Notice of variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Prefere Resins UK Limited

Thermoset Resins

Newton Aycliffe Industrial Park
Newton Aycliffe
County Durham
DL5 6UE

Variation application number

EPR/XP3635ET/V003

Permit number

EPR/XP3635ET

Thermoset Resins
Permit number EPR/XP3635ET

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.

The permit has been reviewed against the requirements of the Medium Combustion Plant Directive (MCPD) for 2025 and relevant conditions and monitoring requirements have been added.

The installation includes a 9MWth natural gas-fired boiler which is an existing medium combustion plant (MCP).

The schedules specify the changes made to the original permit.

We consider that in reaching our decision to vary the permit we have taken into account all relevant considerations and legal requirements and that the permit will ensure at least an equivalent level of protection to human health and the quality of the environment.

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 EPR/DP3638LS/A001	Duly Made 30/03/06	
Additional information received	22/09/06 25/09/06 30/10/06 01/11/06 06/11/06	
Permit determined EPR/DP3638LS/A001	21/12/06	
Transfer determined EPR/JP3630UB	27/02/07	Permit transferred from Dynea Aycliffe Limited to Dynea UK Limited.
Application for variation EPR/JP3630UB/V002	Duly Made 2105/08	
Additional information received	11/06/08	
Variation determined EPR/JP3630UB/V002	24/07/08	
Application for variation EPR/JP3630UB/V003	Duly Made 11/10/10	

Status log of the permit		
Description	**Date**	**Comments**
Schedule 5	14/10/10	Received 15/11/10
Final Schedule 5	26/10/10	Received 25/11/10
Additional information received	06/12/10	Phenol recovery controls, effluent discharges and MCERTS issues.
Variation determined EPR/JP3630UB/V003	15/12/10	
Application EPR/XP3635ET/T001 (full transfer of permit EPR/JP3630UB)	Duly made 22/11/13	Application to transfer the permit in full to PRC (UK) Limited.
Transfer determined EPR/XP3635ET	28/11/13	Full transfer of permit complete.
Notified of change of company name	18/05/15	Name changed to Prefere Resins UK Limited.
Variation issued EPR/XP3635ET/V002	21/05/15	Varied permit issued to Prefere Resins UK Limited.
Application EPR/XP3635ET/V003 (variation)	Regulation 61 Notice response received 14/06/2024	Environment Agency initiated variation following Medium Combustion Plant permit review.
Variation determined EPR/XP3635ET	02/10/24	Notice of variation issued

End of introductory note

Notice of variation

The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

Permit number

EPR/XP3635ET

Issued to

Prefere Resins UK Limited ("the operator")

whose registered office is

Newton Aycliffe Industrial Park
Newton Aycliffe
County Durham
DL5 6UE

company registration number 08632551

to operate a regulated facility at

Thermoset Resins
Newton Aycliffe Industrial Park
Newton Aycliffe
County Durham
DL5 6UE

to the extent set out in the schedules.

The notice shall take effect from 02/10/2024.

Name	Date
Beccy Brough	**02/10/2024**

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

The following conditions are amended as detailed, following an Environment Agency initiated variation:

- Table S1.1, as referenced by condition 2.1.1, is amended with the addition of activity reference numbers and details of MCP:

Table S1.1 activities			
Activity Reference	**Activity listed in Schedule 1 of the PPC Regulations**	**Description of specified activity**	**Limits of specified activity**
AR1	Section 4.1, Part A(1)(a)(viii) Producing organic chemicals such as plastic materials, such as polymers, synthetic fibres and cellulose-based fibres	Polymerisation of organic chemicals to produce resins.	Receipt of raw materials, heating, chemical reactions, evaporating, mixing and blending within five enclosed reactor vessels (R1-R5) with either subsequent pipeline transfer to customers' storage vessels or storage and despatch. Further treatment of resins to manufacture secondary products involving cooling, heating and mixing and blending with additives.
	Directly Associated Activity		
AR2	Directly Associated Activity	Phenol recovery	Distillation of phenol-rich waste waters to generate phenol for reuse
AR3	Directly Associated Activity	Operation of effluent treatment plant	Tankage and hold-up to treat liquid process wastes including facilities for pH control
AR4	Directly Associated Activity	Odour and organic carbon atmospheric abatement	A2 and A3 wet scrubbers plus associated reagent facilities
AR5	Steam supply from operation of a Schedule 25A Medium Combustion Plant	9 MWth natural gas-fired boiler with gas oil back-up fuel, which is an existing MCP	From receipt of fuel to release of products of combustion to air.
AR6	Directly Associated Activity	Power generation	Diesel stand-by generator

- Table S3.1, as referenced by condition 2.3.2 is amended to include limits on fuel sulphur content

Table S3.1 Raw materials and fuels	
Raw Materials and fuel description	**Specification**
Gas oil or equivalent substitute to be agreed in writing with the Environment Agency	Not exceeding 0.1% w/w sulphur content

- Table S4.1, as referenced by conditions 3.1 and 3.6.1 is amended to update emission limit values and monitoring requirements for MCP (Emission Point A70):

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 [Point A1 on site plan in Schedule 2]	No parameters set.	Reactors 1-5 condensers and vacuum pump vents in an emergency situation only. Materials likely to be emitted under emergency conditions: Phenol, Formaldehyde, Particulates and VOCs.	No limit set	-	-	-
A2 [Point A2 on site plan in schedule 2]	Phenol	Novolac cooling belt, Novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	5 mg/m3	1 hour	6 monthly	BS EN 13649
A2 [Point A2 on site plan in schedule 2]	Formaldehyde	Novolac cooling belts (2 off), Novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	2 mg/m3	1 hour	6 monthly	US EPA method 316
A2 [Point A2 on site plan in schedule 2]	Total organic carbon	Novolac cooling belts (2 off), Novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	50mg/m3	1 hour	6 monthly	BS EN 13526
A2 [Point A2 on site plan in schedule 2]	Particulates	Novolac cooling belts (2 off), Novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	5 mg/m3	1 hour	6 monthly	BS EN 13284-1

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A2 [Point A2 on site plan in schedule 2]	Odour	Novolac cooling belts (2 off), Novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	(1)	(2)	6 monthly	BS EN 13725
A3 [Point A3 on site plan in schedule 2]	Phenol	Reactor 1-5 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	10 mg/m3	1 hour	6 monthly	BS EN 13649
A3 [Point A3 on site plan in schedule 2]	Formaldehyde	Reactor 1-5 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	5mg/m3	1 hour	6 monthly	US EPA method 316
A3 [Point A3 on site plan in schedule 2]	Total organic carbon	Reactor 1-5 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	50 mg/m3	1 hour	6 monthly	BS EN 13526
A3 [Point A3 on site plan in schedule 2]	Particulates	Reactor 1-5 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	5 mg/m3	1 hour	6 monthly	BS EN 13284-1
A4 [Point A4 on site plan in schedule 2]	No parameters set	Foundry blender vent	No limit set	-	-	-
A8 [Point A8 on site plan in schedule 2]	No parameters set	Reactor R2 solids hopper and liquid additions tank vent	No limit set	-	-	-
A9	No parameters set	R3/R4 solids hoppers and R4 liquid additions tank vent	No limit set	-	-	-
A10	No parameters set	R5 solids charging hopper	No limit set	-	-	-
A12	No parameters set	R1 resin transfer / blow over vessel vent	No limit set	-	-	-
A47	No parameters set	Urea formaldehyde resin storage tank vent T101	No limit set	-	-	-
A48	No parameters set	Methanol storage tank vent T102	No limit set	-	-	-
A49	No parameters set	Formaldehyde solution storage tank vent T103	No limit set	-	-	-

