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.