

27 NOV 2015



Your ref: DP3733BK

Our ref: 14739/3505/CBH/RHT/VKR/AREA 2 GAS

25th November 2015

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Attn: Mr David Willey

Dear David

RE: DP3733BK - DOCKSWAY DISPOSAL SITE. LATEST AREA 2 GAS MONITORING RESULTS, ROUNDS 137 TO 139.

We write to provide the latest quarterly gas monitoring report for Area 2 of Docksway Disposal Site. The report includes comment on the Area 2 gas monitoring results collected to date. Gas monitoring is required on a monthly basis at Area 2 of Docksway Disposal Site and the results of the monitoring are reported to the EA on a quarterly basis.

We enclose with this report three data sheets showing the results collected between July and September 2015 (i.e. Rounds 137 to 139).

Gas monitoring wells are installed at approximately 100m intervals around the Area 2 landfill perimeter. Thirteen wells were monitored during Rounds 137 and 139.

Trigger Levels

Trigger Levels for all the Area 2 wells are shown on the attached data tables.

Results Summary

The methane and carbon dioxide concentrations recorded at each of the gas monitoring wells between July and September 2015 are summarised on the attached data sheets.

The concentrations of carbon dioxide did not exceed the well specific trigger levels at any of the Area 2 wells monitored during rounds 137 to 139. The concentrations of methane measured, generally did not exceed the well specific trigger levels in Area 2 between July and September 2015 with the following exceptions;

- GP05/15 measured a methane concentration of 1.2% (trigger level = 1%) in July 2015
- GP05/20 measured methane concentrations of 17.4% and 2.5% in July and August respectively.

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The attached data sheets summarise the methane and carbon dioxide concentrations recorded during the last three rounds of monitoring.

Concluding Remarks

In general it is considered that the results obtained from the three rounds of gas monitoring are within the range of results obtained since commencement of monitoring.

NCC will continue to undertake Area 2 perimeter gas monitoring on a monthly basis and PBA will continue to provide factual and interpretative reports to the EA on a quarterly basis.

Yours sincerely

Kate Riley
For and on behalf of
PETER BRETT ASSOCIATES LLP

Cc. Gwyn Jones – NCC (Docksway Disposal Site)

Enc. Gas Monitoring Data Tables
Figure A – Monitoring Point Location Plan

Weather Conditions: Not recorded

Date Sampled:

30th July 2015

Borehole	Barometric Pressure (mBars)	Differential Pressure (mBars)	Methane (% Volume)	Carbon Dioxide (% Volume)	Oxygen (% Volume)	Gas flow - Initial (m3/hr)
GP06_24	1020	58.88	89	5.0	0.3	8.80
GP06_25	1020	-0.60	0.8	0.2	20.3	0.50
GP03_06	1021	-0.29	0	1.8	18.7	-4.20
GP05_14	1021	-0.21	0.1	0.1	20.6	-0.30
GP05_15	1021	-0.40	0	2.8	17.4	-0.20
GP05_16	1020	-0.17	0	1.2	19.9	-0.20
GP05_17	1020	-0.55	0	9.0	10.6	-0.30
GP09_18	1021	-1.34	0.1	2.4	18.0	-14.90
GP05_20	1021	-0.24	0.1	5.5	0.9	-9.80
GP05_21	1021	-0.26	0	2.4	13.5	-2.20
GP05_22	1021	0.41	0	0.4	20.8	-11.30
GP12_23	1021	-0.21	0.0	0.7	19.4	-0.20
GP06_8a	1019	-0.24	0.0	0.4	20.8	-0.30

Equipment Used: GASDATA LMSxi and GF60 flow meter

- Key:
- LEL Lower Explosive Limit
 - xx Methane Concentration above Well Specific Trigger Level
 - xx Carbon Dioxide Concentration above Well Specific Trigger Level
 - N/D Not determined
 - <<<<< Gas Flow outside limit of LMSX Instrument

Triggers

	GP03_06	GP06_08A	GP05_14	GP05_15	GP05_16	GP05_17	GP09_18
Methane (%)	1	1	1	1	1	1	1
Carbon Dioxide (%)	6.1	2.4	2.2	10.4	7.7	13.5	19

