

Site Visit Report

The site visit process is a sample on a particular day of an installation's compliance with some of its licence conditions. Where non-compliance against a particular condition has not been reported, this should not be construed to mean that there is full compliance with that condition of the licence.

Instructions and actions arising from the visit shall be addressed, or where applicable noted, by the licensee in order to ensure compliance, to improve the environmental performance of the installation and to provide clarification on certain issues.

The licensee shall take the actions specified to close out the non-compliances and observations raised in this Site Visit Report.

The licensee may also be requested to provide a response to the Environmental Protection Agency (hereafter referred to as the Agency) in relation to the site visit report findings.

Licensee	
Name of Installation	Drehid Waste Management Facility
Licensee	Bord na Mona Public Limited Company
Licence Register No.	W0201-03
CRO Number	297717
Site Address	Killinagh Upper, Naas, Kildare, W91 RC82
Site Visit Reference No.	SV23707

Report Detail	
Issue Date	22/08/2022
Prepared By	Annette Jordan

Site Visit Detail			
Date Of Inspection	27/07/2022		
Time In	10:35	Time Out	14:05
EPA Inspector(s)	Eddy Minet		
Additional Visitors	Isabel Kerins		
Licensee Personnel and Role	N/A		

> Summary

The Agency carried out this site visit as part of the Agency's emissions monitoring programme. The monitoring report is attached.

The licensee was found to be in compliance with its Licence on the day of the site visit.

> Site Areas Inspected

Emissions monitoring points and/or sampling locations as specified in attached report.

> Documents Inspected

N/A

EPA Laboratory Test Report

EPA Regional Inspectorate Dublin
McCumiskey House
Richview
Clonskeagh Road
Dublin 14

Final

Report To: OEE Wexford Office of Environmental Enforcement PO Box 3000 Johnstown Castle County Wexford	Project: EPA-22-01499 Report Number : 6841 Entity: W0201-03 Location/Site: Bord no Mona Site Visit Number: SV23707
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Sample Number: 22-13117	Sampled Date: 27/07/2022 10:45:00
Sampling Point: W0201-GW6	Sampled By: E. Minet, I. Kerins
Description: Bord no Mona Public Ltd Company (Drehid) - GW6	Replicate / Split: Split
Sample Condition: Normal	Grab/Composite: Grab
	Received in Lab: 27/07/2022

Parameter	Result	Units	Limits	Measurement Uncertainty	Analysis Date	Lab	Method
Dissolved Oxygen	2.6	mg/l				DB	
Dissolved Oxygen	28	% saturation				DB	
pH (Field)	7.4	pH units		0.23pH units		DB	EPA_W27 *
Temperature	18.1	°C				DB	
Ammonia	5.5	mg/l N		22%	28/07/2022	DB	EPA_W07 *
Chloride	13.0	mg/l		16%	28/07/2022	DB	EPA_W07 *
Conductivity @25°C	484	µS/cm		15%	27/07/2022	DB	EPA_W08 *
o-Phosphate	0.18	mg/l P		21%	28/07/2022	DB	EPA_W07 *
Sulphate	<2	mg/l		11%	28/07/2022	DB	EPA_W12 *
Total Oxidised Nitrogen	<0.2	mg/l N		25%	28/07/2022	DB	EPA_W07 *
Mercury (Dissolved)	0.13	µg/l		26%	28/07/2022	DB	EPA_W18 *
Aluminium (Dissolved)	3.0	µg/l		17%	03/08/2022	DB	EPA_W05 *
Antimony (Dissolved)	1.2	µg/l		23%	03/08/2022	DB	EPA_W05 *
Arsenic (Dissolved)	190	µg/l		13%	03/08/2022	DB	EPA_W05 *
Barium (Dissolved)	140	µg/l		10%	03/08/2022	DB	EPA_W05 *
Beryllium (Dissolved)	<1	µg/l		14%	03/08/2022	DB	EPA_W05 *
Boron (Dissolved)	11	µg/l		14%	03/08/2022	DB	EPA_W05 *
Cadmium (Dissolved)	0.033	µg/l		10%	03/08/2022	DB	EPA_W05 *
Calcium (Dissolved)	66	mg/l		14%	03/08/2022	DB	EPA_W05 *

