

# Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

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RTI Extrusions Europe Limited

Low Moor Extrusions Facility

Brighouse Road

Low Moor

Bradford

BD12 0QL

**Permit number**

EPR/PP3730DV

# Low Moor Extrusions Facility

## Permit number EPR/PP3730DV

### Introductory note

#### **This introductory note does not form a part of the permit**

The main features of the permit are as follows.

The site is located at Brighthouse Road, Low Moor, Bradford, BD12 0QL (the site) (National Grid Reference: SE1572528574) surrounded by industrial building and processes. The nearest residential area is Brighthouse Lane which is approximately 60 m from the site boundary

RTI Extrusions Europe Limited (herein after known as the 'Operator') operate a hard alloy (titanium and stainless steel) extrusion and engineering facility that produces specialist titanium alloy components for the aerospace and power sector applications, typically used in turbine engines and associated sub-assemblies.

The site is occupied by various manufacturing buildings, external yard areas and car parking with an approximate site area of 16,700 m<sup>2</sup>.

The site principally comprises the following processes and buildings:

- An extrusion building, with extrusion press, billet preparation area, cutting / radiusing, degreasing, preheat furnace, tool room, die-coating, straightening and shot blasting;
- An acid descaling building facility with pickling baths, chemical milling and a wet scrubber acid emissions abatement plant;
- Finish & dispatch building, with cold draw coating;
- Carbon and stainless steel stockyard;
- Waste storage area; and
- Office facilities.

The Chemical Milling / Tagging activities carried out by the site are required to be permitted as a Part A(1) Installation by virtue of Section 4.2 A(1) (b):

4.2 A(1) (b): Unless falling within any other Section, any manufacturing activity which is likely to result in the release into the air of any hydrogen halide (other than the manufacture of glass or the coating, plating or surface treatment of metal) or which is likely to result in the release into the air or water of any halogen or any of the compounds mentioned in paragraph (a)(vi) (other than the treatment of water).

The listed activities on site comprise the following:

- Chemical Milling: Through the immersion of one end of the titanium extrusion into a concentrated nitric acid, hydrofluoric and/or hydrochloric acid solution for the milling and removal of metal in order to facilitate cold drawing; and
- Acid Pickling: The immersion of hot extrusions into either a nitric/hydrofluoric acid solution or a sulphuric/hydrofluoric acid solution for the removal of oxides and remnant glass lubricant. Both processes result in the potential emissions to air of nitrogen oxides, halogens and acid gas emissions. All tanks are fitted with lip extraction, which provides effective control of tank emissions and subsequently extracts to acid gas scrubbers prior to the release to atmosphere via Authorised Release Point A1.

In addition, the operator requires a Part B activity for the descaling, namely:

2.3 B (a): Any process for the surface treatment of metal which is likely to result in the release into air of any acid-forming oxide of nitrogen and which does not fall within part A(1) or Part A(2) of this section.

This is technically linked to the Part A (1) activity and the two activities combined result in one stationary technical unit and therefore one installation.

### Process

The site receives titanium alloys and stainless steel billets, which undergo a series of engineering processes prior to undergoing chemical milling and pickling. Once chemically treated, all extrusions are then subject to cold drawing, machining and finishing prior to inspection and dispatch.

The site includes a number of ancillary processes including evaporative cooling, emissions extraction and abatement, oil and water hydraulic systems, die machining and preparation.

The site also operates a centralised waste management and hazardous material storage area. All above ground storage tanks on site have secondary containment have been designed to meet Environment Agency Pollution Prevention guidelines.

All current underground storage is progressively being replaced.

### Emissions to Air

Emissions to air are limited to treated acid gas emissions arising from the 'Pickling Shop' emissions scrubber systems.

All emissions from the Pickling Shop Scrubber are released via emission point A1.

There are six (6) other minor and unregulated emission points (A2 to A7) within the Installation relating to various steam extraction, baghouse and other extraction exhausts.