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A50	No parameters set	Phenol formaldehyde resin storage tank vent T201	No limit set	-	-	Permanent access for sampling / monitoring is not required
A51	No parameters set	Catchment vessel – emergency relief CV1	No limit set	-	-	Permanent access for sampling / monitoring is not required
A 52	No parameters set	Phenol Formaldehyde resin Storage tank vent T251	No limit set			
A53	No parameters set	Phenol distillate holding storage tank T253	No limit set			
A54	No parameters set	Phenol storage tank vent T254	No limit set	-	-	-
A55	No parameters set	Flame retardant storage tank	No limit set	-	-	-
A56	No parameters set	Furfuryl alcohol storage tank vent T256	No limit set	-	-	-
A57	No parameters set	Phenol Formaldehyde storage tanl vent T257	No limit set	-	-	-
A58	No parameters set	Recovered phenol storage tank vent T258	No limit set	-	-	-
A59	No parameters set	Product tank storage vent T259	No limit set	-	-	-
A60-69	No parameters set	Product storage tank vents T260/T263/T301-308	No limit set	-	-	-
A70	Oxides of Nitrogen (NO and NO_2 expressed as NO_2)	Boiler operated on natural gas or gas oil	200 mg/m^3 (5)	Periodic	Every 3 years from date of acceptance of first monitoring measurements under condition 3.6.5	MCERTS BS EN 14792
	Carbon Monoxide		No limit set (5)	Periodic		MCERTS BS EN 15058

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A71	No parameters set	2-Furfural storage tank T403	No limit set	-	-	-
A72	No parameters set	Storage tank vent T402	No limit set	-	-	Permanent access for sampling / monitoring is not required
A73	No parameters set	Storage tank vent T404	No limit set	-	-	Permanent access for sampling / monitoring is not required
A74	No parameters set	Phenol formaldehyde foam Storage tank vent T501	No limit set	-	-	-
A75	No parameters set	Phenol recovery system feed storage T903	No limit set	-	-	-
A76	No parameters set	Phenol recovery system vent	No limit set	-	-	-
A77	No parameters set	Furcarb mixing T405 and storage tank T404/402	No limit set	-	-	-
A79 [Point A79 on site plan in Schedule 2]	Particulates	Novolac cooling belts discharge , Floveyor silo discharge bag fill system local extraction	(3)	1 hour	6 monthly (4)	BS EN 13284-1
A81	No parameters set	Foam resin storage tank T502	No limit set	-	-	-
A82	No parameters set	Diesel standby generator	No limit set	-	-	-

Notes

(1) Limit as stated in approved Odour Management Plan. Unit is Odour unit per cubic metre (oue/m3)

(2) Sampling reference as stated in approved Odour Management Plan.

(3) Emission Limit Value to be agreed in writing by the Environment Agency after operator commissioning monitoring submission until 01/07/12.

(4) Frequency as stated until 01/07/12. Subsequently as agreed in writing by the Environment Agency.

(5) Monitoring requirements are defined at a temperature of 273.15 K, a pressure of 101.3 kPa and after correction for the water vapour content of the waste gases at a standardised O_2 content of 6% for solid fuels, 15% for engines and gas turbines and 3% all other MCPs

- Table S5.1 as referenced by condition 4.2.2 is amended as follows:

Table S5.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air	A2 and A3	Every 12 months	01/01/10
Emissions to air	A79	Every 12 months	01/01/11
Emissions to air (MCP) Parameters as required by condition 3.6.1	A70	Every 3 years from date of acceptance of first monitoring measurements under condition 3.6.5	1 January
Emissions to sewer	S1	Every 12 months	01/01/10

- Table S5.4, as referenced by condition 4.2.1 and 4.2.2 is amended to reference updated reporting forms:

Table S5.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Point source emissions to air	Emissions to Air Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Sewer	Form sewer 1	16/11/06
Other performance indicators	Form performance 1	16/11/06

- Schedule 7, as referenced by condition 4.4.1 is amended to include additional interpretation as follows:

  "compliance date" means 01/01/2025 for existing MCPs with net rated thermal input of greater than 5MWth or 01/01/2030 for existing MCPs with a net rated thermal input of less than or equal to 5MWth.

  "existing medium combustion plant" means an MCP in operation before 20 December 2018.

  "medium combustion plant" or "MCP" means a combustion plant with a net rated thermal input equal to or greater than 1 MW but less than 50 MW.

"Medium Combustion Plant Directive" or "MCPD" means Directive 2015/2193/EU of the European Parliament and of the Council on the limitation of emissions of certain pollutants into the air from medium combustion plants, into the air from medium combustion plants, as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

"operating hours" means the time, expressed in hours, during which a combustion plant is operating and discharging emissions into the air, excluding start-up and shut-down periods.

Schedule 3 – conditions to be added

The following conditions are added following an Environment Agency initiated variation:

- 2.3.3 For the following activities referenced in Schedule 1 Table S1.1 (AR5):
    a. the operator must keep periods of start-up and shut down of the combustion plant as short as possible.
    b. there shall be no persistent emission of 'dark smoke' as defined in section 3(1) of the Clean Air Act 1993.
- 3.6.5 For the following activities referenced in Schedule 1 Table S1.1 (AR5): For existing MCP Monitoring measurements shall be carried out within four months of the issue date of this notice.
- 3.6.6 Monitoring of MCP shall not take place during periods of start-up or shut down.
- 4.1.4 The operator shall maintain a record of the type and quantity of fuel used and the total annual operating hours for each MCP.
- 4.2.2 The operator shall notify the Environment Agency, as soon as is practicable, in writing of any change of MCP at the specified location.

Notice of variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Prefere Resins UK Limited

Thermoset Resins
Newton Aycliffe
Aycliffe Industrial Park
Heighington Lane
Newton Aycliffe
County Durham
DL5 6UE

Variation application number

EPR/XP3635ET/V002

Permit number

EPR/XP3635ET

Thermoset Resins
Permit number EPR/XP3635ET

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 variation is undertaken at the operators request to record a change of company name from PRC (UK) Limited to Prefere Resins UK Limited.

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 EPR/DP3638LS/A001	Duly made 30/03/06	
Additional information received	22/09/06, 25/09/06, 30/10/06, 01/11/06, 06/11/06	
Permit determined EPR/DP3638LS	21/12/06	
Transfer determined EPR/JP3630UB	27/02/07	Permit transferred from Dynea Aycliffe Limited to Dynea UK Limited.
Application for variation EPR/JP3630UB/V002 (SP3036XZ)	Duly Made 21/05/08	
Additional information received	11/06/08	
Variation determined EPR/JP3630UB/V002	24/07/08	
Application for variation EPR/JP3630UB/V003	Duly Made 11/10/10	
Schedule 5	14/10/10	Received 15/11/2010.
Final Schedule 5	26/10/10	Received 25/11/2010.
Additional information received	06/12/10	Phenol recovery controls, effluent discharges and MCerts issues.
Variation determined EPR/JP3630UB/V003	15/12/10	
Application EPR/XP3635ET/T001 (full transfer of permit EPR/JP3630UB)	Duly made 22/11/13	Application to transfer the permit in full to PRC (UK) Limited.
Transfer determined EPR/XP3635ET	28/11/13	Full transfer of permit complete.
Notified of change of company name	18/05/15	Name changed to Prefere Resins UK Limited.
Variation issued EPR/XP3635ET/V002	21/05/15	Varied permit issued to Prefere Resins UK Limited.

End of introductory note

Notice of variation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies

permit number
EPR/XP3635ET

issued to
Prefere Resins UK Limited ("the operator")

whose registered office is

PRC (UK) Limited
Heighington Lane
Aycliffe Industrial Park
Newton Aycliffe
County Durham
DL5 6UE

company registration number **08632551**

to operate a regulated facility at

Thermoset Resins
Newton Aycliffe
Aycliffe Industrial Park
Heighington Lane
Newton Aycliffe
County Durham
DL5 6UE

as follows

on the permit page the name of the operator is changed from PRC (UK) Limited to Prefere Resins UK Limited.

