



SYNTHITE LIMITED

ALYN WORKS, DENBIGH ROAD, MOLD,
FLINTSHIRE, UNITED KINGDOM CH7 1BT

A Member of the Tennant Group (Est. 1797)

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RECEIVED

30 OCT 2014

Environment Agency
Chester Rd.
Buckley
Flintshire
CH7 3AJ
27/10/14

Dear Sir,

Re: IPPC Permit BU2349

Please find enclosed three copies of monitoring returns for Q3 2014.


J. Hallard
Synthite Ltd.

Encs. Monitoring report

MONITORING RETURNS N. WALES

CHECKED VS AUTHORISATION

TRACKING

OK FOR PUBLIC REGISTRY

TYPED FOR PUBLIC REGISTRY

INITIALS DATE

AZ 4.12.14

JB 30.10.14

AZ 4/12/14

JB Ednm.



For Formaldehyde
Paraformaldehyde
ALCOFORM Solution
Agricultural Products &
Chemical Tool Manufacture



Directors: K.A. Alexander, W.P. Alexander, S.E.R. Alexander, K.G. Jones

Permit Reference Number: BU2349

Operator: Synthite Limited

Installation: Mold Chemicals (Alyn Works)

Form Number: A1

Reporting of Emissions to Air for the period from 01/07/14 to 30/09/14

Emissions to Air							Uncertainty	
Emission Point	Substance / Parameter	Emission Limit Value [6]	Result [1]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	[5]	
A1	Dimethylamine	5mg/m ³	<1.2	Gastec tube	19/08/14	None	25%	
A2	Ammonia	10mg/m ³	o/c	-	-	-	-	
A3	Propionic Acid (Measured as VOC Toluene)	10mg/m ³	0.5	VOC meter	23/10/14	None	25%	
A4	Formic Acid (Measured as VOC Toluene)	10mg/m ³	0.4	VOC meter	23/10/14	None	25%	
A5	Ammonia	10mg/m ³	<0.2	Gastec tube	23/10/14	None	25%	
A5	Formic & Propionic Acid (Measured as VOC Toluene)	10mg/m ³	0.9	VOC meter	23/10/14	None	25%	
A6	Ammonia	10mg/m ³	<0.2	Gastec tube	23/10/14	None	25%	
A6	Formic Acid (Measured as VOC Toluene)	10mg/m ³	0.9	VOC meter	23/10/14	None	25%	
A7	Formaldehyde	2mg/m ³	1.8	DNPH/HPLC	19/08/14	None	30%	
A7	Acrylamide	5mg/m ³	o/c	-	-	-	-	
A7	Acrylic Acid	5mg/m ³	o/c	-	-	-	-	
A7	Ammonia	10mg/m ³	4.8	Gastec tube	19/08/14	None	25%	
A7	Sulphur Dioxide	50mg/m ³	o/c	-	-	-	-	
A7	n - Decane (Measured as VOC Toluene)	20mg/m ³	18.3	VOC meter	19/08/14	None	25%	
A8	Formaldehyde	5mg/m ³	2.2	DNPH/HPLC	19/08/14	None	30%	
A8	Methanol	40mg/m ³	15.7	VOC meter	19/08/14	None	25%	
A8	Dimethylamine	5mg/m ³	<1.1	Gastec tube	19/08/14	None	25%	

Operator : Synthite Limited

Form Number : A1 continued

A9	n - Decane (Measured as VOC Toluene)	10mg/m3	o/c	-	-	-
A10	Formaldehyde	5mg/m3	2.1	DNPH/HPLC	11/09/14	None
A10	Methanol	1mg/m3	<0.3	Gastec tube	11/09/14	None
A11	Ammonia	10mg/m3	6.5	Gastec tube	11/09/14	None
A11	Formaldehyde	5mg/m3	1.8	DNPH/HPLC	11/09/14	None
A11	Methanol	1mg/m3	<0.3	Gastec tube	11/09/14	None
A12	Formaldehyde	5mg/m3	1.5	DNPH/HPLC	11/09/14	None
A12	Methanol	5mg/m3	<0.4	Gastec tube	11/09/14	None
A13	Methanol	0.5kg/hr [7]	0.1	Estimated	01/07/14 - 30/09/14	N/A
A14	Methanol	0.5kg/hr [7]	0.1	Estimated	01/07/14 - 30/09/14	N/A
A15	Formaldehyde	5mg/m3	4.2	DNPH/HPLC	11/09/14	None
A15	Methanol	5mg/m3	2.5	Gastec tube	11/09/14	None
A16	Formaldehyde	5mg/m3	0.3	DNPH/HPLC	11/09/14	None
A16	Methanol	40mg/m3	0.7	VOC meter	11/09/14	None
A16	Nitrogen Dioxide	50mg/m3	0.2	Gastec tube	11/09/14	None
A17	Nitrogen Dioxide	150mg/m3	1.4	Gastec tube	11/09/14	None
A18	Formaldehyde	5mg/m3	0.5	DNPH/HPLC	11/09/14	None
A18	Methanol	20mg/m3	0.6	VOC meter	11/09/14	None

[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 and in relation to gases from combustion processes 3% oxygen, dry (for gaseous fuels).