Chromium (Dissolved)	<1	µg/l	13%	03/08/2022	DB	EPA_W05 *
Cobalt (Dissolved)	8.2	µg/l	8%	03/08/2022	DB	EPA_W05 *
Copper (Dissolved)	<1	µg/l	8%	03/08/2022	DB	EPA_W05 *
Iron (Dissolved)	5400	µg/l	15%	03/08/2022	DB	EPA_W05 *
Lead (Dissolved)	<0.2	µg/l	10%	03/08/2022	DB	EPA_W05 *
Magnesium (Dissolved)	9.7	mg/l	15%	03/08/2022	DB	EPA_W05 *
Manganese (Dissolved)	39	µg/l	20%	03/08/2022	DB	EPA_W05 *
Molybdenum (Dissolved)	21	µg/l	8%	03/08/2022	DB	EPA_W05 *
Nickel (Dissolved)	21	µg/l	9%	03/08/2022	DB	EPA_W05 *
Potassium (Dissolved)	1.5	mg/l	18%	03/08/2022	DB	EPA_W05 *
Selenium (Dissolved)	<1	µg/l	14%	03/08/2022	DB	EPA_W05 *
Sodium (Dissolved)	9.6	mg/l	14%	03/08/2022	DB	EPA_W05 *
Strontium (Dissolved)	340	µg/l	9%	03/08/2022	DB	EPA_W05 *
Thallium (Dissolved)	1.2	µg/l	8%	03/08/2022	DB	EPA_W05 *
Uranium (Dissolved)	<0.2	µg/l	9%	03/08/2022	DB	EPA_W05 *
Vanadium (Dissolved)	<1	µg/l	8%	03/08/2022	DB	EPA_W05 *
Zinc (Dissolved)	25	µg/l	11%	03/08/2022	DB	EPA_W05 *

Comment: Sample collected from Tap.

Sample Number: 22-13118
Sampling Point: W0201-GW1S
Description: Bord na Mona Public Ltd Company (Drehid)
- GW1S
Sample Condition: Normal

Sampled Date: 27/07/2022 11:40:00
Sampled By: E. Minet, I. Kerins
Replicate / Split: Split
Grab/Composite: Grab
Received in Lab: 27/07/2022

Parameter	Result	Units	Limits	Measurement Uncertainty	Analysis Date	Lab	Method
Dissolved Oxygen	4.9	mg/l				DB	
Dissolved Oxygen	46	% saturation				DB	
pH (Field)	6.6	pH units		0.23pH units		DB	EPA_W27 *
Temperature	12.4	°C				DB	
Ammonia	6.3	mg/l N		22%	28/07/2022	DB	EPA_W07 *
Chloride	13.5	mg/l		16%	28/07/2022	DB	EPA_W07 *
Conductivity @25°C	1153	µS/cm		15%	27/07/2022	DB	EPA_W08 *
o-Phosphate	0.018	mg/l P		21%	28/07/2022	DB	EPA_W07 *
Sulphate	<2	mg/l		11%	28/07/2022	DB	EPA_W12 *
Total Oxidised Nitrogen	<0.2	mg/l N		25%	28/07/2022	DB	EPA_W07 *
Mercury (Dissolved)	<0.02	µg/l		26%	28/07/2022	DB	EPA_W18 *
Aluminium (Dissolved)	10	µg/l		17%	03/08/2022	DB	EPA_W05 *
Antimony (Dissolved)	<1	µg/l		23%	03/08/2022	DB	EPA_W05 *
Arsenic (Dissolved)	6.7	µg/l		13%	03/08/2022	DB	EPA_W05 *
Barium (Dissolved)	360	µg/l		10%	03/08/2022	DB	EPA_W05 *
Beryllium (Dissolved)	<1	µg/l		14%	03/08/2022	DB	EPA_W05 *
Boron (Dissolved)	14	µg/l		14%	03/08/2022	DB	EPA_W05 *
Cadmium (Dissolved)	<0.02	µg/l		10%	03/08/2022	DB	EPA_W05 *
Calcium (Dissolved)	190	mg/l		14%	03/08/2022	DB	EPA_W05 *
Chromium (Dissolved)	<1	µg/l		13%	03/08/2022	DB	EPA_W05 *
Cobalt (Dissolved)	<1	µg/l		8%	03/08/2022	DB	EPA_W05 *
Copper (Dissolved)	<1	µg/l		8%	03/08/2022	DB	EPA_W05 *
Iron (Dissolved)	15000	µg/l		15%	03/08/2022	DB	EPA_W05 *
Lead (Dissolved)	<0.2	µg/l		10%	03/08/2022	DB	EPA_W05 *
Magnesium (Dissolved)	26	mg/l		15%	03/08/2022	DB	EPA_W05 *
Manganese (Dissolved)	700	µg/l		20%	03/08/2022	DB	EPA_W05 *