The notice shall take effect from 21/05/2015

Name	Date
Damien Matthias	**21/05/2015**

Authorised on behalf of the Environment Agency

Notice of transfer with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

PRC (UK) Limited

Thermoset Resins, Newton Aycliffe
Aycliffe Industrial Park
Heighington Lane
Newton Aycliffe
County Durham
DL5 6UE

Transfer application number

EPR/XP3635ET/T001

Permit number

EPR/XP3635ET

Thermoset Resins, Newton Aycliffe
Permit number EPR/XP3635ET

Introductory note

This introductory note does not form a part of the notice

The following notice gives notice of the transfer of an environmental permit to a new operator (the transferee). 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 EPR/DP3638LS/A001	Duly made 30/03/2006	
Additional information received	22/09/2006, 25/09/2006, 30/10/2006, 01/11/2006, 06/11/2006	
Permit determined EPR/DP3638LS	21/12/2006	
Transfer determined EPR/JP3630UB	27/02/2007	Permit transferred from Dynea Aycliffe Ltd to Dynea UK Limited.
Application for variation EPR/JP3630UB/V002 (SP3036XZ)	Duly Made 21/05/2008	
Additional information received	11/06/2008	
Variation determined EPR/JP3630UB/V002	24/07/2008	
Application for variation EPR/JP3630UB/V003	Duly Made 11/10/2010	
Schedule 5	14/10/2010	Received 15/11/2010.
Final Schedule 5	26/10/2010	Received 25/11/2010.
Additional information received	06/12/2010	Phenol recovery controls, effluent discharges and MCerts issues.
Variation determined EPR/JP3630UB/V003	15/12/2010	
Application EPR/XP3635ET/T001 (full transfer of permit EPR/JP3630UB)	Duly made 22/11/2013	Application to transfer the permit in full to PRC (UK) Limited.
Transfer determined EPR/XP3635ET	28/11/2013	Full transfer of permit complete.

End of introductory note

Notice of transfer

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 21 of the Environmental Permitting (England and Wales) Regulations 2010 transfers

permit number

EPR/XP3635ET

to

PRC (UK) Limited ("the operator")

whose registered office is

Aycliffe Industrial Park
Heighington Lane
Newton Aycliffe
County Durham
DL5 6UE

company registration number 08632551

to operate a regulated facility at

Thermoset Resins, Newton Aycliffe
Aycliffe Industrial Park
Heighington Lane
Newton Aycliffe
County Durham
DL5 6UE

from Dynea UK Limited

This notice shall take effect from 28/11/2013.

The number of the new permit granted to PRC (UK) Limited is EPR/XP3635ET.

Name	Date
A.J. Nixon	**28 November 2013**

Authorised on behalf of the Environment Agency.

Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Thermoset Resins, Newton Aycliffe

Dynea UK Limited
Heighington Lane
Aycliffe Industrial Park
County Durham
DL5 6UE

Variation notice number
EPR/JP3630UB/V003

Permit number

EPR/JP3630UB

Thermoset Resins, Newton Aycliffe
Permit number EPR/JP3630UB

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 2010 S.I.2010 No. 675 (the Regulations), gives notice of the variation of an environmental permit to operate a regulated facility..

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions. Schedule 3 lists any conditions that have been added and Schedule 4 shows any changes to the plan.

The variation covers the following changes:

- Modifications to existing reactor R5 and addition of a second cooling belt to allow Novolac resin increased production from 7,500 tonnes/year to 11,500 tonnes /year and switching some other resin production to Dynea Mold facility. The overall installation production capacity of 30,000 tonnes/year is not increased
- Introduction of two new process raw materials. The potential odour impact linked to these
- materials have been assessed and the current A2 atmospheric emission scrubber has been upgraded for odour control. In addition an odour management plan has been formalised by the operator.
- Particulate abatement is to be upgraded linked to dust emission from new cooling belt and big bag fill system (discharge via upgraded existing A79 atmospheric emission point).
- Phenol recovery facility 40 % capacity increase via various de-bottling actions to cover additional distillate flows from the extra Novolac production.

In general the environmental impact risk assessment linked to the variation changes has concluded the changes add no significant environmental risk. Whilst there is the potential for an odour hazard linked to atmospheric emission point A2 the usage of new odour scrubber abatement combined with an odour management plan are accepted as measures to minimise odour nuisance.

The variation includes one Pre-operational Condition and three Improvement Programme requirements for the provision of evidence to substantiate that installation environmental impact is not significant.

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

Status Log of the permit		
Detail	**Date**	**Response Date**
Application DP3638LS	Duly made 30/03/06	
Additional Information Received		22/09/06, 25/09/2006,30/10/06, 1/11/2006, 6/11/06
Permit determined	21/12/06	

Status Log of the permit		
Detail	**Date**	**Response Date**
Permit transferred from Dynea Aycliffe Ltd to Dynea UK Limited. Permit renumbered JP3630UB (EPR/JP3630UB)	27/02/07	
Application for variation SP3036XZ (EPR/JP3630UB/V002)	Duly made 21/05/08	
Additional information received		11/06/08
Permit SP3036XZ determined (EPR/JP3630UB/V002)	24/07/08	
Application for variation EPR/JP3630UB/V003	Duly made 11/10/10	
Schedule 5 dated 14/10/10		15/11/10
Final schedule 5 dated 26/10/10		25/11/10
Additional information linked to phenol recovery controls, effluent discharges and Mcerts issues.		06/12/10
Variation EPR/JP3630UB/V003 determined	15/12/10	

End of Introductory Note

Notice of variation

Environmental Permitting
(England and Wales) Regulations 2010

Permit number
EPR/JP3630UB

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No 675) varies the permit as set out below.

Dynea UK Limited ("the operator").

whose registered office is
Alyn Works
Denbigh Road
Mold
Flintshire
CH7 1BF

company registration number **1443108**

holds a permit to operate a regulated facility at
Aycliffe Industrial Park
Newton Aycliffe
County Durham
DL5 6UE

and that permit is varied to the extent set out in Schedules 1 to 4 of this notice.

The notice shall take effect from 15/12/2010

Name		Date
	[redacted]	15th December 2010

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

No conditions are to be deleted.

Schedule 2 – conditions to be amended

The following conditions are amended as follows

- Table S1.1 Activities as referenced in condition 2.1.1 is amended with the addition of a directly associated activity as follows:

Table S1.1 activities		
Activity listed in Schedule 1 of the PPC Regulations	**Description of specified activity**	**Limits of specified activity**
Section 4.1. Part A(1)(a)(viii) Producing organic chemicals such as plastic materials, such as polymers, synthetic fibres and cellulose-based fibres	Polymerisation of organic chemicals to produce resins.	Receipt of raw materials, heating, chemical reactions, evaporating, mixing and blending within five enclosed reactor vessels (R1-R5) with either subsequent pipeline transfer to customers' storage vessels or storage and despatch. Further treatment of resins to manufacture secondary products involving cooling, heating and mixing and blending with additives.
Directly Associated Activity		
Directly Associated Activity	Phenol recovery	Distillation of phenol-rich waste waters to generate phenol for reuse
Directly Associated Activity	Operation of effluent treatment plant	Tankage and hold-up to treat liquid process wastes including facilities for pH control
Directly Associated Activity	Odour and organic carbon atmospheric abatement	A2 and A3 wet scrubbers plus associated reagent facilities
Directly Associated Activity	Steam generation	Single 9 MWth (input) gas-fired boiler with diesel stand-by generator

- Table S1.2 Operating Techniques as referenced in condition 2.3.1 is amended as follows:

