

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Lotus Cars Limited

Lotus Cars Ltd Wellingborough
Sywell Road
Park Farm South
Wellingborough
Northamptonshire
NN8 6XX

Permit number

EPR/KP3236YH

Lotus Cars Ltd Wellingborough

Permit number EPR/KP3236YH

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

Lotus Cars Limited undertakes surface treatment of components for use in the automotive industry at their facility in Wellingborough, Northamptonshire, which is located at NGR SP 86082 68825. The site is located on the west outskirts of the town of Wellingborough. It is bounded to the north, south and east by industrial units. To the west of the site is a field and a number of outdoor sports clubs.

The installation consists of one surface treatment line, which has a total surface treatment vat capacity of 58,000 litres. The total tank capacity is 206,000 litres, which includes degreasing and rinse tanks that are part of the surface treatment process, but are not classed as surface treatment vats. The surface treatment activity treatment vats have a aggregated volume of more than 30 m³ so the activity is covered under Section 2.3 Part A (1)(a) of the Environmental Protection (England and Wales) Regulations 2016. The operator maintains an ISO 14001 accredited environmental management system.

The main stages of the surface treatment process can be summarised as: alkali clean, rinse, alkali etch, rinse, acid de-smut, rinse, acid anodise, rinse, seal, dye and seal again. The components are attached to flight bars, which are transferred between the tanks by means of a carousel transporter. The main chemicals used in these processes are; sodium hydroxide, nitric acid, hydrofluoric acid and sulphuric acid.

Emissions to air include emissions from burners used to provide heat to the process and emissions from the sulphuric acid tank water scrubber and sodium hydroxide tank water scrubber which will release water vapour with significantly diluted traces of sulphuric acid and sodium hydroxide. Acid and alkaline tank emissions pass through a wash box abatement system where they are captured in water. All air emissions have screened out as insignificant.

The effluent treatment plant manages the process waste water from the surface treatment activities. It comprises: pH adjustment, settlement tanks and a filter press and has a maximum treatment capacity of 24 tonnes per day. The waste water then passes into the municipal sewer and is treated by Anglian Water at Broadholme Wastewater Treatment Works. Sludge is taken by lorry to an authorised waste disposal facility. Surface water run-off from the roofs and paved areas passes into the industrial estate's main surface water drainage network. The domestic wastewaters are discharged to the Anglian Water foul sewer and bypass the onsite effluent treatment plant. All water and sewer emissions have screened out as insignificant.

The nearest residential receptors are the town of Wellingborough 950 m to the east. Within 10 km of the site is the Upper Nene Valley Gravel Pits (SPA, Ramsar and SSSI). Within 2 km of the site are; Park Farm Industrial Estate, Niort Way Verge and Vivians Covert (Local Wildlife Sites). The discharge to water from Broadholme Wastewater Treatment Works passes into the River Nene, which runs alongside the Upper Nene Valley Gravel Pits (Spa, Ramsar and SSSI) and the following Local Wildlife Sites; Irthlingborough Lakes and Meadows, Skew Bridge Lakes, Higham Ferrers Gravel Pit West, Wilsons Pits, Higham Ferrers Reserve and Higham Ferrers Gravel Pit East.

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

Status log of the permit		
Description	Date	Comments
Application EPR/KP3236YH/A001	Duly made 03/11/2020	Application for a surface treatment facility producing automotive components.
Additional information received	06/01/2021	Chemical Safety Data Sheets and H1 supporting information.
Additional information received	25/01/2021	Burner service record and burner details.
Additional information received Schedule 5 Notice dated 18/12/2020	11/03/2021	Further details on Accident Management Plan, Complaints Procedure, BAT Assessment and Washbox Maintenance Procedure.
Additional information received	15/03/2021	Dangerous Substances and Explosive Atmospheres Regulations report on the storage of chemicals onsite.
Additional information received Schedule 5 Notice dated 01/06/2021	26/07/2021	Further details on air, water and sewer emission assessment, site plans and emission points, chemical storage, monitoring of abatement system, no mercury in caustic.
Additional information received	02/08/2021	Confirmation of ISO 14001 certification.
Additional information received	04/08/2021	Confirmation surface water drains do not have interceptors (see IC6).
Additional information received	06/08/2021	Confirmation of sewer treatment destination.
Additional information received	11/08/2021	Confirmation of process monitoring for pH, flow and conductivity.
Permit determined EPR/KP3236YH (Installation - PAS Billing ref. KP3236YH).	14/09/2021	Permit issued to Lotus Cars Limited.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/KP3236YH