Due to the scale of operations, there are very limited combustion products emitted to air from the site.

### Odour

There are no processes with the potential to give rise to odour emissions from the site.

### Noise and Vibration

The site is located within a mixed industrial and residential area with a generally elevated background noise level. The Installation has potential external noise sources for example the extraction systems, cooling tower, and cooler.

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

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/PP3730DV/A001	04/10/16	Application for chemical milling and tagging of metals.
Additional information received	13/04/17 12/05/17 21/06/17 22/09/17	Confirmation of:- <ul style="list-style-type: none"> <li>• air emission impact</li> <li>• accident management plan</li> <li>• waste codes and hazardous property codes</li> <li>• design and maintenance of drainage system.</li> </ul>
Permit determined EPR/PP3730DV (Billing ref. PP3730DV)	29/09/17	Permit issued to RTI Extrusions Europe Limited.

End of introductory note

# Permit

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

### Permit number

**EPR/PP3730DV**

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

**RTI Extrusions Europe Limited** (“the operator”),

whose registered office is

**26a Atlas Way  
Sheffield  
England  
S4 7QQ**

company registration number **08606324**

to operate an installation at

**Low Moor Extrusions Facility  
Brighouse Road  
Low Moor  
Bradford  
BD12 0QL**

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

Name	Date
Claire Roberts	29/09/2017

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 green 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.

### **2.4 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 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;
  - (b) noise specified in table S3.3;
  - (c) 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,
- 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 and 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 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, 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

<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 and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
AR1	S4.2 A(1) (b)	Manufacturing activity which is likely to result in the release into the air of any hydrogen halide or which is likely to result in the release into the air or water of any halogen or any of the compounds mentioned in paragraph (a)(vi) (other than the treatment of water).	From receipt of extruded metal using hydrochloric, hydrofluoric and nitric acid solution and other raw materials to storage of the treated metal.
AR2	S2.3 B (a) Surface treatment of metals	Process for the surface treatment of metal which is likely to result in the release into air of any acid-forming oxide of nitrogen and which does not fall within part A(1) or Part A(2) of this section.	From the extruded metal being acid pickled using hydrochloric, hydrofluoric and nitric acid solution to storage of the treated metal.
<b>Directly Associated Activity</b>			
AR3	Boilers, Ovens and electrical power supply	3 x 110 kWth gas-fired boilers	Includes gas receipt and utilisation to heat billets and extruded profiles throughout the manufacturing process.
AR4	Extrusion and Billet preparation	--	--
AR5	Stretching	2 x hydraulic stretching machines	--
AR6	Shot blasting	1 x shotblasting compound	For the preparation and removal of oxide from extrusions prior to surface treatment
AR7	Storage and dispatch of finished products	--	--
AR8	Control and abatement systems for emissions	--	From receipt of raw materials and metals to treatment and storage of finished product.
AR9	Storage of waste	--	Waste produced from onsite treatment. Storage shall be undertaken on an impermeable surface with secondary containment.

<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 and WFD Annex I and II operations</b>	<b>Limits of specified activity and waste types</b>
AR10	Storage of raw materials and chemicals	--	From receipt of raw materials and metals to treatment and storage of finished product  Storage shall be undertaken on an impermeable surface with secondary containment.
AR11	Management of Surface Water	--	Surface water shall be discharged via oil interceptor.

<b>Table S1.2 Operating techniques</b>		
<b>Description</b>	<b>Parts</b>	<b>Date Received</b>
Application	Sections 3, 4, 5 and 6 of the application supporting document(s) provided in response to section 3a – technical standards, Part B3 of the application form	04/10/16
Response to Schedule 5 Notice dated 17/03/17	Response to <ul style="list-style-type: none"> <li>question 4 detailing Accident Management Plan</li> <li>question 8 detailing cleaning and maintenance of the drainage system</li> </ul>	13/04/17 12/05/17 21/06/17
Process Guidance Note 4/01(13) Statutory guidance for processes and installations for the surface treatment of metals	All parts	July 2013

