

**Quarterly Reporting of Emissions to Air for the period from: Q1 2024**

Emission Point	Substance / Parameter	Emission Limit Value	Result <sup>[1]</sup>	Units	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Accreditation/ Certification <sup>[4]</sup>	Uncertainty <sup>[5]</sup>
A26	Class B VOC's	No limit applies	1.4129	kg/hr	Gas chromatography	07/02/2024 09:34	In House Validated Method	3.6%
A26	Siloxanes	Agreed limit <sup>(6)</sup>	0.5595	kg/hr	Gas chromatography	07/02/2024 09:34	In House Validated Method	3.6%
A27	Siloxanes	Agreed limit <sup>(6)</sup>	0.0194	kg/hr	Gas chromatography	13/07/2023 09:49	In House Validated Method	3.6%
A43	Hydrogen chloride	10mg/m <sup>3</sup>	1.5513	mg/m <sup>3</sup>	Ion chromatography	05/07/2023 14:17	In House Validated Method	3.6%
A44	Hydrogen chloride	10mg/m <sup>3</sup>	See note 8	mg/m <sup>3</sup>	Ion chromatography	N/A	In House Validated Method	3.6%
A57	Hydrogen chloride	10mg/m <sup>3</sup>	0.243411347	mg/m <sup>3</sup>	Ion chromatography	25/01/2024 10:30	In House Validated Method	3.6%
A60	Class B VOC's	5000 kg/year <sup>(7)</sup>	0.0671	kg/hr	Gas chromatography	15/02/2024 10:29	In House Validated Method	3.6%
			36.0636	Kg YTD		2024 TOTAL		
A65	Siloxanes	Agreed limit <sup>(6)</sup>	0.2841	kg/hr	Gas chromatography	08/01/2024 09:50	In House Validated Method	3.6%
A68	Class B VOC's	5000 kg/year <sup>(7)</sup>	0.1141	kg/hr	Gas chromatography	08/01/2024 10:05	In House Validated Method	3.6%
			110.3775	Kg YTD		2024 TOTAL		
A68	Siloxanes	Agreed limit <sup>(6)</sup>	1.4835	kg/hr	Gas chromatography	08/01/2024 10:05	In House Validated Method	3.6%
A78	Class A VOC's	No limit. Temperature (°C)	26.3320	°C	RTD	06/01/2024 08:44	Internally Calibrated	0.02%
A79	Siloxanes	Agreed limit <sup>(6)</sup>	0.2842	kg/hr	Gas chromatography	05/01/2024 11:00	In House Validated Method	3.6%
A85	Siloxanes	Agreed limit <sup>(6)</sup>	0.0932	kg/hr	Gas chromatography	10/08/2023 13:35	In House Validated Method	3.6%
A123	Siloxanes	Agreed limit <sup>(6)</sup>	0.0045	kg/hr	Gas chromatography	08/01/2024 10:25	In House Validated Method	3.6%
A124	Siloxanes	Agreed limit <sup>(6)</sup>	0.0050	kg/hr	Gas chromatography	08/01/2024 10:35	In House Validated Method	3.6%

[1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.

[2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. gas chromatography.

[3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.

[4] The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.

[5] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

[6] Emission limit to be agreed following completion of IP14. This was deferred for consideration with IP25. No limit applies.

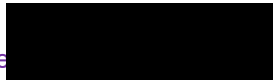
[7] Emission limit agreed following completion of IP4 (5000 kg/year).

Dow Notes:

(8) A44 is now decommissioned (vent is released via A43).

(9) Releases modelled as part of IP16. Agency agreed that releases do not require abatement and that limit no longer applies. Instead the vent temperature will be recorded on form A2 quarterly to ensure vent condenser performance does not deteriorate. A new temperature transmitter was installed in 2009 to give continuous temperature monitoring with operator alarm for elevated condenser outlet temperature to trigger condenser cleaning operations. Result recorded is the maximum temperature value obtained during the reporting period.

