

Quarterly Reporting of Emissions to Water (other than to Sewer) for the period from October 1 2018 to December 31 2018

Emission Point	Substance / Parameter	Emission Limit Value	Result ⁽¹⁾	Test Method ⁽²⁾	Sample Date and Times ⁽³⁾	Accreditation/ Certification ⁽⁴⁾	Uncertainty ⁽⁵⁾
W1 via M1	Flow	11 000 m ³ /day	7763	Agreed ⁽¹⁰⁾	16-Nov-18	MCERT Approved	+/- 0.5%
W1 via M1	Flow	625 m ³ /hour	606.62	Agreed ⁽¹⁰⁾	31-Oct-18	MCERT Approved	+/- 0.5%
W1 via M1	pH	≥ 6, ≤ 9	6.17 7.92	To be agreed ⁽¹¹⁾	28-Dec-18 29-Dec-18	Under Review ⁽¹¹⁾	+/- 4%
W1 via M1	Temperature	40 °C ⁽⁶⁾	28.90	RTD ⁽¹²⁾	05-Oct-18	MCERTS Equiv ⁽¹²⁾	+/- 0.55 °C
W1 via M1	Suspended solids	30 mg/l	16.15	SCA Blue Book 105	Q4 2018	Under Review	+/- 6mg/l
W1 via M1	BOD ₅	20 mg/l	2.00	SCA Blue Book 130	04-Oct-18	UKAS	+/- 21%
W1 via M1	Copper	0.1 mg/l	0.08086	Inductively Coupled Plasma	Q4 2018	In house validated method	+/- 0.0096 mg/l
W1 via M1	Zinc	0.5 mg/l	0.02475	Inductively Coupled Plasma	Q4 2018	In house validated method	+/- 0.02 mg/l
W1 via M1	Hydrocarbon oil	No visible sheen	No visible sheen	Visual Check	Q4 2018	N/A	N/A
W2	pH	≥ 6, ≤ 9	6.39 8.25	pH probe	25-Dec-18 22-Oct-18	In house validated method	+/- 4%
W2	Suspended solids	30 mg/l	14.8	SCA Blue Book 105	8-Nov-18	Under Review	+/- 6mg/l
W2	BOD ₅	20 mg/l	1.00	SCA Blue Book 130	8-Nov-18	UKAS	+/- 21%
W2	COD	125 mg/l (13)	22.0	Offsite Analysis	8-Nov-18	UKAS	Unknown
W2	Copper	0.15 mg/l ⁽⁷⁾	0.0521	Inductively Coupled Plasma	8-Nov-18	In house validated method	+/- 0.0096 mg/l
W2	Zinc	0.25 mg/l ⁽⁷⁾	0.1358	Inductively Coupled Plasma	8-Nov-18	In house validated method	+/- 0.02 mg/l
W2	Hydrocarbon oil	No visible sheen	No visible sheen	Visual Check	Q4 2018	N/A	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 Silicones 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.

(9) Old note now removed (not applicable).

(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 m³/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 Silicones in Q4 2007.

(13) No spot sample shall exceed the limit value by more than 50%. Limit is 125 mg/l so allowable spot sample result is 187.5 mg/l, result was below this.

Signed 

Date...31st Jan 2019.....

(authorised to sign as representative of Operator)

Quarterly Reporting of Emissions to Air for the period from **October 1 2018 to December 31 2018**

Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
A26	Class B VOC's	No limit applies	2.8969	Gas chromatography	10/10/2018 15:00	In House Validated Method	3.6%
A26	Siloxanes	No limit applies ⁽⁶⁾	0.8707	Gas chromatography	10/10/2018 15:00	In House Validated Method	3.6%
A27	Siloxanes	No limit applies ⁽⁶⁾	0.0759	Gas chromatography	10/10/2018 15:30	In House Validated Method	3.6%
A43	Hydrogen chloride	10mg/m ³	0.3996	Ion chromatography	14/11/2018 11:00	In House Validated Method	3.6%
A44	Hydrogen chloride	10mg/m ³	See note 8	Ion chromatography	N/A	In House Validated Method	3.6%
A57	Hydrogen chloride	10mg/m ³	0.355065554	Ion chromatography	10/10/2018 14:00	In House Validated Method	3.6%
A60	Class B VOC's	5000 kg/year ⁽⁷⁾	0.0200 196.9447	Gas chromatography	03/12/2018 11:30 2018 TOTAL	In House Validated Method	3.6%
A65	Siloxanes	No limit applies ⁽⁶⁾	0.0490	Gas chromatography	14/11/2018 10:00	In House Validated Method	3.6%
A68	Class B VOC's	5000 kg/year ⁽⁷⁾	0.1462 693.0372	Gas chromatography	10/10/2018 10:45 2018 TOTAL	In House Validated Method	3.6%
A68	Siloxanes	No limit applies ⁽⁶⁾	1.3982	Gas chromatography	10/10/2018 10:45	In House Validated Method	3.6%
A78	Class A VOC's	No limit. Temperature (°C)	29.6836	RTD	10/10/2018 15:39	Internally Calibrated	0.02%
A79	Siloxanes	No limit applies ⁽⁶⁾	0.0000	Gas chromatography	10/10/2018 13:30	In House Validated Method	3.6%
A85	Siloxanes	No limit applies ⁽⁶⁾	0.1141	Gas chromatography	19/10/2018 11:30	In House Validated Method	3.6%

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[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 Silicones 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.

Signed


Date...31st Jan 2019.....

(authorised to sign as representative of Operator)