mg/l	<0.5	0.6	4	2.6	<0.5	6.2	2.2	0.6	4.1
Ethyl Benzene	ug/l	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S	N/S
Fluoranthene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Fluorene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno (1,2,3) cd pyrene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Iron , Total as Fe	mg/l	10.9	0.35	10	7.22	0.44	0.63	2.04	0.74	<0.23

APPENDIX 2 – GROUNDWATER

Reference	Unit	W1	W2	W3	W4	W5	W6	W7	W8	W9
Lead , Total as Pb	mg/l	0.025	<0.006	0.278	<0.006	<0.006	<0.006	0.092	<0.006	<0.006
m&p Xylene	ug/l	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Naphthalene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Nitrate as N	mg/l	<0.7	<0.7	<0.7	<0.7	1.2	1.2	<0.7	<0.7	<0.7
o-Xylene	ug/l	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
PAH, Total	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
pH	pH units	6.2	6.9	7.1	6.7	5.9	5.9	7.3	6.9	6.4
Phenanthrene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Phenols Mono (Phenol Index)	mg/l	<0.10	<0.10	<0.10	<0.10	0.1	<0.10	<0.10	<0.10	<0.10
Potassium , Total as K	mg/l	1.06	2.04	1.92	2.07	2.25	0.34	2.49	1.11	0.79
Pyrene	ug/l	<0.10	<0.01	<0.02	<0.04	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium Ultra Low Total as Se	mg/l	0.0036	<0.0008	0.0014	<0.0008	0.0011	<0.0008	<0.0008	<0.0008	<0.0008
Silver , Total as Ag	mg/l	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007

APPENDIX 3 – LEACHATE

Table 1: Monthly leachate level data

Location	Sump 1			Sump 2			Sump 3			Sump 4		
	Cover Level (mAOD)		318.86	Cover Level (mAOD)		350	Cover Level (mAOD)		348	Cover Level (mAOD)		325.8
	Base (mAOD)		313.4	Base (mAOD)		310.9	Base (mAOD)		311.5	Base (mAOD)		310.75
Date	Dip (mBGL)	Level (mAOD)	Leachate Head (m)	Dip (mBGL)	Level (mAOD)	Leachate Head (m)	Dip (mBGL)	Level (mAOD)	Leachate Head (m)	Dip (mBGL)	Level (mAOD)	Leachate Head (m)
03/07/2017	4.54	314.32	0.92	38.7	311.3	0.4	35.6	312.4	0.9	14.6	311.2	0.45
03/08/2017	4.56	314.3	0.9	38.7	311.3	0.4	35.7	312.3	0.8	14.7	311.1	0.35
29/09/2017	4.5	314.36	0.96	38.6	311.4	0.5	35.8	312.2	0.7	14.8	311	0.25
EP Limit			1			1			1			1

Location	Sump 5			Sump 9C			Sump 9D		
	Cover Level (mAOD)		323.5	Cover Level (mAOD)		323	Cover Level (mAOD)		323
	Base (mAOD)		310.75	Base (mAOD)		307	Base (mAOD)		307
Date	Dip (mBGL)	Level (mAOD)	Leachate Head (m)	Dip (mBGL)	Level (mAOD)	Leachate Head (m)	Dip (mBGL)	Level (mAOD)	Leachate Head (m)
27/04/2017	11.8	311.7	0.95	15.3	307.7	0.7	15.3	307.7	0.7
11/05/2017	11.8	311.7	0.95	15.25	307.75	0.75	15.35	307.65	0.65
06/06/2017	11.85	311.65	0.9	15.2	307.8	0.8	15.4	307.6	0.6
EP Limit			1			1			1

APPENDIX 3 – LEACHATE

Table 2: Monthly leachate monitoring data

LOCATION	DATE	pH	Ammoniacal Nitrogen as N
		pH units	mg/l
Leachate 1	31/07/2017	7.2	305
	29/08/2017	7.3	235
	29/09/2017	7.4	83
Leachate 2	31/07/2017	8.3	2940
	29/08/2017	8.4	3690
	29/09/2017	7.9	747
Leachate 4	31/07/2017	7.6	1190
	29/08/2017	7.5	1000
	29/09/2017	7.8	961
Leachate 5	31/07/2017	7.7	1220
	29/08/2017	7.5	894
	29/09/2017	7.7	908
Leachate 6	31/07/2017	6.9	87
	29/08/2017	7.7	133
	29/09/2017	-	-
Leachate 7	31/07/2017	-	-
	29/08/2017	7.7	138
	29/09/2017	-	-
Sludge return	31/07/2017	-	-
	29/08/2017	7.9	148
	29/09/2017	7.4	2

APPENDIX 3 – LEACHATE

Table 3: Final discharge monthly monitoring data (EP exceedances highlighted)

LOCATION	DATE	pH	Ammoniacal Nitrogen as N	Suspended Solids	COD (1 hr settled)	Total TPH (EH>C6 - C40)	Sulphate as SO4	Dissolved Methane
		pH units	mg/l	mg/l	mg/l	µg/l	mg/l	mg/l
Trigger Levels		6 - 10	150	500	1000	nil	1000	N/A
Treated Leachate	31/07/2017	6.2	84	548	962	3510	92	<0.010
	29/08/2017	7.9	148	7650	2460	-	-	-
	29/09/2017	6.0	2	130	513	2090	140	<0.010

APPENDIX 4 – SURFACE WATER

Table 1: Monthly monitoring data

LOCATION	DATE	pH	Conductivity-Electrical 20C	Ammoniacal Nitrogen as N (LL)	Chloride as Cl	Total Suspended Solids	BOD + ATU (5 day)	EH >C6 - C40	EH >C6 - C8	EH >C8 - C10	EH >C16 - C24	EH >C24 - C40	EH >C10 - C16
		pH	µS/cm	mg/l	mg/l	mg/l	mg/l	µg/l	µg/l	µg/l	µg/l	µg/l	µg/l
Trigger Level		6 - 9	N/A	0.25	N/A	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A
SW 1	31/07/2017	6.8	113	0.08	13.3	30	1	<40	<10	<40	<40	<40	<40
	29/08/2017	6.8	111	<0.06	9.1	2	<1	<20	<10	<20	<20	<20	<20
	29/09/2017	6.8	111	<0.06	9.1	2	3	<10	<10	<10	<10	<10	<10
SW 2	31/07/2017	7.6	457	0.1	33.3	51	7	23	<20	<20	<20	23	<20
	29/08/2017	7.5	442	0.08	26.5	33	4	<20	<20	<20	<20	<20	<20
	29/09/2017	7.4	415	0.11	24.4	14	<1	11	<10	<10	<10	11	<10

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