Signe



Insert name



Date.....24th April 2024

(authorised to sign as representative of Operator)

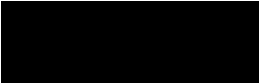
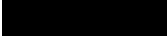
**Quarterly Reporting of Emissions to Water (other than to Sewer) for the period from Q1 2024**

Emission Point	Substance / Parameter	Emission Limit Value	Result <sup>[1]</sup>	Units	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	Accreditation/ Certification <sup>[4]</sup>	Uncertainty <sup>[5]</sup>		
W1 via M1	Flow	11 000 m <sup>3</sup> /day	6739	m <sup>3</sup> /day	Agreed <sup>(10)</sup>	04-Mar	MCERT Approved	+/- 0.5%		
W1 via M1	Flow	625 m <sup>3</sup> /hour	387.71	m <sup>3</sup> /hour	Agreed <sup>(10)</sup>	24-Feb	MCERT Approved	+/- 0.5%		
W1 via M1	pH – Min	≥ 6	7.07		To be agreed <sup>(11)</sup>	02-Mar	Under Review <sup>(11)</sup>	+/- 4%		
	pH - Max	≤ 9	8.18			27-Mar				
W1 via M1	Temperature	40 °C <sup>[6]</sup>	25.9	°C	RTD <sup>(12)</sup>	02-Feb	MCERTS Equiv <sup>(12)</sup>	+/- 0.55 °C		
W1 via M1	Suspended solids	30 mg/l <sup>[6]</sup>	18.28	mg/l <sup>[8]</sup>	SCA Blue Book 105	Q1 2024	Under Review	+/- 6mg/l		
W1 via M1	BOD <sub>5</sub>	20 mg/l <sup>[16]</sup>	4	mg/l	SCA Blue Book 130	08-Feb	UKAS	+/- 21%		
W1 via M1	Copper	0.1 mg/l <sup>[6]</sup>	0.0795	mg/l <sup>[8]</sup>	Inductively Coupled Plasma	Q1 2024	In house validated method	+/- 0.0096 mg/l		
W1 via M1	Zinc	0.5 mg/l <sup>[6]</sup>	0.0282	mg/l <sup>[8]</sup>	Inductively Coupled Plasma	Q1 2024	In house validated method	+/- 0.02 mg/l		
W1 via M1	Hydrocarbon oil	No visible sheen	No visible sheen		Visual Check	Q1 2024	N/A	N/A		
W1 via M1	TOC	100 mg/l	38.47	mg/l	Online TOC analysis	Q1 2024 daily average	In house validated method	TBD		
W2	pH – Min	≥ 6	No discharge to river during Q1 2024		pH probe	No discharge to river during Q1 2024	In house validated method	+/- 4%		
W2	pH - Max	≤ 9							Under Review	+/- 6mg/l
W2	Suspended solids	30 mg/l <sup>[16]</sup>			mg/l		SCA Blue Book 105		UKAS	+/- 21%
W2	BOD <sub>5</sub>	20 mg/l <sup>[16]</sup>			mg/l		SCA Blue Book 130		UKAS	Unknown
W2	COD	125 mg/l <sup>[16]</sup>			mg/l		Offsite Analysis		In house validated method	+/- 0.0096 mg/l
W2	Copper	0.15 mg/l <sup>[7,16]</sup>			mg/l		Inductively Coupled Plasma		In house validated method	+/- 0.02 mg/l
W2	Zinc	0.25 mg/l <sup>[7,16]</sup>			mg/l		Inductively Coupled Plasma		N/A	N/A
W2	Hydrocarbon oil	No visible sheen						Visual Check		N/A

- [1] The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
- [2] Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, e.g. gas chromatography.
- [3] For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- [4] The accreditation status of the equipment and/or the monitoring organisation, as appropriate, for the methods used for both sampling and analysis.
- [5] The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.
- [6] Not more than 5% of measurements in the reporting period shall exceed the limit value.
- [7] To be reported for each effluent transfer from W809 to W413.

Dow Corning Notes:

- (8) The result is the 95%ile reading for the reporting period to demonstrate compliance with the emission limit value stated, which is a 95%ile limit.
- (10) Instrument and measurement technique has been reviewed under improvement item IP8. The final treated effluent Danfloss flow meter FT5098 has been MCERT approved. It has been agreed that from 1 October 2009 onwards that the dry flow rate discharge limit of 11,000 m<sup>3</sup>/day will apply and that reported flow data will relate purely to treated effluent with storm water flow (from W952 penstock valve) excluded from the totalised discharge from release point W1.
- (11) Instrument and measurement technique has been reviewed under improvement item IP10. Existing pH meters will be replaced by MCERT certified pH meter upon failure. Current meters deemed satisfactory in the interim.
- (12) Instrument and measurement technique was reviewed under Note 7 Table 2.2.5 and Agency responded. A New MCERT equivalent resistance thermometer was installed by Dow Corning in Q4 2007.
- (13) Note in DC permit; 'No spot sample can exceed the limit value by more than 50%'.
- (16) no spot sample shall exceed the emission limit value by more than 50%

Signe  Insert name   
(authorised to sign as representative of Operator)

Date.....24<sup>th</sup> April 2024