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application EPR/JP3630UB/V003 supplementary information Appendix 2	Section 1 Introduction and Section 2 Techniques for Pollution Control	29/09/10
Schedule 5 dated 14/10/10 response	Responses to questions 1,2,3,4,5 and 6	15/11/10
Schedule 5 dated 26/10/10 response	Responses to questions 3 and 4.	25/11/10
Operating techniques to support BAT case for phenol recovery plant.	Responses covering phenol recovery facility process controls and Mcerts for effluent sampling	06/12/10

- Condition 3.4.1 relating to Odour is amended as follows:

3.4.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

- Table S4.1 Point source emissions to air as referenced conditions 3.1. and 3.6.1 is amended with changes linked to emission point A2 , A3 and A79 as follows:

Table S4.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 on site plan in Schedule 2]	No parameters set.	Reactors 1-5 condensers and vacuum pump vents in an emergency situation only. Materials likely to be emitted under emergency conditions: Phenol, Formaldehyde, Particulates and VOCs.	No limit set	-	-	-
A2 [Point A2 on site plan in schedule 2]	Phenol	Novolac cooling belt, Novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	5 mg/m3	1 hour	6 monthly	BS EN 13649
A2 [Point A2 on site plan in schedule 2]	Formaldehyde	Novolac cooling belts (2 off), Novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	2 mg/m3	1 hour	6 monthly	US EPA method 316
A2 [Point A2 on site plan in schedule 2]	Total organic carbon	Novolac cooling belts (2 off), Novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	50mg/m3	1 hour	6 monthly	BS EN 13526

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A2 [Point A2 on site plan in schedule 2]	Particulates	Novolac cooling belts (2 off), Novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	5 mg/m3	1 hour	6 monthly	BS EN 13284-1
A2 [Point A2 on site plan in schedule 2]	Odour	Novolac cooling belts (2 off), Novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	(1)	(2)	6 monthly	BS EN 13725
A3 [Point A3 on site plan in schedule 2]	Phenol	Reactor 1-5 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	10 mg/m3	1 hour	6 monthly	BS EN 13649
A3 [Point A3 on site plan in schedule 2]	Formaldehyde	Reactor 1-5 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	5mg/m3	1 hour	6 monthly	US EPA method 316
A3 [Point A3 on site plan in schedule 2]	Total organic carbon	Reactor 1-5 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	50 mg/m3	1 hour	6 monthly	BS EN 13526
A3 [Point A3 on site plan in schedule 2]	Particulates	Reactor 1-5 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	5 mg/m3	1 hour	6 monthly	BS EN 13284-1
A4 [Point A4 on site plan in schedule 2]	No parameters set	Foundry blender vent	No limit set	-	-	-
A8 [Point A8 on site plan in schedule 2]	No parameters set	Reactor R2 solids hopper and liquid additions tank vent	No limit set	-	-	-
A9	No parameters set	R3/R4 solids hoppers and R4 liquid additions tank vent	No limit set	-	-	-

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A10	No parameters set	R5 solids charging hopper	No limit set	-	-	-
A12	No parameters set	R1 resin transfer / blow over vessel vent	No limit set	-	-	-
A47	No parameters set	Urea formaldehyde resin storage tank vent T101	No limit set	-	-	-
A48	No parameters set	Methanol storage tank vent T102	No limit set	-	-	-
A49	No parameters set	Formaldehyde solution storage tank vent T103	No limit set	-	-	-
A50	No parameters set	Phenol formaldehyde resin storage tank vent T201	No limit set	-	-	Permanent access for sampling / monitoring is not required
A51	No parameters set	Catchment vessel – emergency relief CV1	No limit set	-	-	Permanent access for sampling / monitoring is not required
A 52	No parameters set	Phenol Formaldehyde resin Storage tank vent T251	No limit set			
A53	No parameters set	Phenol distillate holding storage tank T253	No limit set			
A54	No parameters set	Phenol storage tank vent T254	No limit set	-	-	-
A55	No parameters set	Flame retardant storage tank	No limit set	-	-	-
A56	No parameters set	Furfuryl alcohol storage tank vent T256	No limit set	-	-	-

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A57	No parameters set	Phenol Formaldehyde storage tanl vent T257	No limit set	-	-	-
A58	No parameters set	Recovered phenol storage tank vent T258	No limit set	-	-	-
A59	No parameters set	Product tank storage vent T259	No limit set	-	-	-
A60-69	No parameters set	Product storage tank vents T260/T263/T301-308	No limit set	-	-	-
A70	No parameters set	Boiler stack vent	No limit set	-	-	Permanent access for sampling / monitoring is not required
A71	No parameters set	2-Furfural storage tank T403	No limit set	-	-	-
A72	No parameters set	Stroage tank vent T402	No limit set	-	-	Permanent access for sampling / monitoring is not required
A73	No parameters set	Storage tank vent T404	No limit set	-	-	Permanent access for sampling / monitoring is not required
A74	No parameters set	Phenol formaldehyde foam Storage tank vent T501	No limit set	-	-	-
A75	No parameters set	Phenol recovery system feed storage T903	No limit set	-	-	-
A76	No parameters set	Phenol recovery system vent	No limit set	-	-	-

Table S4.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A77	No parameters set	Furcarb mixing T405 and storage tank T404/402	No limit set	-	-	-
A79 [Point A79 on site plan in Schedule 2]	Particulates	Novolac cooling belts discharge , Floveyor silo discharge bag fill system local extraction	(3)	1 hour	6 monthly (4)	BS EN 13284-1
A81	No parameters set	Foam resin storage tank T502	No limit set	-	-	-

Notes

(1) Limit as stated in approved Odour Management Plan. Unit is Odour unit per cubic metre (oue/m3)

(2) Sampling reference as stated in approved Odour Management Plan.

(3) Emission Limit Value to be agreed in writing by the Environment Agency after operator commissioning monitoring submission until 01/07/12.

(4) Frequency as stated until 01/07/12. Subsequently as agreed in writing by the Environment Agency.

- The table S4.3 as referenced in permit condition 3.6.1 is amended as follows:

Table S4.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements						
Emission point ref. & location	**Parameter**	**Source**	**Limit (incl. Unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
S1 (on site plan in schedule 2) (emission to Northumbrian Water, Aycliffe Sewage Treatment Works)	Phenol	Effluent collection pit (including phenol recovery plant)	1200 mg/l	Daily composite sample	Daily (1)	ISO 6439:1990
S1 (on site plan in schedule 2) (emission to Northumbrian Water, Aycliffe Sewage Treatment Works)	Formaldehyde	Effluent collection pit (including phenol recovery plant)	2000mg/l	Daily composite sample	Daily (1)	Hach Lange test and Photospectrometer

Note

(1) Frequency as stated until 01/07/12. Subsequently as agreed in writing by the Environment Agency.

