

Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2016

Mold Chemicals (Alyn Works)

**Synthite Limited
Alyn Works
Denbigh Road
Mold
Flintshire
CH7 1BT**

Variation number

EPR/BU2349IL/V005

Permit number

EPR/BU2349IL

Mold Chemicals (Alyn Works)

Permit number EPR/BU2349IL

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the variation of an environmental permit.

This minor technical variation introduces a number of changes to point source emissions to air including:

- Removal of two redundant point source emissions to air from the permit (A2 and A9 emission points)
- Removal of monitoring requirements on a number of point source emissions to air (A3, A4, A5 and A6) as these are all tank breather vents

The schedules specify the changes made to the original permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the permit

Description	Date	Comments
Application for new permit BU2349IL received	29/08/2003	Duly made 03/10/2003
Request for Determination Extension (RDE) issued	22/12/2003	
Request for Further Information (RFI) issued	01/06/2004	
Response to first RFI received	24/06/2004	
RFI issued	02/08/2004	
Response to second RFI received	06/08/2004	
Additional information submitted in support of the application	01/09/2004	
Application for a new permit determined and permit BU2349IL issued	05/10/2004	
Variation application EPR/BU2349IL/V002 received	24/09/2008	Duly made 01/12/2008
RDE issued	24/02/2009	Confirmation received 27/02/2008
Variation application determined and variation notice EPR/BU2349IL/V002 issued	21/04/2009	
Variation application EPR/BU2349IL/V003 received	21/09/2016	Duly made 21/09/2016
Variation application determined and variation notice EPR/BU2349IL/V003 issued	24/11/2016	
Variation application EPR/BU2349IL/V004	Duly made 01/04/2020	Variation application to add a standard rules MCP within current installation boundary
Variation determined EPR/BU2349IL/V004	01/04/2020	Varied permit issued to Synthite Limited
Variation application EPR/BU2349IL/V005	Duly made 21/05/2020	Minor technical variation to vary point source emissions to air including monitoring requirements
Variation determined EPR/BU2349IL/V005	04/06/2020	Varied permit issued to Synthite Limited

Other Part A installation permits relating to this installation

Operator	Permit number	Date of issue
T S Resins Limited	EPR/UP3831ES	13/03/2014

End of introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2016

The Natural Resources Body for Wales (“Natural Resources Wales”) in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/BU2349IL

issued to:

Synthite Limited (“the operator”)

whose registered office is

**Alyn Works
Denbigh Road
Mold
Flintshire
CH7 1BT**

company registration number **00164640**

to operate a regulated facility at

**Mold Chemicals (Alyn Works)
Denbigh Road
Mold
Flintshire
CH7 1BT**

to the extent set out in the schedules

The notice shall take effect from 04/06/2020.

Signed

Date

Holly Noble	04/06/2020
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Authorised on behalf of Natural Resources Wales

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

The following conditions are amended as a result of the application made by the operator:

- (i) Table 2.2.1: Emission points to air, now reading as follows:

Table 2.2.1: Emission points to air		
Emission point reference or description	Source (Abatement)	Location of emission point ^{Note 1}
A1 (Formerly A1)	Formaldehyde derivatives storage (wet scrubber)	Ammonium salt bund (SJ 2338 6498)
A3 (Formerly AA2)	Propionic Acid storage (adsorption)	Agricultural products area (SJ 2311 6501)
A4 (Formerly AA4)	Formic Acid storage (adsorption)	Agricultural products area (SJ 2312 6501)
A5 (Formerly AA12)	Agricultural product storage (adsorption)	Agricultural products area (SJ 2311 6501)
A6 (Formerly AA13)	Agricultural product storage (adsorption)	Agricultural products area (SJ 2311 6501)
A7 (Formerly CA1)	Ammonium salts, Emulsions, and Formaldehyde derivatives scrubber vent emissions from reactors R1, R2, R3, R4, R5, and R6 (catalytic oxidiser)	Ammonium salts, Emulsions, and Formaldehyde derivatives (SJ 2337 6487)
A8 (Formerly CA2)	Formaldehyde derivatives scrubber vent emissions from reactors RV10, AR2, and AR1 (wet scrubber)	Formaldehyde derivatives (SJ 2337 6488)
A10 (Formerly FA2)	Fine powder manufacture (fabric filters)	Grinder House (SJ 2321 6500)
A11 (Formerly FA3)	Fine powder manufacture (wet scrubber)	Grinder House (SJ 2322 6499)
A12 (Formerly FA5)	Paraformaldehyde production (fabric filters)	Formaldehyde Plant (SJ 2323 6494)
A13 (Formerly FA8)	Methanol storage (no abatement)	Formaldehyde Plant (SJ 2332 6494)
A14 (Formerly FA9)	Methanol storage (no abatement)	Formaldehyde Plant (SJ 2333 6494)
A15 (Formerly FA12)	Tanker loading of formalin (wet scrubber)	Formaldehyde Plant (SJ 2336 6491)
A16 (Formerly FA15)	Combustion of silver process exit gas (hydrogen etc.) (no abatement)	Boiler House (SJ 2318 6497)
A17 (Formerly FA16)	Natural Gas fired boilers (x3) (no abatement)	Boiler House (SJ 2319 6496)
A18 (Formerly FA24)	Mixed oxide plant emission control system vent (catalytic oxidation)	Formaldehyde Plant (SJ 2321 6497)

Note 1: Refer to Application 'Synthite - MAP 5 EMISSION POINTS June 2003'

