

# Notice of variation and consolidation with introductory note

**The Environmental Permitting (England & Wales) Regulations 2016**

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Lanxess Solutions UK Ltd

Lanxess Solutions UK Ltd  
Tenax Road  
Trafford Park  
Manchester  
M17 1WT

**Variation application number**

EPR/BM0273IJ/V005

**Permit number**

EPR/BM0273IJ

# Lanxess Solutions UK Ltd

## Permit number EPR/BM0273IJ

### Introductory note

#### This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

The installation manufactures a range of flame-retardant chemicals (up to 16 ktpa). A new product UNIPLEX 214 (up to 5 ktpa) is manufactured in one of the existing production buildings on site (B61) which was previously used for the manufacture of water additive products. The processing will involve the use of existing and new process equipment.

The permitted installation is located on the west side of Tenax Road in the Trafford Park industrial estate (NGR 378434, 397282). A range of products are manufactured at the installation in dedicated batch plants and a multi-purpose pilot plant. Directly associated with the main manufacturing activities are a boiler house operated by Lanxess Solutions UK Limited (under a separate permit), and a warehouse operated by DHL Supply Chain Ltd.

The site is externally certified for ISO14001.

The site is approximately 8km from Manchester Mosses Special Area of Conservation and within 2km of Trafford Ecology Park Local Nature Reserve and several Local Wildlife sites.

The schedules specify the changes made to the permit.

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

Status log of the permit		
Description	Date	Comments
Application received	21/03/2003	
Request for information	29/07/2003	Response received 22/08/03.
Permit determined EPR/BM0273IJ	22/10/2003	Original permit issued to Great Lakes Manufacturing (UK) Ltd.
Variation application received	Duly made 02/04/2004	Application to produce fire retardant organic esters
Variation issued EPR/BM0273IJ/V002	01/06/2004	
Notified of change of company name	Duly made 26/05/2016	Name changed to Chemtura Manufacturing UK Limited.
Variation issued EPR/BM0273IJ/V003	19/08/2016	Varied permit issued to Chemtura Manufacturing UK Limited.
Notified of change of company name	28/06/2017	Name changed to Lanxess Solutions UK Ltd.
Variation issued EPR/BM0273IJ/V004	17/07/2017	Varied permit issued.

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/BM0273IJ/V005	Duly made 03/05/2023	Application to permit production of Uniplex 214 and surrender activities for production of water additives and operation of a pilot plant. Updating consolidation to new template conditions
Request for Further Information dated 07/03/2024.	Response received 12/03/2024  02/04/2024	Clarification of process details including that the main carbon abatement units are in series.  Confirmation of site boundary.
Variation determined and consolidated permit issued EPR/BM0273IJ	14/05/24	Permit issued to Lanxess Solutions UK Ltd.

<b>Other Part A installation permits relating to this installation</b>		
<b>Operator</b>	<b>Permit number</b>	<b>Date of issue</b>
DHL Supply Chain Limited	BU5828IC	22/10/2003
Lanxess Solutions UK Limited	QP3509MZ	03/12/2021

End of introductory note

# Notice of variation and consolidation

## 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/BM0273IJ

### Issued to

**Lanxess Solutions UK Ltd** (“the operator”)

whose registered office is

#### **Accounts Department**

**Tenax Road**

**Trafford Park**

**Manchester**

**M17 1WT**

company registration number 02624692

to operate a regulated facility at

#### **Lanxess Solutions UK Ltd**

**Tenax Road**

**Trafford Park**

**Manchester**

**M17 1WT**

to the extent set out in the schedules.

The notice shall take effect from 14/05/2024.

<b>Name</b>	<b>Date</b>
<b>Vicky Patchett</b>	<b>14/05/2024</b>

Authorised on behalf of the Environment Agency

## **Schedule 1**

All conditions have been varied by the consolidated permit as a result of the application made by the operator.

## **Schedule 2 – consolidated permit**

Consolidated permit issued as a separate document.

