
Report for the Monitoring of the Odour Control Unit at Bryn Pica**Installation Name & Address:**

Biogen Bryn Pica
Merthyr Road
Llwycoed
Aberdare
CF44 0BX

Site Permit Number:

EPR/SP3537VQ

Stack Reference:

A5, Carbon Filter Inlet

Dates of Monitoring Campaign:

30th August 2023

Report Written by:

David Littlewood
Technical Compliance Manager
MCerts Level 2
MM06 772
TE1 TE2 TE3 TE4

Report Date:

11th September 2023

Version:

Version 1

Signature of Report Writer:

CONTENTS

TITLE PAGE

CONTENTS

SUMMARY

Monitoring Objectives	3
Monitoring Results	4
Monitoring Dates and Times	4
Process Details	5
Monitoring and Analytical Methods	5
Sampling Location	6
Plant Photos/Sample Points	7

Appendix 1 – Monitoring Personnel and Equipment List

Appendix 2 – Laboratory Results

Overall Aim of the Monitoring Campaign:

The aim of the monitoring was to assess the effectiveness of the carbon filter odour control plant at Bryn Pica.

Special Requirements: There were no special requirements.

Target Parameters: Odour

MONITORING RESULTS

Concentration		
Parameter	Units	Result
Odour ¹	ouE/m ³	18,830

¹ Reference Conditions (REF) are: 293K, 101.3kPa, without correction for water vapour content

MONITORING DATE(S) & TIMES

Parameter		Units	Concentration	Sampling Date(s)	Sampling Times	Duration (mins)
Odour Sample 1	B1	ouE/m ³	26,101	30/08/2023	11:37-11:39	2
Odour Sample 2	B2	ouE/m ³	15,061	30/08/2023	11:40-11:42	2
Odour Sample 3	B3	ouE/m ³	15,329	30/08/2023	11:43-11:45	2

All results are expressed at the respective reference conditions.

PROCESS DETAILS

Standard Operating Conditions

Parameter	Value
Process Status	Normal Operations
Capacity (of 100%) and Tonnes/Hour	n/a
Continuous or Batch Process	Continuous
Feedstock (if applicable)	Extract from Waste Reception Hall
Abatement System	Pre Carbon Filter
Abatement System Running Status	Normal
Fuel	n/a
Plume Appearance	None Visible

MONITORING & ANALYTICAL METHODS

Parameter	Monitoring	Analysis		
	Standard Used	Analytical Technique	Analysis Status	Analysis Lab
Odour	BS EN 13725	Olfactometry	UKAS	ASE

ANALYSIS LABORATORY

(with short name reference as appears in the table above)

Air Spectrum Environmental Ltd (ASE)	ISO 17025 Accreditation Number: 8283
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SUMMARY OF SAMPLING DEVIATIONS

Parameter	Run	Deviation
All	All	There are no deviations associated with the sampling.

SAMPLE LOCATION**Duct Characteristics**

Parameter	Units	Value
Type	-	Circular
Depth	m	0.8
Width	m	-
Area	m ²	0.503
Port Depth	cm	10
Orientation of Duct	-	Vertical
Number of Ports	-	1
Sample Port Size	-	4" BSP

Location of Sampling Platform

Parameter	Value
Permanent/Temporary Platform	Permanent
Inside/Outside	Inside

Platform Details

EA Technical Guidance Note M1 / EN 15259 Platform Requirements	Value
Sufficient working area to manipulate probe and operate the measuring instruments	Yes
Platform has 2 levels of handrails (approx. 0.5m & 1.0m high)	Yes
Platform has vertical base boards (approx. 0.25m high)	Yes
Platform has chains / self closing gates at top of ladders	Yes
There are no obstructions present which hamper insertion of sampling equipment	Yes
Safe Access Available	Yes
Easy Access Available	Yes

Sampling Location / Platform Improvement Recommendations

The sampling location is suitable for monitoring, and therefore there are no improvement recommendations.

EN 15259 Homogeneity Test Requirements

There is no requirement to perform an EN 15259 Homogeneity Test on this Stack.