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Lotus Cars Limited (“the operator”),

whose registered office is

Potash Lane

Hethel

Norwich

Norfolk

NR14 8EZ

company registration number 00895081

to operate an installation at

Lotus Cars Ltd Wellingborough

Sywell Road

Park Farm South

Wellingborough

Northamptonshire

NN8 6XX

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

Name	Date
David Griffiths	14/09/2021

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.

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.

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.

2.4 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 water, air or land except from the sources and emission points listed in schedule 3 tables S3.1, S3.2 and S3.3.
- 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, S3.2 and S3.3;
- (b) process monitoring specified in table S3.4;

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 and S3.3 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 "immediately", in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities			
Activity reference	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
AR1	Section 2.3 Part A(1)(a) – Surface treating metal materials using an electrolytic or chemical process where the aggregated volume of the treatment vats is more than 30 m ³ .	Electrolytic and chemical etching of aluminium parts.	From receipt of raw materials to despatch of finished product, despatch of process effluent to onsite wastewater treatment plant and exhaust of extracted process fumes via scrubbers to air. Limited to the operation of one single treatment line with an aggregated surface treatment vat capacity of 58 m ³ .
Directly Associated Activity			
AR2	Disposal of non-hazardous waste with a capacity less than 50 tonnes per day involving physico-chemical treatment.	Treatment of effluent from chemical etching and other manufacturing activities. D9 – Physico-chemical treatment resulting in final compounds or mixtures which are discarded by any of the operations numbered D1 to D12.	From receipt of process effluent to discharge of treated effluent to sewer, including storage and dispatch of solids originating from effluent treatment. Maximum effluent treatment capacity of less than 50 tonnes per day.
AR3	Surface water drainage systems.	Discharge of surface water run-off to Anglian Water surface water sewer.	From the collection of uncontaminated surface water run-off to the discharge into the surface water sewerage system.
AR4	Storage of chemicals	Storage of chemicals associated with the surface treatment and effluent treatment activities.	From receipt of chemicals and storage to disposal of containers.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application EPR/KP3236YH/A001	Application form part B3 section 3 Table 3a – technical standards.	Duly made 03/11/2020
Additional information received	Chemical raw material details.	06/01/2021
Additional information received	Burner equipment details.	25/01/2021
Response to Schedule 5 Notice dated 18/12/2020	Response to questions: 1 (a,b,c,d) - burner and stack details 2 – raw material details 3 – surface water from roof and car park 4 – accident management plan 5 – complaint procedure 6 – DSEAR on the storage of chemicals onsite. 7 – liquid containment 8 – no destructive testing 9 – washbox maintenance procedure 10 - BAT assessment.	06/01/2021 12/01/2021 25/01/2021 11/03/2021 15/03/2021
Response to Schedule 5 Notice dated 01/06/2021	Response to questions: 7 – discharge MH20A is no longer active 8 – chemical warehousing 9 – wash box monitoring 10 – ion exchange details 11 – anode material is the product 12 – confirmation there is no mercury in sodium hydroxide.	26/07/2021
Additional information received	Process monitoring pH, flow and conductivity.	11/08/2021