- Table S5.1 as referenced in condition 4.2.2 is amended as follows:

Table S 5.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Emissions to air	A2 and A3	Every 12 months	01/01/10
Emissions to air	A79	Every 12 months	01/01/11
Emissions to sewer	S1	Every 12 months	01/01/10

Schedule 3 – conditions to be added

The following conditions are added to the permit

- Table 1.3 Improvement Programme is amended with addition of three new requirements as follows:

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IP10	The Operator shall submit a written report to the Environment Agency on the commissioning of the installation. The report shall summarise the environmental performance and raw material and water usage of the plant as installed against the design parameters set out in the Application. This includes but is not limited to • Atmospheric emission monitoring from A2. A3 and A79 • Odour monitoring from A2 and A3 plus initial review of performance of abatement systems • Effluent monitoring from S1 discharge plus initial review of performance on upgraded phenol recovery facilities. • Noise commissioning data The report shall also include a review of the performance of the facility against the application estimates including for atmospheric emissions the H1 screening conclusion that the installation environmental impact is insignificant. This assessment shall include beyond the scope of the application H1 a review of installation effluent discharge chlorine process contribution. The report shall further include improvements implemented during commissioning for achieving and demonstrating compliance with permit conditions.	Within 4 months of wet commissioning commencement
IP11	The Operator shall, having regard to Environment Agency Guidance Note IPPC H4 Odour Part 2 – Assessment and Control provide an odour modelling report for A2 and A3 atmospheric emissions utilising actual stack odour monitoring data. The purpose of the report is to substantiate against H4 guidance and the operator's Odour Management Plan that minimisation of potentially odorous emissions beyond the installation boundary has been achieved. The report shall be utilised to set odour emission limit value for A2 for odour control beyond installation boundary. The report shall summarise conclusions and outline any further actions and improvements as appropriate including resultant changes to the Odour Management Plan. The Environment Agency shall provide written approval of the odour emission limit value.	Within 6 months of wet commissioning commencement
IP12	A written report shall be submitted to the Environment Agency detailing indicative BAT measures to minimise phenol and formaldehyde emissions to sewer from S1 discharge This should include but not be limited to: • Formaldehyde emissions from phenol recovery plant outfall to sewer • Other waste streams containing phenol and formaldehyde The report shall have regard to Environment Agency sector guidance S4.02 Speciality Organic Chemicals and the principles of process control, recovery and reduction. The report shall conclude with improvement plans and timescales.	30/06/11

- Condition 2.6.1 is added as follows:

  2.6.1 The operations specified in schedule 1 table S1.4B shall not commence until the measures specified in that table have been completed

- Table S1.4B Pre-operational measure as referenced in condition 2.6.1 is added as follows:

Table S1.4B Pre-operational measures for future development

Reference	Operation	Pre-operational measures
1	Expansion of Novolac production utilising two new synthetic rubber raw materials	At least 14 days before wet commissioning phase for these facilities the operator shall submit a report demonstrating that the necessary infrastructure and operating procedures are in place as detailed in operator application EPR/JP3630UB/V003 for the Installation to allow environmental compliance with this permit. This report shall include but not be limited to : • Process equipment, atmospheric abatement systems , phenol recovery facility improvements , bleach neutralisation and sampling procedures in line with indicative BAT measures as outlined in application • Bunding to ensure fugitive emission control for materials linked to this variation. • Controls, procedures, monitoring techniques and training to allow odour management plan to be put in practice are in place. • Controls linked to fugitive, accident management and noise as detailed in the application are in place. No operations shall commence until this report has been approved by the Environment Agency.

- Odour Condition 3.4.2 is added as follows:

  3.4.2 The operator shall:

  (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan;

  (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

Schedule 4 – amended plan

None.

END OF NOTICE.

ENVIRONMENT AGENCY

Permit with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

Thermoset Resins, Newton Aycliffe

Dynea UK Limited
Heighington Lane
Aycliffe Industrial Park
Newton Aycliffe
County Durham
DL5 6UE

Permit number

JP3630UB

Thermoset Resins, Newton Aycliffe
Permit Number JP3630UB

Introductory note

This introductory note does not form a part of the permit

The main features of the installation are as follows. The Dynea UK Limited site is situated within Newton Aycliffe Industrial Park located approximately 2km south-west of Newton Aycliffe town centre (Grid Reference 427005, 522715). The site uses four steam heated, water-cooled, agitated batch reactors to produce phenol formaldehyde ('Novolac' and 'Resole') resins, melamine and urea formaldehyde resins. Raw materials consumed are mainly bulk chemicals comprising liquid phenol, formaldehyde solution, furfuyl alcohol, methanol and sodium hydroxide. These materials are held in a tank farm together with vessels used for intermediate and finished products. The main activities involved in the manufacturing process are receipt and storage of raw materials, charging of reaction vessels, reaction and distillation, direct transfer of resins to adjacent customer storage/reactors or transfer to onsite storage tanks and despatch of resins. Secondary products using manufactured resins are also produced which involve batch blending. Hydrofluoric acid solution (60%) is used in the manufacture of a small range of speciality phenol formaldehyde resins and is stored and used under enclosed controlled conditions.

The current annual production capacity of the site is 23,000 tonne per annum of primary resins and secondary and solid products.

Release to air from the installation include phenol, formaldehyde and VOCs which arise principally from storage tanks during raw materials transfer and from reactor vessel vents.

Release of particulate matter arises from processing, conveying and bagging operations and from storage silo vents.

There are no releases to controlled waters or to ground water from the installation. All liquid releases are discharged to sewer. Phenol rich liquid waste streams from the process are collected and sent to an on-site phenol recovery plant. Liquid waste streams containing formaldehyde are collected in an effluent pit prior to discharge to sewer.

Effluent treatment is undertaken by a third-party employed by Dynea UK Limited.

The site operates under an EMS which is externally accredited to ISO14001. The site is also a top tier COMAH site and as such has procedures and systems in place to manage environmental impacts generated in the event of an accident. In addition, the Dynea UK Limited site is a participant under a Climate Change Levy Agreement.

Status Log of the permit		
Detail	**Date**	**Response Date**
Application DP3638LS	Duly made 30/03/06	
Additional Information Received		22/09/06, 25/09/2006,30/10/06, 1/11/2006, 6/11/2006
Permit determined	21/12/06	
Permit transferred from Dynea Aycliffe Ltd to Dynea UK Limited. Permit renumbered JP3630UB.	27/02/2007	

Superseded or Partially Superseded Licences/Authorisations/Consents relating to this installation			
Holder	**Reference Number**	**Date of Issue**	**Fully or Partially Superseded**
Perstorp Chemitec Ltd (IPC Authorisation)	AK6225	10/03/94	Fully superseded

End of Introductory Note

Permit

Permit number
JP3630UB

The Environment Agency (the Agency) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No 1973) hereby authorises **Dynea UK Limited ("the operator")**, whose registered office is

Alyn Works
Denbigh Road
Mold
Flintshire
CH7 1BF

Company registration number **1443108**

to operate an installation at
Aycliffe Industrial Park
Newton Aycliffe
County Durham
DL5 6UE

to the extent authorised by and subject to the conditions of this permit.

Signed	Date of transfer
[redacted]	27/2/07

Howard Stuttard, Dales PIR Team Leader

Authorised to sign on behalf of the Agency

Conditions

1 Management

1.1 General management

1.1.1 The activities shall be managed and operated:

(a) in accordance with a management system, which identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents and non-conformances and those drawn to the attention of the operator as a result of complaints; and

(b) by sufficient persons who are competent in respect of the responsibilities to be undertaken by them in connection with the operation of the activities.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.2 Accidents that may cause pollution

1.2.1 The operator shall:

(a) maintain and implement an accident management plan;

(b) review and record at least every 4 years or as soon as practicable after an accident, (whichever is the earlier) whether changes to the plan should be made;

(c) make any appropriate changes to the plan identified by a review.

1.3 Energy efficiency

1.3.1 The operator shall:

(a) take appropriate measures to ensure that energy is used efficiently in the activities;

(b) review and record at least every 4 years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(c) take any further appropriate measures by a review.

1.4 Efficient use of raw materials

1.4.1 The operator shall:

(a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;

(b) maintain records of raw materials and water used in the activities;

(c) review and record at least every 4 years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

(d) take any appropriate further measures identified by a review.

1.5 Avoidance, recovery and disposal of wastes produced by the activities

1.5.1. The operator shall:

(a) take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;

(b) review and record at least every 4 years whether changes to those measures should be made: and

(c) take any further appropriate measures identified by a review.

1.6 Site security

1.6.1. Site security measures shall prevent unauthorised access to the site, as far as practicable.

2. Operations

2.1 Permitted activities

2.1.1 The operator is authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in red on the site plan at schedule 2 to this permit.

2.3 Operating techniques

2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1 table S1.2, unless otherwise agreed in writing by the Agency.