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
IC 01	A written report shall be submitted to the Agency for approval, following a review of all site drainage at the installation. The report should take into account the appropriate measures for the management of drainage systems and run-off in web guidance, EPR 4.03 and PGN 4/01(13), including specific reference to:- <ul style="list-style-type: none"> <li>drainage from yards</li> <li>the interceptors</li> </ul>	29/03/18

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	<ul style="list-style-type: none"> <li>• CCTV survey to look at routing and integrity by a competent engineer</li> <li>• drainage plan for the entire site to ensure that the consequences of spillages are understood</li> <li>• maintenance</li> <li>• and include a plan and timetable for any improvements to the drainage system.</li> </ul> <p>The plan contained within the report shall be implemented by the operator from the date of approval in writing by the Agency subject to such amendments or additions as notified by the Agency.</p>	
IC 02	<p>A written report shall be submitted to the Agency for approval, following a review of all tank storage, pipework and containment at the installation. The review should take into account the appropriate measures for the management of current tanks, design and installation of new tanks, all pipework and containment as per the web guidance and EPR 4.03, PGN 4/01(13), and CIRIA C736 – Containment Systems for the Prevention of Pollution – secondary, tertiary and other measures for industrial and commercial premises or other relevant industry standard.</p> <p>The review shall include:</p> <ul style="list-style-type: none"> <li>• physical condition of the tanks, pipework, and secondary containment</li> <li>• the suitability for providing further containment when subjected to tank failure;</li> <li>• any work required to ensure compliance with the standards set out in CIRIA C736 or other relevant industry standard; and</li> <li>• a preventative maintenance and inspection regime</li> </ul> <p>The plan contained in the report shall be implemented by the operator from the date of approval in writing by the Agency subject to such amendments or additions as notified by the Agency.</p>	29/03/18
IC 03	<p>A written improvement plan to address the improvements identified in Table 4.2 of the application supporting information regarding the noise abatement shall be submitted to the Environment Agency. The plan shall include as a minimum, details of the new plant and timescale for its installation and commissioning.</p> <p>The plan shall be implemented by the operator from the date of approval in writing by the Agency subject to such amendments or additions as notified by the Agency.</p>	05/01/18
IC 04	<p>The operator shall submit a written report to the Environment Agency which will review the stack and extraction options available to reduce emissions from the site's plant, assess how effective these methods will be at reducing the site's NO<sub>x</sub> and HF process contributions and demonstrate that they can achieve an insignificant impact on sensitive receptors.</p>	29/03/18

<b>Table S1.3 Improvement programme requirements</b>		
<b>Reference</b>	<b>Requirement</b>	<b>Date</b>
	<p>Based on this review the operator's shall propose the best available technique(s) for reducing NO<sub>x</sub> and HF emissions from the site's plant, along with timescales for installation/implementation of the technique(s) to the Environment Agency for written approval.</p> <p>The operator shall install/implement the approved options from the date of approval in writing by the Environment Agency subject to such amendments or additions as notified by the Environment Agency.</p>	