PLANT PHOTOGRAPHS & SAMPLING POINT



APPENDIX 1**STACK EMISSION MONITORING PERSONNEL**

Position	Name	MCerts Accreditation	Mcerts Number	Technical Endorsements
Technical Compliance Manager	David Littlewood	MCerts Level II	MM06 772	TE1 TE2 TE3 TE4

EQUIPMENT LIST

Item Description	Model No.	Serial No.	Calibration Due
Sampling Pump	220-4000	235210	20/03/2024
Digital Manometer Reader	Kimo MP210	1D230500693	09/05/2024
Digital Mano Pressure Unit	MPR500	1D221203833	09/05/2024
Site Balance	NVV2002	8343354354	20/05/2024
Digital Barometer	14-650-118, 15557603	230309530	03/05/2025

APPENDIX 2

LABORATORY RESULTS



Olfactometry Report

Report ID 25402 - 31 -08-23
Issue Number 1
Issue Date 08/09/2023



Odour Lab
Air Spectrum Environmental Limited
Spectrum House
Worcester WR3 7JW

Customer Information

Accredited to
ISO/IEC 17025:2017

Customer Name Biogen UK Limited
Address Milton Parc, Milton Ernest
Bedfordshire
MK44 1YU
Customer PO BTLPBRY002006
Customer Reference BRY

Laboratory Information

Laboratory operator Shaun Duffy
Laboratory Address Spectrum House
Checketts Lane Industrial Estate
Checketts Lane
Worcester WR3 7JW
Climate controlled room
Laboratory Description
Environmental Conditions Lab Temperature (start) 22.4 C must be < 25.0 C
Lab Temperature (end) 22.4 C must be within +3C of start
Lab Humidity 36.4%
Oxygen 20.90
Average CO₂ 715ppm must be < 1500ppm
Storage Temperature Acceptable? Yes

Equipment Information

Olfactometer IDES S5600
Serial Number SS101301
Number of Panelists 4
Note Pre-dilutor serial number SN-101255EXN

Laboratory Compliance

Laboratory Accuracy, A_{od} 0.040 Criteria is ≤ 0.217
Laboratory Repeatability, r 0.049 Criteria is ≤ 0.477

Analysis Information

Standard EN 13725:2003
Methodology Forced choice method
Reference odorant N-Butanol 54.1 ppm

Certifications

ISO/IEC 17025:2017 General requirements of the competence of testing and calibration laboratories
EN 13725:2003 Olfactometry odour threshold determination using dynamic dilution and forced choice method
ISO 9001:2015 Quality Management Systems
ISO 14001:2015 Environmental Management Systems

Report Approval

Report Completed By S. Duffy
Report Approved By A. Wynne



Olfactometry Report

Report ID 25402 - 31 08 23
Issue Number 1
Issue Date 08/09/2023

RESULTS

Result Filename	Sample ID	Sample Description	Sample Accepted/ In time?	Bag fill date & time	Analysis date & time	ΔT (hours)	ou ₆ /m ³	Bag OK
B31082306.csv	230823-050 - (06)	CARBON OUTLET 3	Yes PASS	30/08/2023 11:59	31/08/2023 09:15	21	271	Yes
B31082305.csv	230823-049 - (05)	CARBON OUTLET 2	Yes PASS	30/08/2023 11:59	31/08/2023 08:58	21	245	Yes
B31082304.csv	230823-030 - (04)	CARBON OUTLET 1	Yes PASS	30/08/2023 11:55	31/08/2023 08:45	21	304	Yes
B31082315.csv	230823-008 - (03)	WRH INLET 3	Yes PASS	30/08/2023 11:43	31/08/2023 10:56	23	15,329	Yes
B31082314.csv	230823-007 - (02)	WRH INLET 2	Yes PASS	30/08/2023 11:40	31/08/2023 10:35	23	15,061	Yes
B31082311.csv	230823-047 - (01)	WRH INLET 1	Yes PASS	30/08/2023 11:37	31/08/2023 10:10	23	26,101	Yes

Notes

Panelist acuity within acceptable limits

Where the laboratory did not perform the sampling, analysis results apply to samples "as received"

Analysis method carried out in accordance BS EN 13725. Standard uncertainties apply

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When the samples are not collected by ASE, sample dates and times are provided by the customer

The sample transport temperature was recorded to be: < 25 degrees - complies to standard > 25 degrees- not compliant to standard

A laboratory pre-dilution factor of 10.4 has been applied to test results highlighted in yellow. No customer dilution factors have been applied to any results

Sample Fail reason 1 = Sample to Analysis time > 30 hours 4 = reasons 1 + 3

Refer to code 2 = Sample time not given by Customer 5 = reasons 2 + 3

next to FAIL 3 = Bag contaminated when received