2.3.2 No raw materials or fuels listed in schedule 3 table S3.1 shall be used unless they comply with the specifications set out in that table.

2.4 Off-site conditions

There are no off-site conditions under this section.

2.5 Improvement programme

2.5.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by the Agency.

2.5.2 Except in the case of an improvement which consists only of a submission to the Agency, the operator shall notify the Agency within 14 days of completion of each improvement.

2.6 Pre-operational conditions

There are no pre-operational conditions in this permit.

2.7 Closure and decommissioning

2.7.1 The operator shall maintain and operate the activities so as to prevent or where that is not practicable, to minimise, any pollution risk on closure and decommissioning.

2.7.2 The operator shall maintain a site closure plan which demonstrates how the activities can be decommissioned to avoid any pollution risk and return the site to a satisfactory state.

2.7.3 The operator shall carry out and record a review of the site closure plan at least every 4 years.

2.7.4 The site closure plan (or relevant part thereof) shall be implemented on final cessation or decommissioning of the activities or part thereof.

2.8 Site protection and monitoring programme

2.8.1 The operator shall, within 4 months of the issue of this permit, submit a site protection and monitoring programme.

2.8.2 The operator shall implement and maintain the site protection and monitoring programme and shall carry out and record a review of it at least every 4 years.

3. Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 4 tables S4.1 and S4.2.

3.1.2 The limits given in schedule 4 shall not be exceeded.

3.2 Transfers off-site

3.2.1 Records of all the wastes sent off site from the activities, for either disposal or recovery, shall be maintained.

3.3 Fugitive emissions of substances

3.3.1 Fugitive emissions of substances (excluding odour, noise and vibration) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.3.2 No condition applies.

3.3.3 No condition applies.

3.3.4 All liquids, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.4 Odour

3.4.1 Emissions from the activities shall be free from odour at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures to prevent or where that is not practicable to minimise the odour.

3.5 Noise and vibration

3.5.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures to prevent or where that is not practicable to minimise the noise and vibration.

3.6 Monitoring

3.6.1 The operator shall, unless otherwise agreed in writing by the Agency, undertake the monitoring specified in the following tables in schedule 4 to this permit

(a) point source emissions specified in tables S4.1, S4.2 and S4.3;

3.6.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.6.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme specified in condition 3.6.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Agency.

3.6.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 4 tables S4.1, S4.2 and S4.3 unless otherwise specified in that schedule.

4. Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

(a) be legible;

(b) be made as soon as reasonably practicable;

(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and

(d) be retained, unless otherwise agreed in writing by the Agency, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

(i) the site protection and monitoring programme.

4.1.2 Any records required to be made by this permit shall be supplied to the Agency within 14 days where the records have been requested in writing by the Agency.

4.1.3 All records required to be held by this permit shall be held on the installation and shall be available for inspection by the Agency at any reasonable time.

4.2 Reporting

4.2.1 A report or reports on the performance of the activities over the previous year shall be submitted to the Agency by 31 January (or other date agreed in writing by the Agency) each year. The report(s) shall include as a minimum:

(a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the assessment of the impact of the emissions submitted with the application;

(b) where the operator's management system encompasses annual improvement targets, a summary report of the previous year's progress against such targets;

(c) the annual production /treatment data set out in schedule 5 table S5.2;

(d) the performance parameters set out in schedule 5 table S5.3 using the forms specified in table S5.4 of that schedule; and

(e) details of any contamination or decontamination of the site which has occurred.

4.2.2 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

(a) in respect of the parameters and emission points specified in schedule 5 table S5.1;

(b) for the reporting periods specified in schedule 5 table S5.1 and using the forms specified in schedule 5 table S5.4 ; and

(c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.3 No condition applies.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding 4 years, submit to the Agency, within 6 months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.2.5 All reports and notifications required by the permit shall be sent to the Agency using the contact details supplied in writing by the Agency

4.2.6 The results of reviews and any changes made to the site protection and monitoring programme shall be reported to the Agency, within 1 month of the review or change.

4.3 Notifications

4.3.1 The Agency shall be notified without delay following the detection of:

(a) any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution;

(b) the breach of a limit specified in the permit;

(c) any significant adverse environmental effects.

4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 6 to this permit within the time period specified in that schedule.

4.3.3 Prior written notification shall be given to the Agency of the following events and in the specified timescales:

(a) as soon as practicable prior to the permanent cessation of any of the activities;

(b) cessation of operation of part or all of the activities for a period likely to exceed 1 year; and

(c) resumption of the operation of part or all of the activities after a cessation notified under (b) above.

4.3.4 The Agency shall be given at least 14 days notice before implementation of any part of the site closure plan.

4.3.5 Where the Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Agency when the relevant monitoring is to take place. The operator shall provide this information to the Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.6 No condition applies.

4.3.7 No condition applies.

4.3.8 No condition applies.

4.3.9 The Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

(a) any change in the operator's trading name, registered name or registered office address;

(b) any change to particulars of the operator's ultimate holding company (including details of an ultimate holding company where an operator has become a subsidiary); and

(c) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Climate Change Agreement

4.3.10 Where the operator has entered into a climate change agreement with the Government, the Agency shall be notified within one month of:

(a) a decision by the Secretary of State not to re-certify the agreement;

(b) a decision by either the operator or the Secretary of State to terminate the agreement; and

(c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 7 shall have the meaning given in that schedule.