# 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

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	Source	Parameter	Limit (including unit) <sup>[Note 1 &amp; 2]</sup>	Reference period	Monitoring frequency	Monitoring standard or method
A1 [Point A1 in application supporting document for EPR/PP3730DV/A001 labelled Figure 1.3: Installation Boundary and Site Layout]	Pickling Plant Extract Scrubber	Oxides of Nitrogen (NO and NO <sub>2</sub> expressed as NO <sub>2</sub> )	200 mg/m <sup>3</sup>	Hourly Mean	Quarterly for first year then Annually	USEPA M7d <sup>[Note 1]</sup>
			75mg/m <sup>3</sup>	Daily Mean		
		Fluoride (expressed as HF)	2 mg/m <sup>3</sup>	1 hour period	Quarterly for first year then Annually	BS ISO 15713 and MID <sup>[Note 1]</sup>
A2 [Point A2 in application supporting document for EPR/PP3730DV/A001 labelled Figure 1.3: Installation Boundary and Site Layout]	Billet Washer Steam Extract	Steam	--	--	--	--
A3 [Point A3 in application supporting document for EPR/PP3730DV/A001 labelled Figure 1.3: Installation Boundary and Site Layout]	Glass Coating Extraction bag house	--	--	--	--	--
A4 [Point A4 in application supporting document for EPR/PP3730DV/A001 labelled Figure 1.3: Installation Boundary and Site Layout]	Shot blast extraction bag house filter	--	--	--	--	--
A5 [Point A5 in application supporting document for EPR/PP3730DV/A001 labelled Figure 1.3: Installation Boundary and Site Layout]	Vica Fill Tank Gas Burner exhaust	--	--	--	--	--
A6 [Point A6 in application supporting document for EPR/PP3730DV/A001 labelled Figure 1.3: Installation Boundary and Site Layout]	Extrusion Press Extraction Exhaust	--	--	--	--	--
A7 [Point A7 in application supporting document for	Dryer Tank exhaust	--	--	--	--	--



<b>Table S3.1 Point source emissions to air – emission limits and monitoring requirements</b>						
<b>Emission point ref. &amp; location</b>	<b>Source</b>	<b>Parameter</b>	<b>Limit (including unit) <sup>[Note 1 &amp; 2]</sup></b>	<b>Reference period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
EPR/PP3730DV/A001 labelled Figure 1.3: Installation Boundary and Site Layout]						
Note1: Reference conditions 273K and 101.3kPa, without correction for water vapour content or O <sub>2</sub>						
Note 2: Minimum stack height is 11 m and velocity of the exhaust gases discharge shall be greater than 12 m/s.						

<b>Table S3.2 Point source emissions to sewer, effluent treatment plant or other transfers off-site– emission limits and monitoring requirements</b>						
<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>
S1 on site plan in application supporting document for EPR/PP3730DV/ A001 labelled EGN1071 OSE Site Drainage Plan	Press collection sump and interceptor	Total daily volume of discharge	25 m <sup>3</sup> /day	24-hour total	Periodic (quarterly)	As agreed in writing with Environment Agency.

<b>Table S3.3 Noise monitoring requirements</b>				
<b>Location or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Perimeter noise survey 'Monitoring Position 1' 53.752766, -1.763295	Noise	Annually unless otherwise agreed in writing with the Environment Agency	BS 4142:2014	--

<b>Table S3.4 Process monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Process scrubber	NaOH	Weekly	Not applicable	Continuous pH monitoring

## 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
Emissions to air Parameters as required by condition 3.5.1.	A1	Every 12 months	1 January
Noise monitoring Parameters as required by condition 3.5.1	Perimeter noise monitoring Position 1. 53.752766, -1.763295	Every 12 months unless otherwise agreed in writing with the environment Agency	1 January

Parameter	Units
Metal treated	tonnes

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

Media/parameter	Reporting format	Date of form
Air	Form air 1 or other form as agreed in writing by the Environment Agency	29/09/17
Sewer	Form sewer 1 or other form as agreed in writing by the Environment Agency	29/09/17
Water usage	Form water usage 1 or other form as agreed in writing by the Environment Agency	29/09/17
Energy usage	Form energy 1 or other form as agreed in writing by the Environment Agency	29/09/17
Other performance indicators	Form performance 1 or other form as agreed in writing by the Environment Agency	29/09/17

# 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	

<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 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 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.

“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.

“Hazardous property” has the meaning in Annex III of the Waste Framework Directive.

“Hazardous waste” has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

“Industrial Emissions Directive” means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

“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.

“Waste code” means the six digit code referable to a type of waste in accordance with the List of Wastes and in relation to hazardous waste, includes the asterisk.