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

Signed

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(Authorised to sign as representative of the Operator)

Date: 27.10.14

Permit Reference Number: BU23349
Installation: Mold Chemicals (Alyn Works)

Operator: Synthite Limited
Form Number: W1

Reporting of Emissions to Water (other than to Sewer) for the period from 01/07/14 to 30/09/14

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	6.0 – 8.5 [7]	7.0 – 8.2	pH meter	15/08/14, 08/08/14	None	20%
	BOD	10mg/l	3	ISO5815:1989	08/08/14	None	20%
	Suspended Solids	20mg/l	Nil	GFA ISO1929:1997	All samples within quarter	None	20%
	Formaldehyde	0.25mg/l	0.23	DNPH/HPLC	26/09/14	None	30%
	Ammonia (Unionised as N)	5mg/l	1.3	Ion Selective Electrode	08/08/14	None	
	Temperature	25°C	13	Calibrated thermometer	05/09/14	None	20%
	Volumetric Flow Rate	700m3/day [8]	356	Meter (ISBN 011752364X)	02/07/14	None	20%
River Monitoring							
R. Alyn SJ 2363 6487	pH	n/a	7.1 – 8.1	pH meter	26/09/14, 02/07/14	None	20%
	Formaldehyde	n/a	1.60	DNPH/HPLC	26/09/14	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).

Signed

Date: 27.10.14

(authorised to sign as representative of the Operator)

Permit Reference Number: BU23349

Operator: Synthite Limited

Installation: Mold Chemicals (Alyn Works)

Form Number: S1

Reporting of Emissions to Sewer for the period from 01/07/14 to 30/09/14

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]	7.0 – 9.0	pH Meter	19/09/14, 29/08/14	None	20%		
	Suspended solids	400mg/l	354	GFA ISO11929:1997	17/07/14	None	20%		
	Formaldehyde	40mg/l	19.88	DNPH/HPLC	13/08/14	None	30%		
	Methanol	40mg/l	17.4	Gas Chromatography	11/07/14	None	20%		
	Ammonia (Unionised as N)	25mg/l	5.6	Ion Selective Electrode	02/07/14	None	20%		
	COD	1500mg/l	620	Dichromate ISO6060:1989	23/09/14	None	20%		
	Grease and Oils	10mg/l	<10	Gas Chromatography	All samples within quarter	None	20%		
	Volumetric Flow Rate	300m3/day [8]	273	Meter (ISBN 011752364X)	30/07/14	None	20%		
	Temperature	40°C	28	Calibrated Thermometer	02/07/14	None	20%		
Other Monitoring Points									
B/H1	Groundwater level	n/a	3.49	Dip Tape	26/09/14	None	10%		
	Formaldehyde	n/a	0.14	DNPH/HPLC	26/09/14	None	30%		
B/H8	Groundwater level	n/a	1.77	Dip Tape	26/09/14	None	10%		
	Formaldehyde	n/a	0.50	DNPH/HPLC	26/09/14	None	30%		
B/H9	Groundwater level	n/a	2.94	Dip Tape	26/09/14	None	10%		
	Formaldehyde	n/a	0.60	DNPH/HPLC	26/09/14	None	30%		
B/H10	Groundwater level	n/a	3.18	Dip Tape	26/09/14	None	10%		
	Formaldehyde	n/a	0.49	DNPH/HPLC	26/09/14	None	30%		
B/HA	Groundwater level	n/a	3.24	Dip Tape	26/09/14	None	10%		
	Formaldehyde	n/a	0.50	DNPH/HPLC	26/09/14	None	30%		

Emission Point	Substance / Parameter	Emission Limit Value [6]	Result [9]	Test Method [2]	Sample Date and Times [3]	Accreditation/ Certification [4]	Uncertainty [5]
B/HB	Groundwater level	n/a	6.60	Dip Tape	26/09/14	None	10%
	Formaldehyde	n/a	0.51	DNPH/HPLC	26/09/14	None	30%
SP4	Groundwater level	n/a	2.04	Dip Tape	26/09/14	None	10%
	Formaldehyde	n/a	0.42	DNPH/HPLC	26/09/14	None	30%
Culvert Pump	Formaldehyde	n/a	203	Titration using sulphite method	09/07/14	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.

Signed

Operator)

Date 27.10.14

(Authorised to sign as representative of the