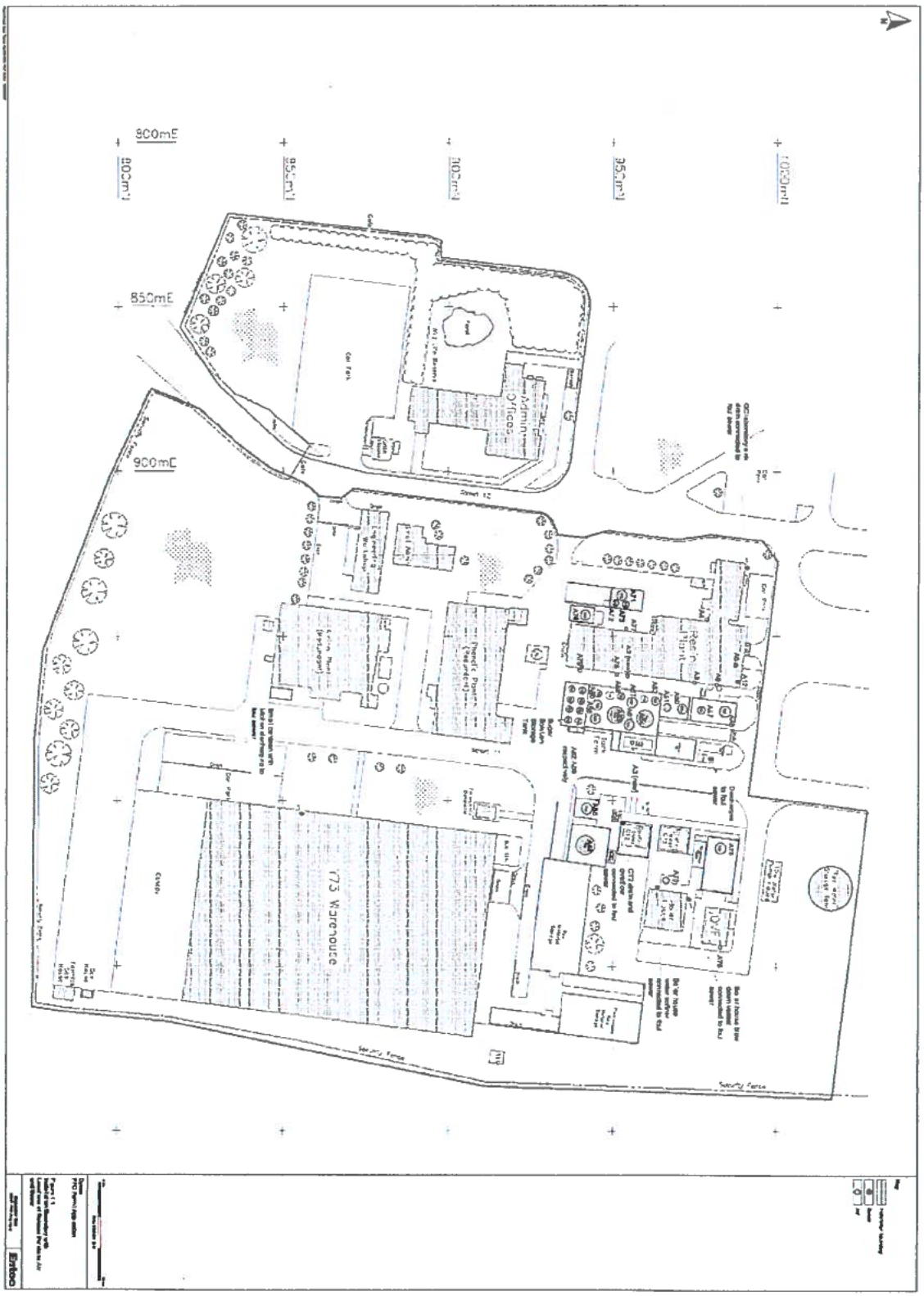
Schedule 1 - Operations

Table S1.1 activities		
Activity listed in Schedule 1 of the PPC Regulations	**Description of specified activity**	**Limits of specified activity**
Section 4.1, Part A(1)(a)(viii) Producing organic chemicals such as plastic materials, such as polymers, synthetic fibres and cellulose-based fibres	Polymerisation of organic chemicals to produce resins.	Receipt of raw materials, heating, chemical reactions, evaporating, mixing and blending within four enclosed reactor vessels (R1-R4) with either subsequent pipeline transfer to customer's storage vessels or storage and despatch. Further treatment of resins to manufacture secondary products involving cooling, heating and mixing and blending with additives
Directly Associated Activity		
Directly Associated Activity (Unlisted)	Phenol recovery	Distillation of phenol-rich waste waters to generate phenol for reuse
Directly Associated Activity (Unlisted)	Operation of effluent treatment plant	Tankage and hold-up to treat liquid process wastes including facilities for pH control
Directly Associated Activity (Unlisted)	Steam generation	Single 9 MWth (input) gas-fired boiler with diesel stand-by generator

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The response to section 2.1 in the Application.	30/03/06
Additional information	Responses to question in RFI (26/08/2006) about water treatment processes and scrubber system.	22/09/06
Additional information	Information relating to the re use of hydrofluoric acid	06/11/06

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IP1	A written Site Closure Plan will be submitted to the Agency for approval. The plan shall comply with the requirements of Section 2.11 of the Agency Sector Guidance Note IPPC S4.02.	21/06/07
IP2	The operator shall undertake the monitoring of emissions from emission points A2 and A3 having regard to section 2.10 of Sector Guidance S4.10. A report shall be submitted to the Agency detailing the results obtained. The report shall include an assessment of emissions using the H1 assessment tool.	21/06/07
IP3	The Operator shall install additional containment measures to storage tank T501 such that sufficient containment is provided to meet regulatory requirements. The measures shall be implemented with regards to the requirements of section 2.2.5 of EA guidance Note S4.02.	21/09/07
IP4	The operator shall submit a plan and appropriate timetable for approval to the Agency to address improvements relating to the dispensing of diesel to FLT's from Tank T104. Any improvements shall have regard to Section 2.2.5 of EA guidance note S4.02.	21/09/07
IP5	A written Energy Management Plan shall be submitted to the Agency for approval. The plan shall comply with section 2.11 of the Agency Sector Guidance Note IPPC 4 02 and be implemented by the operator from the date of approval from the Agency.	21/12/07
IP6	A written procedure shall be submitted to the agency detailing the measures to be used so that monitoring equipment, personnel and organisations employed for the emissions monitoring programme shall have either MCERTS certification or accreditation in accordance with condition 3.6.3. The notification requirements of condition 2.5.2 shall be deemed to have been complied with on submission of the procedure. The procedure shall be implemented by the operator from the date of approval in writing by the Agency	21/12/07
IP7	An audit plan and methodology for a programme of waste minimisation audits shall be submitted to the Agency for approval. The audit shall analyse the use of raw materials, assess opportunities for reduction and provide an action plan for improvements incorporating process mapping and materials mass balances. The operator shall submit waste minimisation audits within two months of audit completion.	21/06/08

Schedule 2 - Site plan



Schedule 3 - Waste types, raw materials and fuels

Table S3.1 Raw materials and fuels	
Raw materials and fuel description	Specification
-	-

Schedule 4 – Emissions and monitoring

Table S4.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 on site plan in Schedule 2]	Phenol	Main rector vents, cooling belt and Aerodux fan vent	150 mg/m^3	1 Hour	6 monthly	Non-iso kinetic, wet chemistry (internal method RG 168)
A1 [Point A1 on site plan in Schedule 2]	Formaldehyde	Main rector vents, cooling belt and Aerodux fan vent	100 mg/m^3	1 Hour	6 monthly	Non-iso kinetic, wet chemistry (internal method RG 168)
A1 [Point A1 on site plan in Schedule 2]	Total organic carbon	Main rector vents, cooling belt and Aerodux fan vent	700 mg/m^3	1 Hour	6 monthly	Non-iso kinetic, wet chemistry (internal method RG 168)
A1 [Point A1 on site plan in Schedule 2]	Particulates	Main rector vents, cooling belt and Aerodux fan vent	10 mg/m^3	1 hour	6 monthly	BS EN 13284-1:2002
A2 [Point A2 on fig 1.1]	Phenol	Novolac cooling belt, novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	150 mg/m^3	1 hour	6 monthly	Non-iso kinetic, wet chemistry (internal method RG 168)
A2 [Point A2 on fig 1.1]	Formaldehyde	Novolac cooling belt, novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	100 mg/m^3	1 hour	6 monthly	Non-iso kinetic, wet chemistry (internal method RG 168)
A2 [Point A2 on fig 1.1]	Total organic carbon	Novolac cooling belt, novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	700 mg/m^3	1 hour	6 monthly	Non-iso kinetic, wet chemistry (internal method RG 168)
A2 [Point A2 on fig 1.1]	Particulates	Novolac cooling belt, novolac holding tank, aerodux mixer, T405 furcarb IBC and filling point via scrubber	10 mg/m^3	1 hour	6 monthly	BS EN 13284-1:2002
A3 [Point A3 on fig 1.1]	Phenol	Reactor 1-4 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	150 mg/m^3	1 hour	6 monthly	Non-iso kinetic, wet chemistry (internal method RG 168)

A3 [Point A3 on fig 1.1]	Formaldehyde	Reactor 1-4 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	100 mg/m^3	1 hour	6 monthly	Non-iso kinetic, wet chemistry (internal method RG 168)
A3 [Point A3 on fig 1.1]	Total organic carbon	Reactor 1-4 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	700 mg/m^3	1 hour	6 monthly	Non-iso kinetic, wet chemistry (internal method RG 168)
A3 [Point A3 on fig 1.1]	Particulates	Reactor 1-4 condensers, vacuum pumps, phenol tank vents T254/T258 via reactor process emissions scrubber	10 mg/m^3	1 hour	6 monthly	BS EN 13284-1:2002
A4[Point A4 on site plan in schedule 2]	No parameters set	Foundry blender vent	No limit set	-	-	-
A8 [Point A8 on site plan in schedule 2]	No parameters set	Reactor R2 solids hopper and liquid additions tank vent	No limit set	-	-	-
A9	No parameters set	R3/R4 solids hoppers and R4 liquid additions tank vent	No limit set	-	-	-
A12	No parameters set	R1 resin transfer / blow over vessel vent	No limit set	-	-	-
A47	No parameters set	Urea formaldehyde resin storage tank vent (T101)	No limit set	-	-	-
A48	No parameters set	Methanol storage tank vent (T102)	No limit set	-	-	-
A49	No parameters set	Formaldehyde solution storage tank vent (T103)	No limit set	-	-	-
A50	No parameters set	Phenol formaldehyde resin storage tank vent (T201)	No limit set	-	-	Permanent access for sampling/ monitoring is not required
A51	No parameters set	Catchment vessel – emergency relief (CV1)	No limit set	-	-	Permanent access for sampling/ monitoring is not required
A52	No parameters set	Phenol Formaldehyde resin storage tank vent (T251)	No limit set	-	-	-
A53	No parameters set	Phenol distillate holding storage tank (T253)	No limit set	-	-	-