	GP05_20	GP05_21	GP05_22	GP12_23	GP06_24	GP06_25
Methane (%)	1.5	1.5	1	1	Not Required	Not Required
Carbon Dioxide (%)	Not Required	Not Required	8.3	5.5	Not Required	Not Required

Weather Conditions: Not recorded

Date Sampled: 14th August 2015

Borehole	Barometric Pressure (mBars)	Differential Pressure (mBars)	Methane (% Volume)	Carbon Dioxide (% Volume)	Oxygen (% Volume)	Gas flow - Initial (m3/hr)
GP06_24	1016	61.69	86.5	4.8	0.6	7.60
GP06_25	1016	0.06	20.5	2.0	14.1	0.19
GP03_06	1015	-1.96	0	0.9	19.9	-2.01
GP05_14	1016	0.08	0.18	0.1	20.9	0.06
GP05_15	1015	-0.01	0	4.1	14.9	0.07
GP05_16	1015	-0.03	0	3.7	17.1	0.04
GP05_17	1016	-0.09	0	5.4	14.5	0.07
GP09_18	1016	-0.17	0	0.9	20.3	-2.17
GP05_20	1015	-1.40	2.5	1.5	17.4	-5.31
GP05_21	1014	0.20	0	1.7	14.4	-2.00
GP05_22	1014	5.30	0	1.0	15.6	-5.74
GP12_23	1014	-0.06	0.0	0.4	20.2	0.01
GP06_8a	1015	-0.14	0.0	0.6	20.2	-0.04

Equipment Used: GASDATA LMSxi and GF60 flow meter

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 - N/D Not determined
 - <<<<< Gas Flow outside limit of LMSX Instrument

Triggers

	GP03_06	GP06_08A	GP05_14	GP05_15	GP05_16	GP05_17	GP09_18
Methane (%)	1	1	1	1	1	1	1
Carbon Dioxide (%)	6.1	2.4	2.2	10.4	7.7	13.5	19
Methane (%)	GP05_20 1.5	GP05_21 1.5	GP05_22 1	GP12_23 1	GP06_24 Not Required	GP06_25 Not Required	
Carbon Dioxide (%)	Not Required	Not Required	8.3	5.5	Not Required	Not Required	Not Required

Weather Conditions:

Date Sampled: *Sept 2015*

Borehole	Barometric Pressure (mBars)	Differential Pressure (mBars)	Methane (% Volume)	Carbon Dioxide (% Volume)	Oxygen (% Volume)	Gas flow - Initial (m3/hr)
GP06_24	987	61.27	88.4	5.4	0.4	11.60
GP06_25	989	0.20	2.7	0.4	20.1	0.00
GP03_06	989	0.10	0.2	2	18.5	-7.20
GP05_14	989	0.10	0.0	0.2	20.8	0.30
GP05_15	989	0.20	0.0	7.5	13.2	0.20
GP05_16	988	0.20	0.0	2.3	18.0	0.10
GP05_17	988	0.10	0.0	11.7	6.4	0.00
GP09_18	988	0.40	0.4	1.0	19.9	-2.80
GP05_20	988	0.00	0.0	2.8	18.5	-8.10
GP05_21	988	0.10	0.0	2.8	11.5	-4.10
GP05_22	997	0.00	0.0	1.5	18.7	0.00
GP12_23	n/a	-0.10	0.0	0.6	20.0	-0.30
GP06_8a	988	0.10	0.0	1.0	19.4	0.00

Equipment Used: GASDATA LMSxi and GF60 flow meter

- Key:
- LEL Lower Explosive Limit
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 - N/D Not determined
 - <<<<< Gas Flow outside limit of LMSX Instrument

Triggers

Parameter	GP03_06	GP06_08A	GP05_14	GP05_15	GP05_16	GP05_17	GP09_18
Methane (%)	1	1	1	1	1	1	1
Carbon Dioxide (%)	6.1	2.4	2.2	10.4	7.7	13.5	19
Methane (%)	GP05_20 1.5	GP05_21 1.5	GP05_22 1	GP12_23 1	GP06_24 Not Required	GP06_25 Not Required	
Carbon Dioxide (%)	Not Required	Not Required	8.3	5.5	Not Required	Not Required	