Molybdenum (Dissolved)	1.6	µg/l	8%	03/08/2022	DB	EPA_W05 *
Nickel (Dissolved)	1.1	µg/l	9%	03/08/2022	DB	EPA_W05 *
Potassium (Dissolved)	1.3	mg/l	18%	03/08/2022	DB	EPA_W05 *
Selenium (Dissolved)	<1	µg/l	14%	03/08/2022	DB	EPA_W05 *
Sodium (Dissolved)	11	mg/l	14%	03/08/2022	DB	EPA_W05 *
Strontium (Dissolved)	360	µg/l	9%	03/08/2022	DB	EPA_W05 *
Thallium (Dissolved)	<0.2	µg/l	8%	03/08/2022	DB	EPA_W05 *
Uranium (Dissolved)	<0.2	µg/l	9%	03/08/2022	DB	EPA_W05 *
Vanadium (Dissolved)	2.6	µg/l	8%	03/08/2022	DB	EPA_W05 *
Zinc (Dissolved)	1.6	µg/l	11%	03/08/2022	DB	EPA_W05 *

Comment:

Sample Number: 22-13119
Sampling Point: W0201-SW6
Description: Bord na Mona Public Ltd Company (Drehid)
- SW6
Sample Condition: Normal

Sampled Date: 27/07/2022 12:05:00
Sampled By: E. Minet, I. Kerins
Replicate / Split: Split
Grab/Composite: Grab
Received in Lab: 27/07/2022

Parameter	Result	Units	Limits	Measurement Uncertainty	Analysis Date	Lab	Method
Dissolved Oxygen	6.8	mg/l				DB	
Dissolved Oxygen	71	% saturation				DB	
pH (Field)	7.5	pH units		0.23pH units		DB	EPA_W27 *
Temperature	17.2	°C				DB	
Ammonia	<0.02	mg/l N		22%	28/07/2022	DB	EPA_W07 *
BOD	<1	mg/l O2		40%	28/07/2022	DB	EPA_W04 *
Chloride	29.4	mg/l		16%	28/07/2022	DB	EPA_W07 *
COD	27.0	mg/l O2		11%	28/07/2022	DB	EPA_W01 *
Conductivity @25°C	550	µS/cm		15%	27/07/2022	DB	EPA_W08 *
o-Phosphate	<0.01	mg/l P		21%	28/07/2022	DB	EPA_W07 *
Sulphate	70	mg/l		11%	28/07/2022	DB	EPA_W12 *
Suspended Solids	<4	mg/l		19%	28/07/2022	DB	EPA_W03 *
Total Oxidised Nitrogen	0.39	mg/l N		25%	28/07/2022	DB	EPA_W07 *

Comment:

Sample Number: 22-13120
Sampling Point: W0201-GW9
Description: Bord na Mona Public Ltd Company (Drehid)
- GW9
Sample Condition: Normal

