

Permit Reference Number: EPR/BU2349IL

Operator: Synthite Limited

Installation: Mold Chemicals (Alyn Works)

Form Number: A1

Reporting of Emissions to Air for the period from 01/01/21 to 31/03/21

Emissions to Air							
Emission Point	Substance / Parameter	Emission Limit Value	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Accreditation/ Certification ^[4]	Uncertainty ^[5]
A1 (A1)	Dimethylamine	5 mg/m ³	<1.2	Gastec Tube	21/01/2021	None	25%
A7 (CA1)	Formaldehyde	2 mg/m ³	0	DNPH/HPLC	21/01/2021	None	30%
	Acrylamide	5 mg/m ³	-	MDHS 57	21/01/2021	None	25%
	Acrylic acid	5 mg/m ³	-	Gastec Tube	21/01/2021	None	25%
	Ammonia	10 mg/m ³	0	Gastec Tube	21/01/2021	None	25%
	Sulphur dioxide	50 mg/m ³	-	Gastec Tube	21/01/2021	None	25%
	n-Decane (Measured as VOC Toluene)	20 mg/m ³	2.1	VOC Meter	21/01/2021	None	25%
A8 (CA2)	Formaldehyde	5 mg/m ³	0.8	DNPH/HPLC	21/01/2021	None	30%
	Methanol (Measured as VOC Toluene)	40 mg/m ³	12.1	VOC Meter	21/01/2021		
	Dimethylamine	5 mg/m ³	<1.2	Gastec Tube	21/01/2021	None	25%
A10 (FA2)	Formaldehyde	5 mg/m ³	0.2	DNPH/HPLC	21/01/2021	None	30%
	Methanol	1 mg/m ³	0.1	Gastec Tube	21/01/2021	None	25%
A11 (FA3)	Ammonia	10 mg/m ³	6.9	Gastec Tube	11/02/2021	None	25%
	Formaldehyde	5 mg/m ³	0.2	DNPH/HPLC	11/02/2021	None	30%
	Methanol	1 mg/m ³	0.1	Gastec Tube	11/02/2021	None	25%
A12 (FA5)	Formaldehyde	5 mg/m ³	0.2	DNPH/HPLC	11/02/2021	None	30%
	Methanol	5 mg/m ³	0.2	Gastec Tube	11/02/2021	None	25%
A13 (FA8)	Methanol	0.5 kg/hr [7]	0.1	Estimated	01/01/2021 – 31/03/2021	N/A	Not Known
A14 (FA9)	Methanol	0.5 kg/hr [7]	0.1	Estimated	01/01/2021 – 31/03/2021	N/A	Not Known
A15 (FA12)	Formaldehyde	5 mg/m ³	0.3	DNPH/HPLC	11/02/2021	None	30%
	Methanol	5 mg/m ³	0.6	Gastec Tube	11/02/2021	None	25%
A16 (FA15)	Formaldehyde	5 mg/m ³	0.2	DNPH/HPLC	26/03/2021	None	30%
	Methanol (Measured as VOC Toluene)	40 mg/m ³	0.3	VOC Meter	26/03/2021	None	25%
	Nitrogen dioxide	50 mg/m ³ [6]	18.7	Gastec Tube	26/03/2021	None	25%
A17 (FA16)	Nitrogen dioxide	150 mg/m ³ [6]	20.2	Gastec Tube	26/03/2021	None	25%

A18 (FA24)	Formaldehyde	5 mg/m ³	0.2	DNPH/HPLC	26/03/2021	None	30%
	Methanol (Measured as VOC Toluene)	20 mg/m ³	0.1	VOC Meter	26/03/2021	None	25%

[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.

[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] The emission limit values are expressed as instantaneous and corrected to 273K, 101.3kPa, 11% oxygen, dry.

[7] Taken as average vent concentration multiplied by the volume of expressed air and actual number of deliveries.

SignedJM.....

