

Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2007

Mold Chemicals (Alyn Works)

Synthite Limited
Denbigh Road
Mold
Flintshire
CH7 1BT

Variation notice number
EA/EPR/BU2349IL/V002

Permit number
BU2349

Mold Chemicals (Alyn Works) Permit Number BU2349

Introductory note

This introductory note does not form a part of the permit

The following notice, which is issued pursuant to regulation 20 and Part 1 of Schedule 5 of the Environmental Permitting (England and Wales) Regulations S.I.2007 No. 3538 (the Regulations), gives notice of the variation of an environmental permit to operate a regulated facility/facilities

The change is introduction of a reactor/mixer – designated R6 – into the bunded Chemicals plant building to allow better management of product campaigns, and reduction of water use per batch of chemicals produced. This will allow a 15% increase in output of the formaldehyde derivatives business.

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions and Schedule 3 lists any conditions that have been added.

Status Log of the permit		
Detail	Date	Comment/Response Date
Application BU2349	Dated 03/08/03 Received 29/08/03	
Not Duly Made	Dated 12/09/03	Agreement sought over EOPRA v.1 profile
Duly made	Dated 03/10/03	
Response to Schedule 4 notice for information	Request dated 01/06/04	Response dated 22/06/04 Received 24/06/04
Response to request for information	Request dated 02/08/04	Response dated 22/06/04 Received 06/08/04
Additional information submitted in support of the Application	Dated 01/09/04	
Request to extend determination	Request dated 22/12/03	Request accepted 06/01/04 Received 08/01/04
Request to extend determination	Request dated 22/12/03	Request accepted 04/08/04
Permit determined	05/10/04	
Application for Variation EA/EPR/BU2349/L/V002 – Pas Ref: EP3039GC	24 September 2008	
Not Duly Made	Dated 16 October 2008.	Letter Sent
Additional information in response to letter Not Duly Made	24 October 2008 and 02 December 2008	
Duly Made	01 December 2008	Letter sent 16 December 2008.
Request to extend determination	24 February 2009	Confirmation received 27 Feb 2008
Variation EA/EPR/BU2349/L/V002 Determined	21 April 2009	

Other Part A installation permits relating to this installation		
Operator	Permit Number	Date of Issue
Dynea (UK) Limited	BU2322	05/10/04

End of Introductory Note

Notice of variation
Environmental Permitting
(England and Wales) Regulations 2007

Permit number
BU2349

Variation Notice Number
E/EP/BU2349IL/V002

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2007 (SI 2000 No 3538) varies the permit as set out below.

Synthite Limited ("the operator"),

of/ whose registered office/or principal office is

Alyn Works
Denbigh Road
Mold
Flintshire
CH7 1BT

company registration number 164640

holds a permit to operate part of a regulated facility at

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

and that permit is varied to the extent set out in Schedules 1 to 3 of this notice.

The notice shall take effect from 21 April 2009

Name	Date
Alison Soper 	21/04/09

Authorised on behalf of the Agency

Schedule 1 – conditions to be deleted

1. None

Schedule 2 – conditions to be amended

2. The following conditions are amended as follows

- i) Condition 1.4.1 table 1.4.1

Table 1.4.1: Improvement programme

Reference	Requirement	Due date
1-21	Conditions 1-21 are complete.	N/A
22	The operator shall forward a full commissioning report of the new reactor R6, to include the monitoring detailed in response to question 2.10.1 of the Application (in BU2349_Var_SecC2.)	30 June 2009
23	The operator shall provide an updated drainage diagram showing the interconnection with Parry's Ditch and the position of the proposed filter and meter, technical specifications of the filter and meter and details of the revised MCERTS programme of certification	30 June 2009.

- ii) Condition 2.1.1, Table 2.1.1 shall be amended to:

Table 2.1.1: Operating techniques

Description	Parts	Date Received
Application	The response to questions 2.1 and 2.2 and multi-product protocol given in pages 8-55 and appendices of the application	29/08/03
Schedule 4 Notice	The response to questions 2 and 3	24/06/04
Additional information		01/09/04
Application for Variation	The response to question 2, given in BU2349_VAR_SECC2	24 September 2008
Additional Information	All	Received 02 December 2008.

ii) Condition 2.2.1.2, Table 2.2.1 shall be amended to:

Table 2.2.1 : Emission points to air

Emission point reference or description	Source (Abatement)	Location of emission point (1)
A1 (Formerly A1)	Formaldehyde Derivatives Storage (Wet scrubber)	Ammonium Salt Bund (SJ 2338 6498)
A2 (Formerly AA1)	Storage of Ammonia Solution (wet scrubber)	Agricultural Products Area (SJ 2315 6500)
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, R6. (wet scrubber / Adsorption)	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 2336 6488)
A9 (Formerly CA3)	Formaldehyde Derivatives Storage Tank Vent (Adsorption)	Formaldehyde Derivatives (SJ 2338 6487)
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'.

iii) Condition 2.2.1.3, Table 2.2.2 shall be amended to:

Table 2.2.2 : Emission limits to air and monitoring

Emission point reference	Parameter	Limit (including Reference Period)¹	Monitoring frequency	Monitoring method
A1 (A1)	Dimethylamine	5 mg/m ³	Quarterly	Gastec Tube
A2 (AA1)	Ammonia	10 mg/m ³	Quarterly	Gastec Tube
A3 (AA2)	Propionic Acid (Measured as VOC Toluene)	10 mg/m ³	Quarterly	VOC Meter
A4 (AA4)	Formic Acid (Measured as VOC Toluene)	10 mg/m ³	Quarterly	VOC Meter
A5 (AA12)	Ammonia	10 mg/m ³	Quarterly	Gastec Tube
A5 (AA12)	Formic & Propionic Acid (Measured as VOC Toluene)	10 mg/m ³	Quarterly	VOC Meter
A6 (AA13)	Ammonia	10 mg/m ³	Quarterly	Gastec Tube
A6 (AA13)	Formic Acid (Measured as VOC Toluene)	10 mg/m ³	Quarterly	VOC Meter
A7 (CA1)	Formaldehyde	2 mg/m ³	Quarterly	DNPH/HPLC
A7 (CA1)	Acrylamide	5 mg/m ³	Quarterly	MDHS 57
A7 (CA1)	Acrylic Acid	5 mg/m ³	Quarterly	Gastec Tube
A7 (CA1)	Ammonia	10 mg/m ³	Quarterly	Gastec Tube
A7 (CA1)	Sulphur Dioxide	50 mg/m ³	Quarterly	Gastec Tube
A7 (CA1)	n – Decane (Measured as VOC Toluene)	20 mg/m ³	Quarterly	VOC Meter
A8 (CA2)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
A8 (CA2)	Methanol (Measured as VOC Toluene)	40 mg/m ³	Quarterly	VOC Meter
A8 (CA2)	Dimethylamine	5 mg/m ³	Quarterly	Gastec Tube
A9 (CA3)	n – Decane (Measured as VOC Toluene)	10 mg/m ³	Quarterly	VOC Meter
A10 (FA2)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
A10 (FA2)	Methanol	1 mg/m ³	Quarterly	Gastec Tube
A11 (FA3)	Ammonia	10 mg/m ³	Quarterly	Gastec Tube
A11 (FA3)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
A11 (FA3)	Methanol	1 mg/m ³	Quarterly	Gastec Tube
A12 (FA5)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
A12 (FA5)	Methanol	5 mg/m ³	Quarterly	Gastec Tube
A13 (FA8)	Methanol	0.5 kg/hr	Quarterly	Estimated (2)
A14 (FA9)	Methanol	0.5 kg/hr	Quarterly	Estimated (2)
A15 (FA12)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
A15 (FA12)	Methanol	5 mg/m ³	Quarterly	Gastec
A16 (FA15)	Formaldehyde	5 mg/m ³	Quarterly	DNPH/HPLC
A16 (FA15)	Methanol (Measured as VOC Toluene)	40 mg/m ³	Quarterly	VOC Meter
A16 (FA15)	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 concentration multiplied by the volume of expressed air and actual number of deliveries.

iv) Conditions 4.1.2.1, 4.2.2.2, 4.2.2.3 and 4.2.4.4 shall be amended in so far as Schedule 2, Table S2 shall be amended to:

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins (1)
Ammonia mg/m ³	A2, A5 A6, A7, A11	Quarterly	01/01/05
Propionic Acid (Measured as VOC Toluene) mg/m ³	A3	Quarterly	01/01/05
Formic Acid (Measured as VOC Toluene) mg/m ³	A4, A6	Quarterly	01/01/05
Formic & Propionic Acid (Measured as VOC Toluene) mg/m ³	A5	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, A9	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	
Energy usage		Annually	
Waste disposal		Annually	

Schedule 3 – conditions to be added

3. None.

ENVIRONMENT AGENCY WALES

SCHEME OF DELEGATION

NOMINATION TO ACT UP DURING ABSENCE

Name of employee to be absent	Ann Weedy
Job Title/Role to be filled in absence	PPC Compliance Team Leader
Area and Department	Northern Area
Absence type/Period of absence for which acting up powers apply*	7 th -13 th April 2009 & 15 th April to 01 st May 2009

Name of employee(s) nominated to act up in absence**	Alison Soper
Job Title(s)	PPC Compliance Officer
Area and Department	Environment Management East Northern Area

Please indicate which systems are to be covered ***

Financial SoD

☒

Non Financial SoD

☒

E-cards

☒

Restrictions (if any) on types of work authorised ****	
Signed	
Dated	6 April 2009

Notes

* Examples

- Any absence in excess of one day until either a change of job by either of the above named or 12 months, whichever is the sooner.

- 21 to 28 July 200X (inclusive).

** Cannot appoint more than one person to act up at the same time.

*** place X in the relevant box(es)

**** To be kept to the absolute minimum – most can be by management guidance given separately.