Sampled Date: 27/07/2022 12:45:00
Sampled By: E. Minet, I. Kerins
Replicate / Split: Split
Grab/Composite: Grab
Received in Lab: 27/07/2022

Parameter	Result	Units	Limits	Measurement Uncertainty	Analysis Date	Lab	Method
Dissolved Oxygen	3.6	mg/l				DB	
Dissolved Oxygen	34	% saturation				DB	
pH (Field)	6.9	pH units		0.23pH units		DB	EPA_W27 *
Temperature	12.7	°C				DB	
Ammonia	2.8	mg/l N		22%	28/07/2022	DB	EPA_W07 *
Chloride	31.9	mg/l		16%	28/07/2022	DB	EPA_W07 *
Conductivity @25°C	740	µS/cm		15%	27/07/2022	DB	EPA_W08 *
o-Phosphate	0.14	mg/l P		21%	28/07/2022	DB	EPA_W07 *
Sulphate	30	mg/l		11%	28/07/2022	DB	EPA_W12 *
Total Oxidised Nitrogen	<0.2	mg/l N		25%	28/07/2022	DB	EPA_W07 *
Mercury (Dissolved)	<0.02	µg/l		26%	28/07/2022	DB	EPA_W18 *
Aluminium (Dissolved)	25	µg/l		17%	03/08/2022	DB	EPA_W05 *
Antimony (Dissolved)	<1	µg/l		23%	03/08/2022	DB	EPA_W05 *
Arsenic (Dissolved)	8.0	µg/l		13%	03/08/2022	DB	EPA_W05 *
Barium (Dissolved)	150	µg/l		10%	03/08/2022	DB	EPA_W05 *
Beryllium (Dissolved)	<1	µg/l		14%	03/08/2022	DB	EPA_W05 *
Boron (Dissolved)	10	µg/l		14%	03/08/2022	DB	EPA_W05 *
Cadmium (Dissolved)	<0.02	µg/l		10%	03/08/2022	DB	EPA_W05 *
Calcium (Dissolved)	120	mg/l		14%	03/08/2022	DB	EPA_W05 *
Chromium (Dissolved)	<1	µg/l		13%	03/08/2022	DB	EPA_W05 *
Cobalt (Dissolved)	<1	µg/l		8%	03/08/2022	DB	EPA_W05 *
Copper (Dissolved)	<1	µg/l		8%	03/08/2022	DB	EPA_W05 *
Iron (Dissolved)	2900	µg/l		15%	03/08/2022	DB	EPA_W05 *
Lead (Dissolved)	<0.2	µg/l		10%	03/08/2022	DB	EPA_W05 *
Magnesium (Dissolved)	7.3	mg/l		15%	03/08/2022	DB	EPA_W05 *
Manganese (Dissolved)	300	µg/l		20%	03/08/2022	DB	EPA_W05 *

Molybdenum (Dissolved)	1.8	µg/l	8%	03/08/2022	DB	EPA_W05 *
Nickel (Dissolved)	1.3	µg/l	9%	03/08/2022	DB	EPA_W05 *
Potassium (Dissolved)	1.0	mg/l	18%	03/08/2022	DB	EPA_W05 *
Selenium (Dissolved)	<1	µg/l	14%	03/08/2022	DB	EPA_W05 *
Sodium (Dissolved)	19	mg/l	14%	03/08/2022	DB	EPA_W05 *
Strontium (Dissolved)	260	µg/l	9%	03/08/2022	DB	EPA_W05 *
Thallium (Dissolved)	<0.2	µg/l	8%	03/08/2022	DB	EPA_W05 *
Uranium (Dissolved)	<0.2	µg/l	9%	03/08/2022	DB	EPA_W05 *
Vanadium (Dissolved)	4.7	µg/l	8%	03/08/2022	DB	EPA_W05 *
Zinc (Dissolved)	1.9	µg/l	11%	03/08/2022	DB	EPA_W05 *