“Waste Framework Directive” or “WFD” means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste

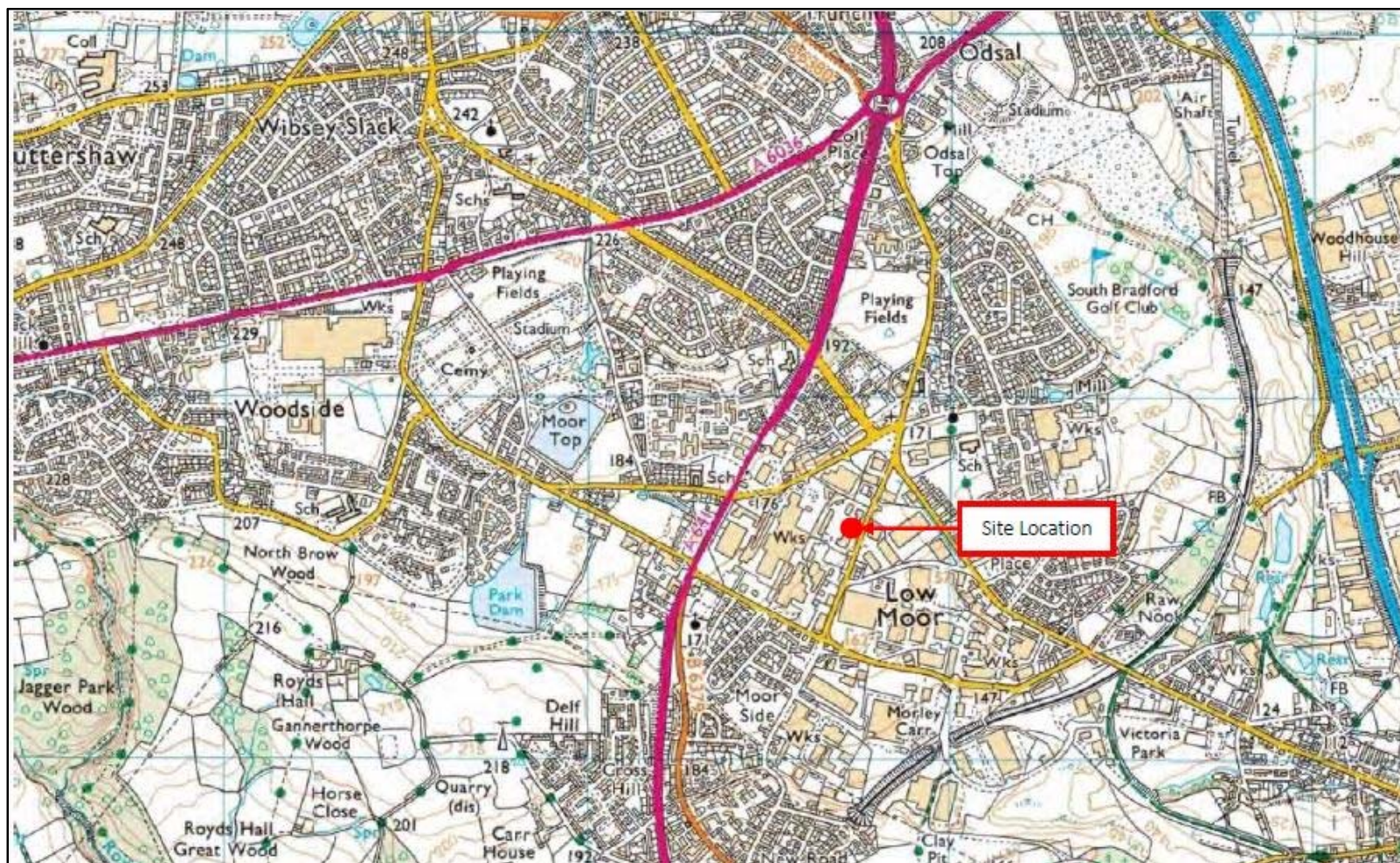
Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

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.