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	<p>The Operator shall submit a report to the Environment Agency for written approval, detailing how the recommendations to improve secondary and tertiary containment, as detailed in Section 5.0 Conclusions and Recommendations of the Containment Assessment report (19-0118.01, dated 03/11/2020) provided with permit application EPR/KP3236YH/A001, have been implemented.</p> <p>This report must include details of how the bunds meet the standards in the guidance: CIRIA C736 – Containment Systems for the Prevention of Pollution. Secondary, Tertiary and Other Measures for Industrial and Commercial Premises.</p>	31/01/2022
IC2	<p>The Operator shall submit a copy of their maintenance and inspection regime for all primary, secondary and tertiary containment to the Environment Agency for written approval.</p> <p>The maintenance and inspection regime must be in line with the guidance: CIRIA C736 – Containment Systems for the Prevention of Pollution. Secondary, Tertiary and Other Measures for Industrial and Commercial Premises.</p>	31/01/2022
IC3	<p>The Operator shall submit a report for written approval by the Environment Agency on the removal of the redundant tanks at the site. Where the tanks are removed from secondary or tertiary containment, the Operator must demonstrate how the integrity of the bund has been maintained.</p>	28/02/2022
IC4	<p>The Operator shall carry out a water efficiency audit of the installation and submit a report to the Environment Agency for written approval.</p> <p>The audit report shall have regard to the Environment Agency Guidance Note: The Surface Treatment of Metals and Plastics by Electrolytic and Chemical Processes - EPR S2.07, and shall provide a breakdown of significant water use by department or activity and shall establish the current installation performance (for example litre water/kg of product) and water efficiency objective(s) for this installation.</p> <p>The audit report must include:</p> <ul style="list-style-type: none"> • A review of relevant water saving technologies and techniques, including a cost benefit analysis of those water saving measures. • A review of options for a water recovery/recirculation system in line with EPR 2.07 sections 1.2 and 1.3. • A summary of the audit and the full cost benefit analysis of BAT measures along with timescales for implementation of water saving/recovery measures. • In the event a water recovery system/recirculation system cannot be considered BAT, justification supported by evidence and a cost- benefit analysis to demonstrate why this cannot be considered BAT. <p>The Operator shall implement any additional water saving measures within the timescales agreed with the Environment Agency.</p>	28/01/2022
IC5	<p>The Operator shall submit a report for written approval by the Environment Agency detailing potential routes for recovery / re-use for the filter cake sludge from the onsite effluent treatment plant. The report must include how the Operator is applying the waste hierarchy referred to in Article 4 of the Waste Framework Directive to their filter cake sludge. The report must include timescales for implementation of any recovery / re-use proposals.</p> <p>Recovery / re-use proposals shall be implemented in line with the timescales agreed with the Environment Agency.</p>	28/01/2022

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC6	<p>The Operator shall submit to the Environment Agency for written approval proposals for the installation of interceptor(s), and/or other suitable pollution abatement device(s) for the surface water drainage system that passes through emission points W1, W2, as listed in table S3.2 and outline timescales for these works.</p> <p>The Operator shall install interceptor(s), and/or other suitable pollution abatement device(s) in line with the timescales agreed with the Environment Agency.</p> <p>Upon completion of the installation of the pollution abatement device(s), the Operator shall submit an inspection and maintenance plan for the pollution abatement device(s) to the Environment Agency for written approval.</p>	28/08/2022
IC7	<p>The Operator shall submit a report to the Environment Agency for written approval which assesses the feasibility of using low temperature biological detergents in line with EPR 2.07.</p> <p>The report shall consider the use of a low temperature biological cleaner system in place of the traditional alkaline soak cleaner for longer production life, less waste and lower energy consumption.</p> <p>The Operator shall either:</p> <p>a) Implement the use of detergent within the timescales as agreed with the Environment Agency.</p> <p>b) Justify why the use of low temperature biological detergent is not feasible.</p>	28/01/2022
IC8	<p>The Operator shall submit a report to the Environment Agency for written approval which reviews options for adjusting their process control software in order to allow drag out times to be adjusted to minimise drag out. The report shall specify timescales for implementation.</p> <p>The Operator shall implement the proposals in line with the timescales agreed with the Environment Agency.</p>	28/01/2022