Comment:

Sample Number: 22-13121
Sampling Point: W0201-GW10
Description: Bord na Mona Public Ltd Company (Drehid)
- GW10
Sample Condition: Normal

Sampled Date: 27/07/2022 13:20:00
Sampled By: E. Minet, I. Kerins
Replicate / Split: Split
Grab/Composite: Grab
Received in Lab: 27/07/2022

Parameter	Result	Units	Limits	Measurement Uncertainty	Analysis Date	Lab	Method
Dissolved Oxygen	3.3	mg/l				DB	
Dissolved Oxygen	31	% saturation				DB	
pH (Field)	6.7	pH units		0.23pH units		DB	EPA_W27 *
Temperature	12.7	°C				DB	
Ammonia	3.9	mg/l N		22%	28/07/2022	DB	EPA_W07 *
Chloride	10.7	mg/l		16%	28/07/2022	DB	EPA_W07 *
Conductivity @25°C	657	µS/cm		15%	27/07/2022	DB	EPA_W08 *
o-Phosphate	0.12	mg/l P		21%	28/07/2022	DB	EPA_W07 *
Sulphate	<2	mg/l		11%	28/07/2022	DB	EPA_W12 *
Total Oxidised Nitrogen	<0.2	mg/l N		25%	28/07/2022	DB	EPA_W07 *
Mercury (Dissolved)	<0.02	µg/l		26%	28/07/2022	DB	EPA_W18 *
Aluminium (Dissolved)	33	µg/l		17%	03/08/2022	DB	EPA_W05 *
Antimony (Dissolved)	<1	µg/l		23%	03/08/2022	DB	EPA_W05 *
Arsenic (Dissolved)	11	µg/l		13%	03/08/2022	DB	EPA_W05 *
Barium (Dissolved)	110	µg/l		10%	03/08/2022	DB	EPA_W05 *
Beryllium (Dissolved)	<1	µg/l		14%	03/08/2022	DB	EPA_W05 *
Boron (Dissolved)	<10	µg/l		14%	03/08/2022	DB	EPA_W05 *
Cadmium (Dissolved)	<0.02	µg/l		10%	03/08/2022	DB	EPA_W05 *
Calcium (Dissolved)	110	mg/l		14%	03/08/2022	DB	EPA_W05 *
Chromium (Dissolved)	<1	µg/l		13%	03/08/2022	DB	EPA_W05 *
Cobalt (Dissolved)	<1	µg/l		8%	03/08/2022	DB	EPA_W05 *
Copper (Dissolved)	<1	µg/l		8%	03/08/2022	DB	EPA_W05 *
Iron (Dissolved)	5000	µg/l		15%	03/08/2022	DB	EPA_W05 *
Lead (Dissolved)	0.44	µg/l		10%	03/08/2022	DB	EPA_W05 *
Magnesium (Dissolved)	9.7	mg/l		15%	03/08/2022	DB	EPA_W05 *
Manganese (Dissolved)	200	µg/l		20%	03/08/2022	DB	EPA_W05 *

Molybdenum (Dissolved)	<1	µg/l	8%	03/08/2022	DB	EPA_W05 *
Nickel (Dissolved)	3.4	µg/l	9%	03/08/2022	DB	EPA_W05 *
Potassium (Dissolved)	0.64	mg/l	18%	03/08/2022	DB	EPA_W05 *
Selenium (Dissolved)	<1	µg/l	14%	03/08/2022	DB	EPA_W05 *
Sodium (Dissolved)	6.3	mg/l	14%	03/08/2022	DB	EPA_W05 *
Strontium (Dissolved)	170	µg/l	9%	03/08/2022	DB	EPA_W05 *
Thallium (Dissolved)	<0.2	µg/l	8%	03/08/2022	DB	EPA_W05 *
Uranium (Dissolved)	<0.2	µg/l	9%	03/08/2022	DB	EPA_W05 *
Vanadium (Dissolved)	10	µg/l	8%	03/08/2022	DB	EPA_W05 *
Zinc (Dissolved)	3.5	µg/l	11%	03/08/2022	DB	EPA_W05 *