# Permit

## The Environmental Permitting (England and Wales) Regulations 2016

### Permit number

**EPR/BM0273IJ**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/BM0273IJ/V005 authorising,

**Lanxess Solutions UK Ltd** (“the operator”),

whose registered office is

**Accounts Department**

**Tenax Road**

**Trafford Park**

**Manchester**

**M17 1WT**

company registration number 02624692

to operate an installation at

**Lanxess Solutions UK Ltd**

**Tenax Road**

**Trafford Park**

**Manchester**

**M17 1WT**

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

Name	Date
Vicky Patchett	14/05/2024

Authorised on behalf of the Environment Agency

# Conditions

## 1 Management

### 1.1 General management

1.1.1 The operator shall manage and operate the activities:

- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
- (b) using sufficient competent persons and resources.

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 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

### 1.3 Efficient use of raw materials

1.3.1 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 four 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 further appropriate measures identified by a review.

### 1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
- (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
- (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

## **1.5 Multiple operator installations**

- 1.5.1 Where the operator notifies the Environment Agency under condition 4.3.1 (a) or 4.3.1 (c), the operator shall also notify without delay the other operator(s) of the installation of the same information.

## **2 Operations**

### **2.1 Permitted activities**

- 2.1.1 The operator is only 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 7 to this permit which represents the extent of the installation covered by this permit, but excludes the areas edged in green on the site plan that represent those of the other operators of the installation.

### **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 Environment Agency.
- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 2.3.3 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.
- 2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:
- (a) the nature of the process producing the waste;
  - (b) the composition of the waste;
  - (c) the handling requirements of the waste;
  - (d) the hazardous property associated with the waste, if applicable; and
  - (e) the waste code of the waste.
- 2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.
- 2.3.6 There shall be no transfer to effluent treatment plant from third party warehousing or third party drum filling activities, other than in the case of fire.

### **2.4 Improvement programme**

- 2.4.1 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 Environment Agency.

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

### **3 Emissions and monitoring**

#### **3.1 Emissions to water, air or land**

- 3.1.1 There shall be no point source emissions to air, sewer except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

#### **3.2 Emissions of substances not controlled by emission limits**

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.
- 3.2.3 All liquids in containers, 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.

#### **3.3 Odour**

- 3.3.1 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.
- 3.3.2 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 which identifies and minimises the risks of pollution from odour;
  - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

#### **3.4 Noise and vibration**

- 3.4.1 Emissions from the activities shall be free from noise and vibration 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 noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

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 noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
- (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## **3.5 Monitoring**

3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:

- (a) point source emissions specified in tables S3.1, and S3.2.

3.5.2 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.

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.5.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by the Environment Agency.

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 & S3.2 unless otherwise agreed in writing by the Environment Agency.

## **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 Environment 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) off-site environmental effects; and
  - (ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

### **4.2 Reporting**

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

- 4.2.2 A report or reports on the performance of the activities over the previous year shall be submitted to the Environment Agency by 31 January (or other date agreed in writing by the Environment 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 the permit including an interpretive review of that data;
  - (b) the annual production /treatment data set out in schedule 4 table S4.2; and
  - (c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.
- 4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment 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 4 table S4.1;
  - (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six 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.

## 4.3 Notifications

- 4.3.1 In the event:
- (a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
    - (i) inform the Environment Agency,
    - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
    - (iii) take the measures necessary to prevent further possible incidents or accidents;
  - (b) of a breach of any permit condition the operator must immediately—
    - (i) inform the Environment Agency, and
    - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
  - (c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.2 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.3 Where the Environment 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 Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

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

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

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

4.3.7 Where the operator has entered into a climate change agreement with the Government, the Environment 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 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made "without delay", in which case it may be provided by telephone.