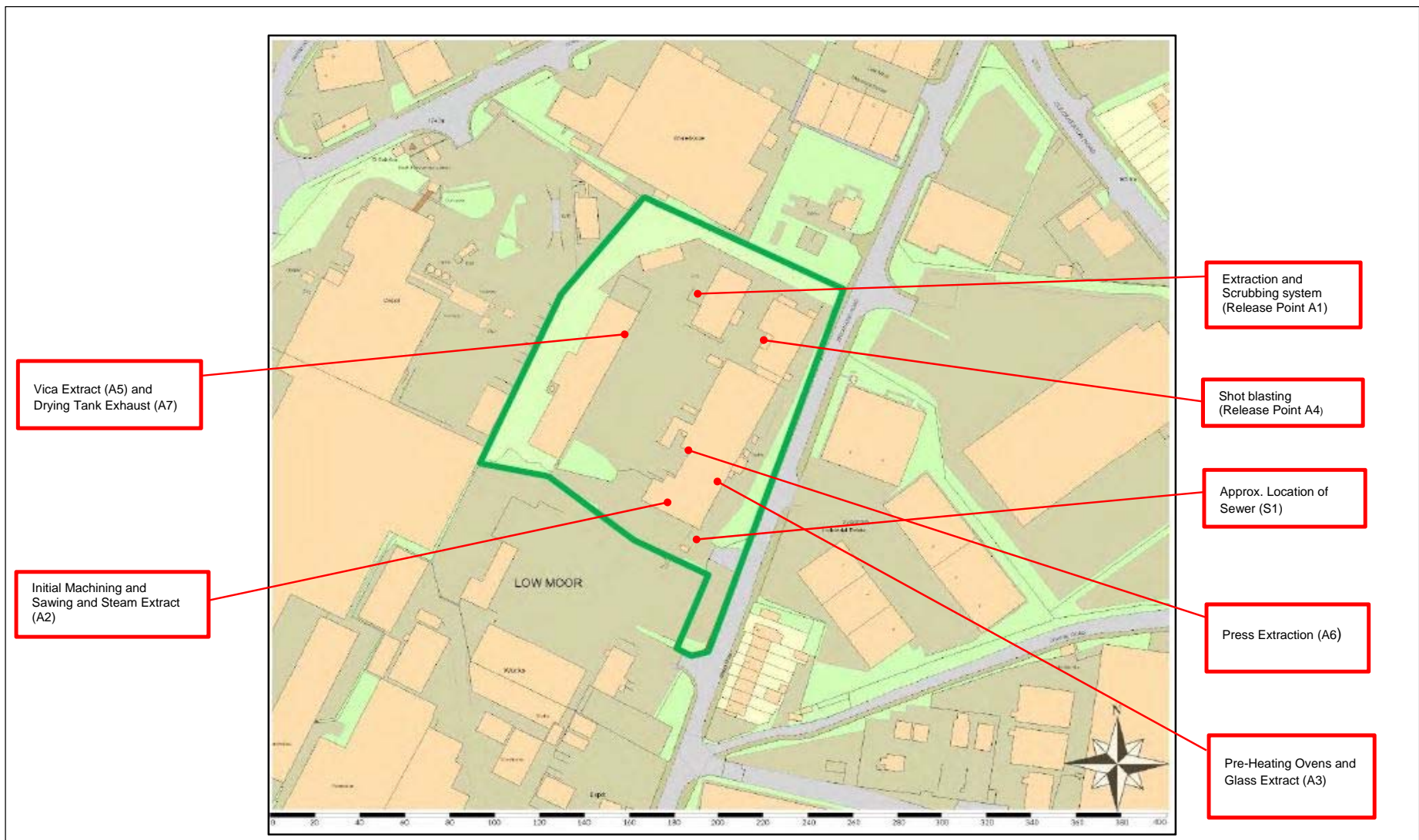
“year” means calendar year ending 31 December.

## Schedule 7 – Site plans



Site Location Plan ©Crown Copyright. All rights reserved. Environment Agency, 100024198, 2017.