Comment:

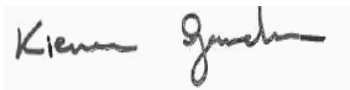
Sample Number: 22-13122
Sampling Point: W0201-SW4
Description: Bord na Mona Public Ltd Company (Drehid)
 - SW4
Sample Condition: Normal

Sampled Date: 27/07/2022 13:55:00
Sampled By: E. Minet, I. Kerins
Replicate / Split: Split
Grab/Composite: Grab
Received in Lab: 27/07/2022

Parameter	Result	Units	Limits	Measurement Uncertainty	Analysis Date	Lab	Method
Dissolved Oxygen	7.7	mg/l				DB	
Dissolved Oxygen	77	% saturation				DB	
pH (Field)	7.7	pH units		0.23pH units		DB	EPA_W27 *
Temperature	14.2	°C				DB	
Ammonia	0.034	mg/l N		22%	28/07/2022	DB	EPA_W07 *
BOD	<1	mg/l O2		40%	28/07/2022	DB	EPA_W04 *
Chloride	18.4	mg/l		16%	28/07/2022	DB	EPA_W07 *
COD	48.0	mg/l O2		11%	28/07/2022	DB	EPA_W01 *
Conductivity @25°C	614	µS/cm		15%	27/07/2022	DB	EPA_W08 *
o-Phosphate	0.044	mg/l P		21%	28/07/2022	DB	EPA_W07 *
Sulphate	22	mg/l		11%	28/07/2022	DB	EPA_W12 *
Suspended Solids	<4	mg/l		19%	28/07/2022	DB	EPA_W03 *
Total Oxidised Nitrogen	<0.2	mg/l N		25%	28/07/2022	DB	EPA_W07 *

Comment:

Report Approved By:



Kieran Gordon - Chemist

Results in bold are outside specified limits, not taking account of measurement uncertainty. * Indicates accredited method. nm = not measured, nr = not reported, vob = visible on bottom. The temperature reading of a **composite** sample is provided to allow the interpretation of the field pH result only.

Field Measurements are performed on the date of sampling. Results relate only to the item tested as received.

This test report shall not be reproduced except in full without approval of the laboratory.

FOLLOW-UP ACTIONS

The licensee is required to complete the actions outlined in this site visit report within the specified timeframes. Where required, the licensee shall also respond to actions specified in Compliance Investigations and/or submit a response to this site visit report via the EDEN system. The licensee shall maintain a documentary evidence, for review by the Agency, that the prescribed actions were completed within the required timeframe.

(i) Compliance Investigations

The Agency may generate a Compliance Investigation through the EDEN system and issue instructions and actions to the licensee. The licensee will receive notification when an instruction or action is issued and the licensee must respond to the actions within the Compliance Investigation within the specified timeframe.

(ii) Response to Site Visit Report

Where the licensee is requested to (or wishes to) respond to the Agency in relation to this site visit report, the licensee may select the 'Make a Response' link on the actions taken by the licensee to address the issues raised in this site visit report and the target completion dates. This Licensee Public Response provides the licensee with an opportunity to inform both the Agency and the public about the implementing of actions set out in the Agency site visit report. The response must be submitted **within 30 calendar days** of the issue date of this site visit report.

(iii) Publication of Reports

The site visit report will be made available for public viewing via the Agency's Licence Enforcement Access Portal (LEAP), within one day of the issue date. The Site Visit Report and the Licensee Public Response will also be published on the Agency's website, www.epa.ie, 60 calendar days after the site visit report issue date (on the Licence Details Page for the relevant licence).

Please note that licensees are required to comply with the conditions of the licence at all times, and where non-compliance occurs, compliance must be restored within the shortest possible time. These actions will be verified during subsequent Agency visits. Please quote the above Inspection Reference Number in any correspondence in relation this Report.