# Schedule 1 – Operations

<b>Table S1.1 activities</b>			
<b>Activity reference</b>	<b>Activity listed in Schedule 1 of the EP Regulations</b>	<b>Description of specified activity</b>	<b>Limits of specified activity</b>
AR1	Section 4.1 A(1) (a) (ii) – Producing organic chemicals containing oxygen.	Manufacture of fire retardant esters	From receipt of raw materials to despatch of finished goods, excludes operation of warehouse and boiler plant.
AR2	Section 4.1, Part A(1)(a)(iii) - Producing organic chemicals containing sulphur	Manufacture of Uniplex 214	From receipt of raw materials to despatch of finished goods, excludes operation of warehouse and boiler plant.
AR3	Section 4.1, Part A(1)(a)(iv) - Producing organic chemicals containing nitrogen	Manufacture of Uniplex 214	From receipt of raw materials to despatch of finished goods, excludes operation of warehouse and boiler plant.
AR4	Section 4.1 A(1) (a) (v) – Producing organic chemicals containing phosphorous.	Manufacture of aryl phosphates	From receipt of raw materials to despatch of finished goods, excludes operation of warehouse and boiler plant.
	Directly Associated Activities		
AR5	Effluent Pre-treatment	Flow and pH balancing	Up to discharge to public sewer system.

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application EPR/BM0273IJ/A001	The response to questions B2.2 and B2.3 given in sections 4 & 5 of the application on pages 59 to 120 and in appendices L1 and L2.	21 <sup>st</sup> March 2003
Letter from Applicant dated 18 <sup>th</sup> June 2003	Redesignation of tank T164 from the purpose stated in application.	
Response dated 22 <sup>nd</sup> Aug 2003 to Schedule 4 Notice.	Response to question 2.	27 <sup>th</sup> August 2003
Application for variation EPR/BM0273IJ/V002	Sections 4 & 5 of the application for variation on pages 7 to 17 (inclusive)	Duly made on 2 <sup>nd</sup> April 2004

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application for variation EPR/BM0273IJ/V005	Best Available Techniques and Operating Techniques document April 2023. Environmental Risk Assessment April 2023 (including abatement measures).	Duly made 3 <sup>rd</sup> May 2023
Response to request for further information dated 22/03/2024	Updated site emission points plan Effluent, foul and surface water drainage plan	2 <sup>nd</sup> April 2024 19 <sup>th</sup> April 2024

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
1	The Operator shall write and make available for inspection the Site Closure Plan as set out in Condition 2.11.1.3 of this Permit.	Completed
2	The Operator shall provide a report to the Agency on the condition and integrity of the site drainage system facilities. This report to include proposals for remedial works where required and a timescale for their implementation	Completed
3	The Operator shall carry out monitoring of emissions to air from the crude product storage tanks T97 and T164 for phenol. The monitoring shall cover those operating conditions likely to give rise to the highest releases and shall be carried out to method BS EN 13649 / (OSHA 32 or NIOSH 2546). A report shall be made to the Agency on the emissions, including an assessment against the short term EAL/EQS.	Completed
4	The Operator shall provide a report acceptable to the Environment Agency, establishing a procedure for the regular review of fugitive emissions to air and a methodology for calculating such fugitives' losses. This procedure and methodology shall be applied in respect of Condition 4.1.4 thereafter.	Completed
5	The first report submitted to the Environment Agency under Condition 4.1.4 shall also include a more detailed environmental assessment of fugitive emissions against the relevant EAL/EQS.	Completed
6	The Operator shall carry out a review to further reduce the release of phenol, phenolic compounds, xylenols and cresols to sewer. This review shall also examine releases and potential releases to sewer of xylene and tri-phenyl phosphate (and any other candidate List I substances) and assess their environmental impact. The review shall include but not be limited to the consideration of additional primary effluent treatment and / or secondary effluent treatment. A report and action plan shall be submitted to the Agency.	Completed
7	The Operator shall provide proposals acceptable to the Environment Agency to eliminate the use of penstock valves from bunded areas replacing these with sumps and a pumped discharge. This report to include a programme for the completion of these works.	Completed
8	The Operator shall jointly with Dalkia Utilities Services plc, carry out an energy efficiency audit. A report describing the methodology used and an action plan for increasing energy efficiency shall be submitted to the Agency.	Completed
9	The Operator shall introduce a procedure to regularly review the use of stirred tank reactors for all batch reactions and produce a report comparing the efficiency and waste generation with alternative reactor types. The report shall demonstrate BAT for the continued use of STRs and include an action plan to implement any improvements identified. The	Completed