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels	
Raw materials and fuel description	Specification
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Schedule 3 – Emissions and monitoring

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
A1 as shown on site plan in Schedule 7	Sulphuric acid tank water scrubber	Sulphuric acid vapour	-	-	-	-
A2 as shown on site plan in Schedule 7	Sodium hydroxide tank water scrubber	Sodium hydroxide vapour	-	-	-	-
A3 as shown on site plan in Schedule 7	Gas burner tank heater exhaust 1	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	-	-	-	-
		Carbon monoxide	-	-	-	-
A4 as shown on site plan in Schedule 7	Gas burner tank heater exhaust 2	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	-	-	-	-
		Carbon monoxide	-	-	-	-

Emission point ref. & location	Source	Parameter	Limit (incl. unit)	Reference Period	Monitoring frequency	Monitoring standard or method
W1 on site plan in schedule 7 emission to surface water drainage system (Anglian Water Network)	Clean uncontaminated surface water runoff.	Visible oil and grease	No visible oil and grease	Spot check	Weekly	Visual
W2 on site plan in schedule 7 emission to surface water drainage system (Anglian Water Network)	Clean uncontaminated surface water runoff.	Visible oil and grease	No visible oil and grease	Spot check	Weekly	Visual

Table S3.3 Point source emissions to sewer, effluent treatment plant or other transfers off-site—emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (incl. Unit)	Reference period	Monitoring frequency	Monitoring standard or method
S1 as shown on site plan in Schedule 7. Emission via discharge consent to Anglian Water Broadholme Wastewater Treatment Works	Site effluent treatment plant	-	-	-	-	-
S2 as shown on site plan in Schedule 7. Emission via discharge consent to Anglian Water Broadholme Wastewater Treatment Works	Site amenities effluent	-	-	-	-	-

Table S3.4 Process monitoring requirements

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Wash Box 1 (sodium hydroxide tank extraction)	Water level	Every 2 hours	Visual check	--
	Water pressure	Daily	Visual check	0.5 – 1 bar pressure limits
	Solids build-up	Weekly	Visual check	Internal cassette checked
	pH	Daily	Spot check	7 - 14
	Flow Rate	Daily	Visual check	4000- 7000 l/h
	Conductivity	Daily	Spot check	-
Wash Box 2 (sulphuric acid tank extraction)	Water level	Every 2 hours	Visual check	--
	Water pressure	Daily	Visual check	0.5 – 1 bar pressure limits
	Solids build-up	Weekly	Visual check	Internal cassette checked
	pH	Daily	pH meter	1-6
	Flow Rate	Daily	Visual check	4000 – 7000 l/h
	Conductivity	Daily	Conductivity meter	-

Schedule 4 – Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Surface water monitoring Parameters as required by condition 3.5.1	W1, W2	Every 12 months	1 January
Process monitoring Parameters as required by condition 3.5.1	Wash Box 1 (sodium hydroxide tank extraction) Wash Box 2 (sulphuric acid tank extraction)	Every 6 months	1 January, 1 July

Table S4.2: Annual production/treatment	
Parameter	Units
Components produced	tonnes

Table S4.3 Performance parameters		
Parameter	Frequency of assessment	Units
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Total raw material used	Annually	tonnes
Total acid used	Annually	tonnes
Total alkali used	Annually	tonnes

Table S4.4 Reporting forms		
Media/parameter	Reporting format	Date of form
Point source emissions to water (other than sewer)	Emissions to Water Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Process monitoring	Process Monitoring Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Water usage	Water Usage Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Energy usage	Energy Usage Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021
Other performance parameters	Other Performance Parameters Reporting Form, or other form as agreed in writing by the Environment Agency	Version 1, 08/03/2021

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	
Name of operator	
Location of Facility	
Time and date of the detection	

(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	
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	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
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 breach of permit conditions not related to limits	
To be notified within 24 hours of detection	
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.	

(d) 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 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.

“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.

“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.

“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.

“quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

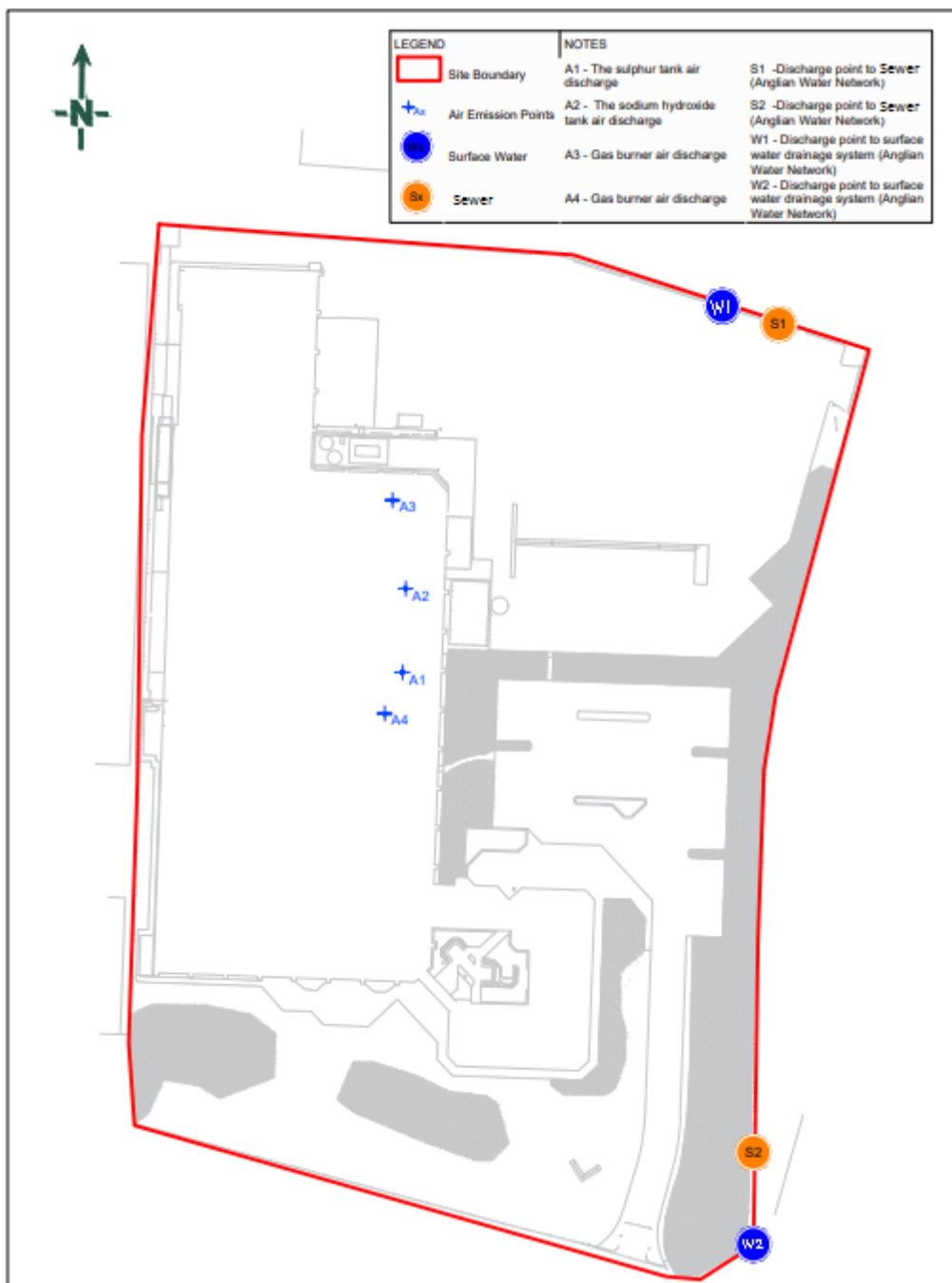
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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.

“year” means calendar year ending 31 December.

Schedule 7 – Site plan



END OF PERMIT