(ii) Table 2.2.2: Emission limits to air and monitoring, now reading as follows:

Table 2.2.2 Emission limits to air and monitoring				
Emission point reference	Parameter	Limit (including Reference Period) Note 1	Monitoring frequency	Monitoring method
A1 (A1)	Dimethylamine	5 mg/m ³	Quarterly	Gastec Tube
A3 (AA2)	No parameters	No limit	-	-
A4 (AA4)	No parameters	No limit	-	-
A5 (AA12)	No parameters	No limit	-	-
A6 (AA13)	No parameters	No limit	-	-
A7 (CA1)	Formaldehyde	2 mg/m ³	Quarterly	DNPH/HPLC
	Acrylamide	5 mg/m ³	Quarterly	MDHS 57
	Acrylic acid	5 mg/m ³	Quarterly	Gastec Tube
	Ammonia	10 mg/m ³	Quarterly	Gastec Tube
	Sulphur dioxide	50 mg/m ³	Quarterly	Gastec Tube
	n-Decane (measured as VOC toluene)	20 mg/m ³	Quarterly	VOC Meter
A8 (CA2)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
	Methanol (measured as VOC toluene)	40 mg/m ³	Quarterly	VOC Meter
	Dimethylamine	5 mg/m ³	Quarterly	Gastec Tube
A10 (FA2)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
	Methanol	1 mg/m ³	Quarterly	Gastec Tube
A11 (FA3)	Ammonia	10 mg/m ³	Quarterly	Gastec Tube
	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
	Methanol	1 mg/m ³	Quarterly	Gastec Tube
A12 (FA5)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
	Methanol	5 mg/m ³	Quarterly	Gastec Tube
A13 (FA8)	Methanol	0.5 kg/hr	Quarterly	Estimated ^{Note 2}
A14 (FA9)	Methanol	0.5 kg/hr	Quarterly	Estimated ^{Note 2}
A15 (FA12)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
	Methanol	5 mg/m ³	Quarterly	Gastec Tube
A16 (FA15)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
	Methanol (measured as VOC toluene)	40 mg/m ³	Quarterly	VOC Meter
	Nitrogen dioxide	50 mg/m ³	Quarterly	Gastec Tube
A17 (FA16)	Nitrogen dioxide	150 mg/m ³	Quarterly	Gastec Tube
A18 (FA24)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
A18 (FA24)	Methanol (measured as VOC toluene)	20 mg/m ³	Quarterly	VOC Meter

Note 1: See section 6 for reference conditions, limits are instantaneous

Note 2: Taken as average vent concentrations multiplied by the volume of expressed air and actual number of deliveries

(iii) Table S2: Reporting of monitoring data, now reading as follows:

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins
Ammonia mg/m ³	A7, A11	Quarterly	01/01/05
Acrylamide mg/m ³	A7	Quarterly	01/01/05
Acrylic acid mg/m ³	A7	Quarterly	01/01/05
Sulphur dioxide mg/m ³	A7	Quarterly	01/01/05
n-Decane (measured as VOC toluene) mg/m ³	A7	Quarterly	01/01/05
Formaldehyde mg/m ³	A7, A8, A10, A11, A12, A15, A16, A18	Quarterly	01/01/05
Methanol mg/m ³	A10, A11, A12, A15	Quarterly	01/01/05
Methanol kg/hr	A13, A14	Quarterly	01/01/05
Methanol (measured as VOC toluene) mg/m ³	A8, A16, A18	Quarterly	01/01/05
Dimethylamine mg/m ³	A1, A8	Quarterly	01/01/05
Nitrogen dioxide mg/m ³	A16, A17	Quarterly	01/01/05
pH	W1	Quarterly	01/01/05
Biological Oxygen Demand mg/L	W1	Quarterly	01/01/05
Total suspended solids mg/L	W1	Quarterly	01/01/05
Formaldehyde mg/L	W1	Quarterly	01/01/05
Ammonia (unionised as nitrogen) mg/L	W1	Quarterly	01/01/05
Temperature °C	W1	Quarterly	01/01/05
Volumetric flow rate m ³ /day	W1	Quarterly	01/01/05
pH	S1	Quarterly	01/01/05
Total suspended solids mg/L	S1	Quarterly	01/01/05
Formaldehyde mg/L	S1	Quarterly	01/01/05
Methanol mg/L	S1	Quarterly	01/01/05
Ammonia (unionised as nitrogen) mg/L	S1	Quarterly	01/01/05
Chemical oxygen demand mg/L	S1	Quarterly	01/01/05
Grease and oils mg/L	S1	Quarterly	01/01/05
Volumetric flow rate m ³ /day	S1	Quarterly	01/01/05
Temperature °C	S1	Quarterly	01/01/05
Groundwater level m	Borehole reference points B/H1, B/H8, B/H9, B/H10, B/HA, B/HB, SP4	Quarterly	01/01/05
Formaldehyde mg/L	Borehole reference points B/H1, B/H8, B/H9, B/H10, B/HA, B/HB, SP4	Quarterly	01/01/05
Formaldehyde mg/L	Sample culvert at culvert pump as identified on MAP6 Drainage Diagram	Quarterly	01/01/05
Formaldehyde mg/L	River Alyn sampled downstream at SJ 2363 6487	Quarterly	01/01/05
pH	River Alyn sampled downstream at SJ 2363 6487	Quarterly	01/01/05
Water usage	-	Annually	01/01/05

Energy usage	-	Annually	01/01/05
Waste disposal	-	Annually	01/01/05

Schedule 3 – conditions to be added

None