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	Operator shall periodically update the review and action plan. A copy of the written procedure and the outcome of the first review shall be sent to the Environment Agency.	
10	In respect of the monitoring requirements set out in table 2.10.1, the Operator shall provide a report acceptable to the Agency setting out the monitoring methods, and the accreditation status of the equipment, and / or the monitoring organisation as appropriate for the methods used for both sampling and analysis.	Completed
11	The operator shall provide a report of monitoring of the release of 2-ethylhexanol from the following points: - Point 40 (VO157) Point 42 (VO160) Point 45 (VO265)  Each point shall be monitored to method BS EN 13649/(OSHA 32 or NIOSH 2546) on a t least 3 separate occasions when operating conditions are stable and when 2-ethylhexanol is likely to be present.  The effect of that release on the environment shall be re-assessed for any release point where the average release is more than 2 times the calculated release given in the application for variation dated 2 April 2004.	Completed
12	Provide a summary on the optimisation of process operations. The report should have particular regard to raw material usage, energy efficiency and waste minimisation.	Completed
13	Provide a summary report of an investigation into reducing the amount of brominated species in the waste disposed by incineration.	Completed
14	<b>Confirmatory emissions to air monitoring</b> The Operator shall submit a written report to the Environment Agency for technical assessment and approval. The report must contain: <ul style="list-style-type: none"> <li>Results of monitoring to MCERTS standards for the parameters assessed within the H1 submitted with the application EPR/BM0273IJ/V005 A30 (during a normal Uniplex214 production cycle), n-butylamine (nBA), benzenesulphonyl chloride (BSC), monochlorobenzene (MCB), n-butylbenzenesulphonamide (BBSA – Uniplex214) as well as hydrogen chloride. A31 BSC A32 nBA</li> <li>A revised H1 using the results of the monitoring where the actual emissions are higher than those in the original H1 (nBA, BSC, MCB) or above the limit of detection (BBSA, HCl). Use benzene as a proxy for nBA and BSC and p-dichlorobenzene for MCB when assessing against Environmental Assessment Levels.</li> <li>Detailed air dispersion modelling where the emissions do not screen out within the revised H1.</li> <li>Measures to be taken to reduce or abate emissions where detailed modelling does not screen out emissions.</li> </ul> The Operator shall implement any improvement measures and applicable limits identified within the report or arising from the assessment in line with a timetable agreed in writing with the Environment Agency.	31/12/2024

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
15	<p><b>Emissions to sewer monitoring</b></p> <p>The Operator shall submit a written report to the Environment Agency for technical assessment and approval.</p> <p>The report must contain monitoring analyses during representative periods of normal production for monochlorobenzene (MCB) and n-butylbenzenesulphonamide (BBSA – Uniplex214) from effluent discharge point S1.</p> <p>The Operator shall implement any improvement measures and monitoring (including applicable limits) identified within the report or arising from the assessment in line with a timetable agreed in writing with the Environment Agency.</p>	31/12/2024
16	<p><b>Failure Mode Effect Analysis</b></p> <p>The operator shall submit a written report to the Environment Agency for confirmation.</p> <p>The report must contain a summary of the output of a Failure Mode Effect Analysis (or equivalent) risk assessment supporting identification of environmentally critical equipment to meet the requirement of the BAT Conclusions for Production of Large Volume Organic Chemicals 18a as described in application document 410.HF280.00002_BATOT.</p>	31/12/2024

## Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
-	-

## Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A13, Point A13 on site plan in Schedule 7	HCl absorber exhaust	HCl	40 mg/m <sup>3</sup>	-	Every 6 months	BS EN 1911
A14, Point A14 on site plan in Schedule 7	HCl tails tower exhaust	HCl	40 mg/m <sup>3</sup>	-	Every 6 months	BS EN 1911
A30, Point A30 on site plan in Schedule 7	Vent from reactor V001	No parameter set	-	-	-	-
A31, Point A31 on site plan in Schedule 7	Tank T438 breather vent	No parameter set	-	-	-	-
A32, Point A32 on site plan in Schedule 7	Tanks T404, T406, T408 collected breather vent	No parameter set	-	-	-	-
A33, Point A33 on site plan in Schedule 7	LEV for solids charging	No parameter set	-	-	-	-
A34, Point A34 on site plan in Schedule 7	Uniplex storage tanks T431 and T432 breather vent	No parameter set	-	-	-	-

Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 Point S1 on site plan in Schedule 7	Discharge from Effluent pre-treatment plant	pH	No limits set	-	Continuous	BS 6068-2.50:1995, ISO 10523:1994
		Phenols & Phenolic compounds		24 hour flow proportional sample	Daily	Method to be agreed in writing with the Environment Agency.

**Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site–emission limits and monitoring requirements**

<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (incl. Unit)</b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
		Xylenols & Cresols		24 hour flow proportional sample	Daily	Method to be agreed in writing with the Environment Agency.
		Separable oils & greases		24 hour flow proportional sample	Daily	Method to be agreed in writing with the Environment Agency.
		Flow		24 hour total	Continuous	MCERTS or otherwise agreed in writing with the Environment Agency
S2 Discharge points 1-9 around installation boundary on drainage plan C006151 RevM	All discharge points from surface water drainage to surface water sewer	No parameter set	-	-	-	-

## Schedule 4 – Reporting

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

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Gaseous chlorides as HCl (mg/m <sup>3</sup> )	A13, A14	Every 6 months	01/01/2004
Flow (m <sup>3</sup> /day) – Average and peak	S1	Every 3 months	01/01/2004
Phenols and phenolic compounds (mg/ l)	S1	Every 3 months	01/01/2004
Xylenols and cresols (mg/l)	S1	Every 3 months	01/01/2004
Separable oils and greases (mg/l)	S1	Every 3 months	01/01/2004
pH – minimum and maximum	S1	Every 3 months	01/01/2004

Parameter	Units
Annual production fire retardant chemicals	tonnes
Annual production Uniplex 214	tonnes

Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes
Primary energy usage	Annually	MWh
Total raw material used	Annually	tonnes
Chemical oxygen demand (kg) discharged - from data provided by sewerage receiver	Annually	kg
Recovery of Hydrochloric Acid	Annually	Wgt %

Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	01/01/2024
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	01/01/2024
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	01/01/2024
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	01/01/2024
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	01/01/2024

# Schedule 5 – 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 EP Regulations.

## Part A

Permit Number	<b>EPR/BM0273IJ</b>
Name of operator	<b>Lanxess Solutions UK Ltd</b>
Location of Facility	<b>Tenax Road, Trafford Park, Manchester M17 1WT</b>
Time and date of the detection	

<b>(a) Notification requirements for any malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution</b>	
<b>To be notified within 24 hours of detection</b>	
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>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	

<b>(b) Notification requirements for the breach of a limit</b>	
<b>To be notified within 24 hours of detection unless otherwise specified below</b>	
Measures taken, or intended to be taken, to stop the emission	

<b>Time periods for notification following detection of a breach of a limit</b>	
<b>Parameter</b>	<b>Notification period</b>

<b>(c) Notification requirements for the breach of permit conditions not related to limits</b>	
<b>To be notified within 24 hours of detection</b>	
Condition breached	
Date, time and duration of breach	
Details of the permit breach i.e. what happened including impacts observed.	
Measures taken, or intended to be taken, to restore permit compliance.	

<b>(d) Notification requirements for the detection of any significant adverse environmental effect</b>	
<b>To be notified within 24 hours of detection</b>	
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 facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

\* authorised to sign on behalf of the operator

## Schedule 6 – Interpretation

“accident” means an accident that may result in pollution.

“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 5 to the EP Regulations.

“authorised officer” means any person authorised by the Environment 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 of substances not controlled by emission limits” means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

“emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

“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.