Date...23/04/21...Authorised to sign as representative of the Operator)

Permit Reference Number: EPR/BU2349IL
Installation: Mold Chemicals (Alyn Works)

Operator: Synthite Limited
Form Number: W1

Reporting of Emissions to Water (other than to Sewer) for the period from 01/01/21 to 31/03/21

Emissions to Water							
Emission Point	Substance / Parameter	Emission Limit Value [6]	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
W1	pH	6 – 8.5 [7]	6.9 – 7.7	pH Meter	25/03/2021, 04/02/2021	None	20%
	BOD	10 mg/L	7	ISO5815:1989	19/01/2021	None	20%
	Suspended Solids	20 mg/L	0	GFA ISO11929:1997	All samples within quarter	None	20%
	Formaldehyde	0.25 mg/L	0.20	DNPH/HPLC	04/01/2021	None	30%
	Ammonia (Unionised as N)	5 mg/L	2.5	Ion Selective Electrode	09/02/2021	None	
	Temperature	25 °C	10	Calibrated Thermometer	16/02/2021	None	20%
	Volumetric Flow Rate	700 m ³ /day [8]	848	Meter (ISBN 011752364X)	25/01/2021	None	20%
River Monitoring							
R. Alyn SJ 2363 6487	pH	n/a	8.2	pH Meter	28/01/2021	None	20%
	Formaldehyde	n/a	0.09 mg/L	DNPH/HPLC	07/01/2021	None	30%

[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. colorimetry.

[3] For non-continuous measurements the date and time of the sample that produced 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] The emission limit values are expressed as instantaneous.

[7] The emission limit values for pH are expressed as minimum and maximum individual values.

[8] The emission limit value for volumetric flow rate is expressed as a daily maximum (not to exceed 30m³/hour).

SignedJM.....

Date...23/04/21.....(authorised to sign as representative of the Operator)

Permit Reference Number: EPR/BU2349IL

Operator: Synthite Limited

Installation: Mold Chemicals (Alyn Works)

Form Number: S1

Reporting of Emissions to Sewer for the period from 01/01/21 to 31/03/21

Emissions to Sewer							
Emission Point	Substance / Parameter	Emission Limit Value [6]	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
S1	pH	5 – 9 [7]	6.6 – 8.0	pH Meter	26/03/2021, 08/01/2021	None	20%
	Suspended solids	400mg/l	280	GFA ISO11929:1997	24/02/2021	None	20%
	Formaldehyde	10mg/l	4.97	DNPH/HPLC	10/03/2021	None	30%
	Methanol	10mg/l	5.3	Gas Chromatography	08/03/2021	None	20%
	Ammonia (Unionised as N)	50mg/l	22.8	Ion Selective Electrode	17/03/2021	None	
	COD	800mg/l	649	Dichromate ISO6060:1989	26/01/2021	None	20%
	Grease and Oils	10mg/l	0	Gas Chromatography	All samples within quarter	None	20%
	Volumetric Flow Rate	300m3/day [8]	300	Meter (ISBN 011752364X)	04/01/2021	None	20%
	Temperature	43°C	22	Calibrated Thermometer	22/03/2021	None	20%
Other Monitoring Points		Result [9]					
B/H1	Groundwater level	n/a	3.31	Dip Tape	23/03/2021	None	10%
	Formaldehyde	n/a	0.00	DNPH/HPLC	23/03/2021	None	30%
B/H8	Groundwater level	n/a	0.93	Dip Tape	23/03/2021	None	10%
	Formaldehyde	n/a	0.00	DNPH/HPLC	23/03/2021	None	30%
B/H9	Groundwater level	n/a	2.60	Dip Tape	24/03/2021	None	10%
	Formaldehyde	n/a	0.03	DNPH/HPLC	15/02/2021	None	30%
B/H10	Groundwater level	n/a	2.26	Dip Tape	23/03/2021	None	10%
	Formaldehyde	n/a	0.00	DNPH/HPLC	23/03/2021	None	30%

B/HA	Groundwater level	n/a	2.39	Dip Tape	16/03/2021	None	10%
	Formaldehyde	n/a	0.00	DNPH/HPLC	16/03/2021	None	30%
B/HB	Groundwater level	n/a	2.28	Dip Tape	16/03/2021	None	10%
	Formaldehyde	n/a	0.00	DNPH/HPLC	16/03/2021	None	30%
SP4	Groundwater level	n/a	1.30	Dip Tape	17/03/2021	None	10%
	Formaldehyde	n/a	0.02	DNPH/HPLC	17/03/2021	None	30%
Culvert Pump	Formaldehyde	n/a	2477	DNPH/HPLC	15/03/2021	None	30%

[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. colourimetry.

[3] For non-continuous measurements the date and time of the sample that produced 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] The emission limit values are expressed as instantaneous.

[7] The emission limit values for pH are expressed as minimum and maximum individual values.

[8] The emission limit value for volumetric flow rate is expressed as a daily maximum.

[9] Readings are in metres below the respective borehole surface.

SignedJM..... Date.....23/04/21..... (Authorised to sign as representative of the Operator)