Site Boundary and Layout Plan as reference by condition 2.2.1

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END OF PERMIT

Permit number  
EPR/PP3730DV



# Reporting Forms

**Permit Number: EPR/PP3730DV**

**Operator:**

**RTI Extrusions Europe Limited**

**Facility: Low Moor Extrusions Facility**

**Form Number:**

**Air1 / 29/09/17**

**Reporting of emissions to air for the period from DD/MM/YYYY to DD/MM/YYYY**

<b>Emission Point</b>	<b>Substance / Parameter</b>	<b>Emission Limit Value</b>	<b>Reference Period</b>	<b>Result <sup>[1]</sup></b>	<b>Test Method <sup>[2]</sup></b>	<b>Sample Date and Times <sup>[3]</sup></b>	<b>Uncertainty <sup>[4]</sup></b>
A1	Oxides of nitrogen (NO and NO2 expressed as NO2)	200 mg/m <sup>3</sup>	Hourly average		USEPA M7d		
		75 mg/m <sup>3</sup>	Daily Mean				
A1	Fluoride (expressed as HF)	2 mg/m <sup>3</sup>	1 hour period		ISO 15713		

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .....

Date.....

(Authorised to sign as representative of Operator)

**Permit Number: EPR/PP3730DV**

**Operator:**

**RTI Extrusions Europe Limited**

**Facility: Low Moor Extrusions Facility**

**Form Number:**

**WaterUsage1 / 29/09/17**

**Reporting of Water Usage for the year YYYY**

<b>Water Source</b>	<b>Usage (m<sup>3</sup>/year)</b>	<b>Specific Usage (m<sup>3</sup>/unit output)</b>
Mains water		
Site borehole		
Other		
<b>TOTAL WATER USAGE</b>		

Operator's comments:

Signed .....

Date.....

(authorised to sign as representative of Operator)

**Permit Number: EPR/PP3730DV**

**Operator:**

**RTI Extrusions Europe Limited**

**Facility: Low Moor Extrusions Facility**

**Form Number:**

**Energy1 / 29/09/17**

**Reporting of Energy Usage for the year YYYY**

Energy Source	Energy Usage		Specific Usage (MWh/unit output)
	Quantity	Primary Energy (MWh)	
Electricity *	MWh		
Natural Gas	MWh		
Gas Oil	tonnes		
Recovered Fuel Oil	tonnes		
<b>TOTAL</b>	-		

\* Conversion factor for delivered electricity to primary energy = 2.4

Operator's comments:

Signed .....

Date.....

(Authorised to sign as representative of Operator)

**Permit Number: EPR/PP3730DV**

**Operator:**

**RTI Extrusions Europe  
Limited**

**Facility: Low Moor Extrusions  
Facility**

**Form Number:**

**Performance1 / 29/09/17**

**Reporting of other performance indicators for the period DD/MM/YYYY to DD/MM/YYYY**

<b>Parameter</b>	<b>Units</b>
Total raw material used	tonnes
Sodium Hydroxide used in scubber	litres

Operator's comments:

Signed .....

Date.....

(Authorised to sign as representative of Operator)

**Permit Number: EPR/PP3730DV**

**Operator:**

**RTI Extrusions Europe Limited**

**Facility: Low Moor Extrusions Facility**

**Form Number:**

**Sewer1 / 29/09/17**

**Reporting of emissions to sewer for the period from DD/MM/YYYY to DD/MM/YYYY**

<b>Emission Point</b>	<b>Substance / Parameter</b>	<b>Emission Limit Value</b>	<b>Reference Period</b>	<b>Result <sup>[1]</sup></b>	<b>Test Method <sup>[2]</sup></b>	<b>Sample Date and Times <sup>[3]</sup></b>	<b>Uncertainty <sup>[4]</sup></b>
S1	Total daily volume of discharge	25 m <sup>3</sup> /day	24 hours		As agreed in writing with Environment Agency.		

1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed .....

Date.....

(Authorised to sign as representative of Operator)