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions as read in accordance with Schedule 1A to the Environmental Permitting (England and Wales) Regulations 2016.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

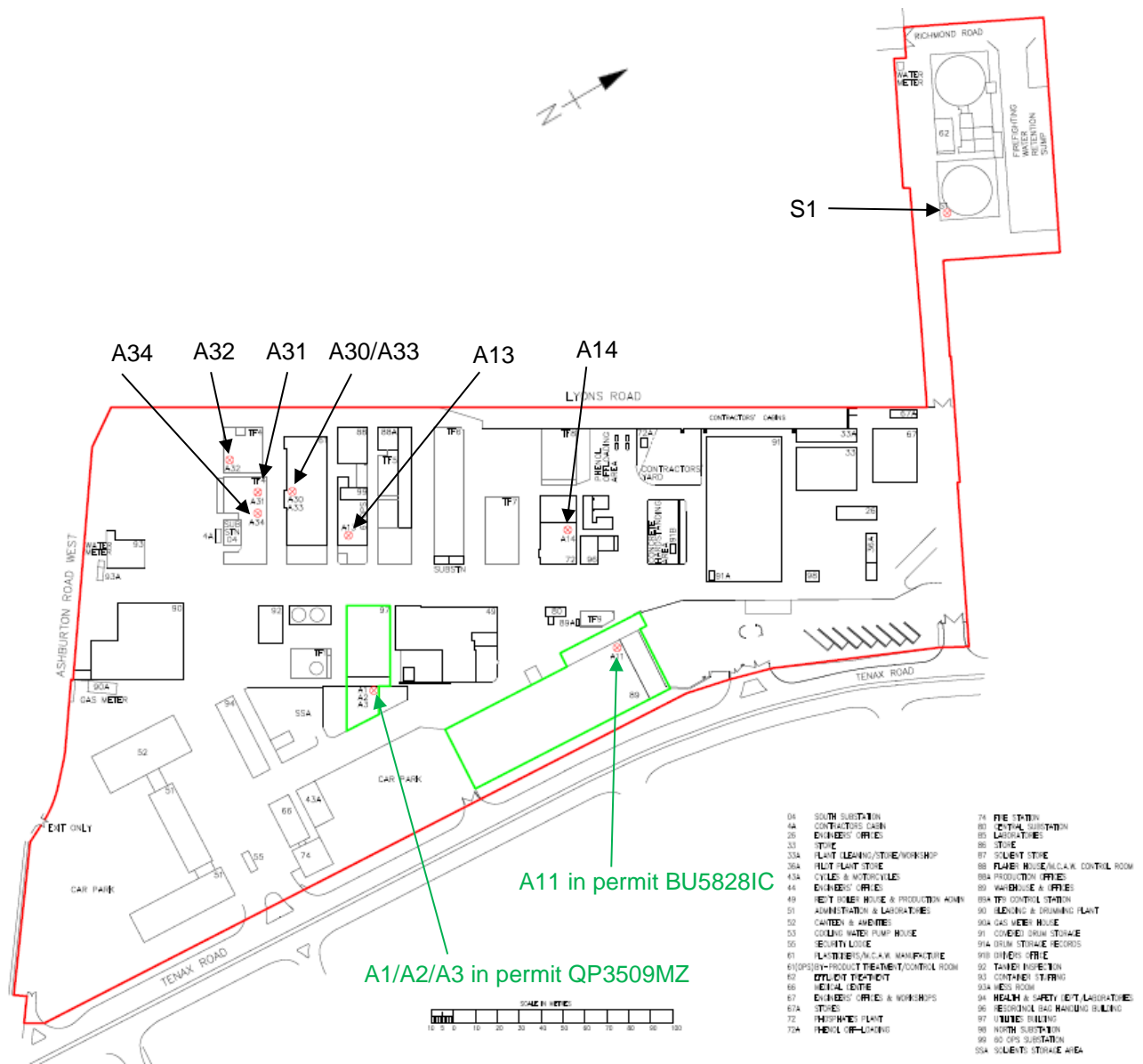
“year” means calendar year ending 31 December.