A54	No parameters set	Phenol storage tank vent (T254)	No limit set	-	-	-
A56	No parameters set	Furfuryl alcohol storage tank vent (T256)	No limit set	-	-	-
A57	No parameters set	Phenol Formaldehyde resin storage tank vent (T257)	No limit set	-	-	-
A58	No parameters set	Recovered phenol storage tank vent (T258)	No limit set	-	-	-
A59	No parameters set	Product storage tank vent (T259)	No limit set	-	-	-
A60-A69	No parameters set	Resin storage tank vents (T2600/T263/T301-T308)	No limit set	-	-	-
A70	No parameters set	Boiler stack vent	No limit set	-	-	Permanent access for sampling/ monitoring is not required
A71	No parameters set	2-Furfural storage tank (T403)	No limit set	-	-	-
A72	No parameters set	Storage tank vent (T402)	No limit set	-	-	Permanent access for sampling/ monitoring is not required
A73	No parameters set	Storage tank vent (T404)	No limit set	-	-	Permanent access for sampling/ monitoring is not required
A74	No parameters set	Phenol formaldehyde foam storage tank vent (T501)	No limit set	-	-	-
A75	No parameters set	Phenol recovery system feed storage (T903)	No limit set	-	-	-
A76	No parameters set	Phenol recovery system vent	No limit set	-	-	-
A77	No parameters set	Furcarb mixing (T405) and storage (T404/T402)	No limit set	-	-	Permanent access for sampling/ monitoring is not required

A78	No parameters set	Novolac cooling belt (main section)	No limit set	-	-	-
A79	No parameters set	Novolac cooling belt (discharge)	No limit set	-	-	-
A80	No parameters set	Diesel fuel oil storage tank vent	No limit set	-	-	Permanent access for sampling/ monitoring is not required

Table S4.2 Point Source emissions to water (other than sewer) – emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (incl. unit)	Reference period	Monitoring frequency	Monitoring standard or method
-						

Table S4.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements

Emission point ref. & location	Parameter	Source	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 (on site plan in schedule 2) (emission to Northumbrian Water, Aycliffe Sewage Treatment Works)	Phenol	Effluent collection pit (main contribution - phenol recovery plant)	1200 mg/l	Daily composite sample	Daily	Hach Lange test and Photospectrom eter

Schedule 5 - Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S5.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Emissions to air Parameters as required by condition 3.6.1.	A1, A2, A3	Every 12 months	01/01/07
Emissions to sewer	S1	Every 12 months	01/01/07

Table S5.2: Annual production/treatment

Parameter	Units
Resins, secondary and solid products	tonnes

Table S5.3 Performance parameters

Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Total raw material used	Annually	tonnes

Table S5.4 Reporting forms

Media/parameter	Reporting format	Date of form
Air	Form air 1	16/11/06
Sewer	Form sewer 1	16/11/06
Other performance indicators	Form performance 1	16/11/06

Schedule 6 - Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the PPC Regulations.

Part A

Permit Number	**JP3630UB**
Name of operator	**Dynea UK Limited**
Location of Installation	**Aycliffe Industrial Park, Newton Aycliffe, County Durham, DL5 6UE**
Time and date of the detection	

(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	**Notification period**

(c) Notification requirements for the detection of any significant adverse environmental effect	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B - to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the installation in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of DYNEA UK LIMITED

Schedule 7 - Interpretation

"*accident*" means an accident that may result in pollution.

"*annually*" means once every year.

"*application*" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 4 to the PPC Regulations.

"authorised officer" means any person authorised by the Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

"emissions to land", includes emissions to groundwater.

"fugitive emission" means an emission to air, water or land from the activities which is not controlled by an emission or background concentration limit.

"groundwater" means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"*land protection guidance*", means Agency guidance "H7 - Guidance on the protection of land under the PPC Regime: application site report and site protection monitoring programme".

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"notify/notified without delay" means that a telephone call can be used, whereas all other reports and notifications must be supplied in writing, either electronically or on paper.

"PPC Regulations" means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"*quarter*" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"*site protection and monitoring programme*" means a document which meets the requirements for site protection and monitoring programmes described in the Land Protection Guidance.

"year" means calendar year ending 31 December.

Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

(a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or

(b) in relation to emissions from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content

END OF PERMIT

Permit Number: JP3630UB Operator: Dynea UK Limited

Installation: Thermoset Resins, Newton Aycliffe Form Number: Air1 (16/11/06)

Reporting of emissions to air for the period from ..... to .....

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A1	Phenol	150 mg/m³	1 hour period		Non-iso kinetic, wet chemistry (internal method RG 168)		
A1	Formaldehyde	100 mg/m³	1 hour period		Non-iso kinetic, wet chemistry (internal method RG 168)		
A1	Total organic carbon	700 mg/m³	1 hour period		Non-iso kinetic, wet chemistry (internal method RG 168)		
A1	Particulates	10 mg/m³	1 hour period		BS EN 13284-1:2002		
A2	Phenol	150 mg/m³	1 hour period		Non-iso kinetic, wet chemistry (internal method RG 168)		
A2	Formaldehyde	100 mg/m³	1 hour period		Non-iso kinetic, wet chemistry (internal method RG 168)		
A2	Total organic carbon	700 mg/m³	1 hour period		Non-iso kinetic, wet chemistry (internal method RG 168)		
A2	Particulates	10 mg/m3	1 hour period		BS EN 13284-1:2002		

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
A3	Phenol	150 mg/m³	1 hour period		Non-iso kinetic, wet chemistry (internal method RG 168)		
A3	Formaldehyde	100 mg/m³	1 hour period		Non-iso kinetic, wet chemistry (internal method RG 168)		
A3	Total organic carbon	700 mg/m³	1 hour period		Non-iso kinetic, wet chemistry (internal method RG 168)		
A3	Particulates	10 mg/m3	1 hour period		BS EN 13284-1.2002		

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 uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed ..... Date.....

(Authorised to sign as representative of Operator)

Permit Number: JP3630UB

Operator: Dynea UK Limited

Installation: Thermoset Resins, Newton Aycliffe

Form Number: Performance / 16/11/06

Reporting of other performance indicators for the period ..... to .....

Parameter	Units
Resins, secondary and solid products	tonnes
Water Usage	Tonnes/tonnes of product
Energy Usage	MWhs /tonnes of product
Total raw material used	Tonnes /tonne product

Operator's comments :

Signed .....

(Authorised to sign as representative of Operator)

Date.....

Permit Number: JP3630UB Operator: Dynea UK Limited

Installation: Thermoset Resins, Newton Aycliffe Form Number: Sewer 1 / 16/11/06

Reporting of emissions to sewer for the period from ..... to .....

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result [1]	Test Method [2]	Sample Date and Times [3]	Uncertainty [4]
S1	Phenol	1200 mg/l	Daily composite sample		BS 6068-2.12: 1990		

[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 uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .....
(Authorised to sign as representative of Operator)

Date.....