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:

- 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
- 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.

# Schedule 7 – Site plan



END OF PERMIT

## Emissions to Air Reporting Form

**Permit number:** EPR/BM0273IJ  
**Facility name:** Lanxess Solutions UK Ltd

**Operator:** Lanxess Solutions UK Ltd  
**Emissions to Air Reporting Form: 01/01/2024**

Reporting of emissions to air for the period from *[DD/MM/YY]* to *[DD/MM/YY]*

<b>Emission point</b>	<b>Substance / parameter</b>	<b>Emission Limit Value</b>	<b>Reference period</b>	<b>Test method <sup>1</sup></b>	<b>Result <sup>2</sup></b>	<b>Sample dates and times <sup>3</sup></b>	<b>Uncertainty <sup>4</sup></b>
<i>[e.g. A1]</i>	<i>[e.g. Oxides of nitrogen (NO and NO<sub>2</sub> expressed as NO<sub>2</sub>)]</i>	<i>[e.g. 200 mg/m<sup>3</sup>]</i>	<i>[e.g. daily average]</i>	<i>[e.g. BS EN 14181]</i>	<i>[State result]</i>	<i>[State relevant dates and time periods]</i>	<i>[State uncertainty if not 95% confidence interval]</i>

**Signed:** *[Name]*

**Date:** *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

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**Guidance for use:** Use this form to report your monitoring results.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Complete columns 1 to 5 using the information from schedule 3 of your permit. Complete columns 6 to 8 with your monitoring data. Add additional rows as necessary.

- <sup>1</sup> Where an internationally recognised standard test method is used, give the reference number. Where another method that has been formally agreed with the Environment Agency, give the appropriate identifier. In other cases state the principal technique, for example gas chromatography.
- <sup>2</sup> Give the result as 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, give the result as the 'minimum to maximum' of the measured values.
- <sup>3</sup> For non-continuous measurements give the date and time of the sample that produced the result. For continuous measurements give the percentage of the process operating time covered by the result.
- <sup>4</sup> Complete if the uncertainty associated with the result is not a 95% confidence interval. Leave blank for 95% confidence intervals.



**Signed:**     *[Name]*

**Date:**       *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

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**Guidance for use:** Use this form to report your monitoring results.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Complete columns 1 to 5 using the information from schedule 3 of your permit. Complete columns 6 to 8 with your monitoring data. Add additional rows as necessary.

- <sup>1</sup> Where an internationally recognised standard test method is used, give the reference number. Where another method that has been formally agreed with the Environment Agency, give the appropriate identifier. In other cases state the principal technique, for example gas chromatography.
- <sup>2</sup> Give the result as 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, give the result as the 'minimum to maximum' of the measured values.
- <sup>3</sup> For non-continuous measurements give the date and time of the sample that produced the result. For continuous measurements give the percentage of the process operating time covered by the result.
- <sup>4</sup> Complete if the uncertainty associated with the result is not a 95% confidence interval. Leave blank for 95% confidence intervals.

## Water Usage Reporting Form

**Permit number:**   EPR/BM0273IJ  
**Facility name:**    Lanxess Solutons UK Ltd

**Operator:**   Lanxess Solutions UK Ltd.  
**Water Usage Reporting Form: 01/01/2024**

Reporting of water usage for the year [YYYY]

Water source	Water usage (m <sup>3</sup> )	Specific water usage (m <sup>3</sup> /unit) <sup>2</sup>
Mains water	<i>[insert annual usage in m<sup>3</sup> where mains water is used]</i>	<i>[insert annual usage in m<sup>3</sup>/unit where mains water is used]</i>
Site borehole	<i>[insert annual usage in m<sup>3</sup> where water is used from a site borehole]</i>	<i>[insert annual usage in m<sup>3</sup>/unit where water is used from a site borehole]</i>
River abstraction	<i>[insert annual usage in m<sup>3</sup> where abstracted river water is used]</i>	<i>[insert annual usage in m<sup>3</sup>/unit where abstracted river water is used]</i>
Other – <i>[specify other water source where applicable. Add extra rows where needed]</i>	<i>[insert annual usage in m<sup>3</sup> where applicable]</i>	<i>[insert annual usage in m<sup>3</sup>/unit where applicable]</i>
Total water usage	<i>[insert total annual water usage in m<sup>3</sup>]</i>	<i>[insert total annual water usage in m<sup>3</sup>/unit]</i>

<b>Operator’s comments</b>

<b>Operator's comments</b>

**Signed:**     *[Name]*

**Date:**       *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

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**Guidance for use:** Use this form to report your annual water usage.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Add additional rows as necessary.

## Energy Usage Reporting Form

**Permit number:** EPR/BM0273IJ  
**Facility name:** Lanxess Solutions UK Ltd

**Operator:** Lanxess Solutions UK Ltd.  
**Energy Usage Reporting Form: 01/01/2024**

Reporting of energy usage for the year [YYYY]

Energy source	Energy consumption / production (MWh)	Specific energy consumption (MWh/unit) <sup>2</sup>
Electricity imported as delivered - source [specify source, e.g. supplied from the national grid]	<i>[insert annual consumption in MWh where electricity is imported]</i>	<i>[insert annual consumption in MWh/unit where electricity is imported]</i>
Electricity imported as primary energy 1 – conversion factor of [specify conversion factor used to convert electricity delivered to primary energy]	<i>[insert annual consumption in MWh where electricity is imported]</i>	<i>[insert annual consumption in MWh/unit where electricity is imported]</i>
Natural gas	<i>[insert annual consumption in MWh where natural gas is used]</i>	<i>[insert annual consumption in MWh/unit where natural gas is used]</i>
Gas oil – conversion factor of [specify conversion factor used to convert tonnes to MWh]	<i>[insert annual consumption in MWh where gas oil is used]</i>	<i>[insert annual consumption in MWh/unit where gas oil is used]</i>
Imported heat	<i>[insert annual consumption in MWh where heat is imported]</i>	<i>[insert annual consumption in MWh/unit where heat is imported]</i>
Other – <i>[specify other energy source and conversion factors where applicable, e.g. renewable fuel. Add extra rows where needed]</i>	<i>[insert annual consumption in MWh where applicable]</i>	<i>[insert annual consumption in MWh/unit where applicable]</i>
Electricity exported	<i>[insert annual production in MWh where electricity is exported]</i>	Not applicable
Heat exported	<i>[insert annual production in MWh where heat is exported]</i>	Not applicable

<b>Operator's comments</b>

**Signed:**     *[Name]*

**Date:**       *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

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**Guidance for use:** Use this form to report your annual energy usage.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Add additional rows as necessary.

<sup>1</sup> Multiply delivered electricity by 2.4 to convert to primary energy where the electricity is supplied from the national grid. If the electricity is supplied from another source, specify the conversion factor used. Add additional rows as needed if electricity is imported from multiple sources.

<sup>2</sup> Divide energy consumption by an appropriate unit of raw material processed or product output.

# Other Performance Parameters Reporting Form

**Permit number:** EPR/BM0273IJ  
**Facility name:** Lanxess Solutions UK Ltd

**Operator:** Lanxess Solutions UK Ltd  
**Other Performance Parameters Reporting Form:** 01/01/2024

Reporting of other performance parameters for the period from [DD/MM/YY] to [DD/MM/YY]

Parameter	Units
Annual production fire retardant chemicals	tonnes
Annual production Uniplex 214	tonnes
Total raw material used	tonnes
Chemical oxygen demand (kg) discharged - from data provided by sewerage receiver	kg
Recovery of Hydrochloric Acid	Wgt %

<b>Operator's comments</b>

**Signed:** *[Name]*

**Date:** *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

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**Guidance for use:** Use this form to report the performance parameters (other than water and energy) required by your permit. Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. The parameters to report and units to be used can be found in the 'Performance parameters' table in schedule 4 of your permit. Add additional rows as necessary.