



PPC Permit ref: **070**  
Variation ref: **001**

Coventry City Council  
The Pollution Prevention and Control (England and Wales) Regulations 2000 Regulation 17(2)

**Variation Notice**

**Hytec Castings Ltd**  
**Barlow Road**  
**Aldermans Green Industrial Estate**  
**Coventry**  
**CV2 2LD**

Coventry City Council ("the Council"), in the exercise of the powers conferred upon it by regulation 17(2) of the Pollution Prevention and Control (England and Wales) Regulations 2000<sup>1</sup> ("the 2000 Regulations") hereby gives you a notice as follows-

The Council has decided to vary the conditions of permit reference **070** granted under regulation 9(1) of the 2000 Regulations in respect of the operation of the installation at:

**Hytec Castings Ltd**  
**Barlow Road**  
**Aldermans Green Industrial Estate**  
**Coventry**  
**CV2 2LD**

The variation of the conditions of the permit and date on which they are to take effect are specified in Schedule 1 to this notice. A consolidated permit as varied by this notice is set out in Schedule 2.

Signed on behalf of Coventry City Council

..... Date.....

Neil Chaplin, Environmental Protection Officer

An authorised officer of the Council

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<sup>1</sup> S.I 2000 No. 1973 to which there are amendments not relevant to this suspension notice.

**Schedule 1**

Variation to the Conditions of the Permit	Date(s) on which the variations are to take place
<p><b>In Document A: Permit, Page 1 Company name and installation address, DELETE:</b>            'Hytech (Castings Manufacture) Limited'</p> <p><b>And INSERT:</b>            'Hytec Castings Limited'</p>	<p>IMMEDIATELY</p>
<p><b>In Document A Permit, Page 1 Registered office address, DELETE:</b>            Hytech (Castings Manufacture) Limited            Foster Peschardt, Denmark House            143 High Street            Chalfont St Peter            Bucks SL9 9QL</p> <p><b>And INSERT:</b>            Hytec Castings Limited            Barlow Road            Aldermans Green Industrial Estate            Coventry            West Midlands            CV2 2LD</p>	<p>IMMEDIATELY</p> <p>IMMEDIATELY</p>
<p><b>In Document B Section 1.0 'Emissions Limits and Controls', Condition 1.1</b></p> <p><b>After the words:</b>            'All emissions to air'</p> <p><b>INSERT</b> the words:            '(including fugitive emissions)'</p>	<p>IMMEDIATELY</p>
<p><b>In Document B Section 1.0 'Emissions Limits and Controls' Condition 1.3</b></p> <p><b>DELETE</b> the words:            'as perceived by the Local Authority Inspector'</p>	<p>IMMEDIATELY</p>

<p><b>In Document B Section 2.0 'Monitoring, Sampling and Measurement of Emissions'</b></p> <p><b>DELETE Condition 2.2:</b> 'Any abnormal visual or olfactory emissions shall be investigated immediately and necessary corrective action taken. Details of the incident and corrective action taken shall be recorded in a logbook. The logbook shall be retained on site for a minimum of four years.'</p> <p><b>And replace by INSERTING new condition:</b> <b>2.15</b> The monitoring required by conditions 1.1, 1.2 and 1.3 shall be undertaken at least once per day whilst the installation is operational. The time, location of the monitoring, wind direction and results of these assessments shall be recorded in the site logbook. Where this monitoring shows abnormal visual or olfactory emissions, or where in the opinion of an Inspector from this Local Authority abnormal emissions exist, the operator shall investigate the cause of the emission and undertake remedial action immediately. Details of the emission and remedial action shall be recorded in the site logbook. The logbook shall be retained on site for a minimum of two years.</p>	<p>IMMEDIATELY</p> <p>IMMEDIATELY</p>
<p><b>In Document B Section 2.0 'Monitoring, Sampling and Measurement of Emissions' Condition 2.3</b></p> <p><b>DELETE the words:</b> The inventory of the retrospective six monthly solvent usage shall be forwarded to the local authority every six months commencing at six months from the date of this authorisation.</p> <p><b>And replace by INSERTING:</b> This inventory shall be submitted to the Local Authority every 12 months and in all cases the use of solvents, resins and catalysts shall be minimised to the greatest extent possible.</p>	<p>IMMEDIATELY</p> <p>IMMEDIATELY</p>
<p><b>In Document B Section 2.0 'Monitoring, Sampling and Measurement of Emissions'</b></p> <p><b>DELETE condition 2.4:</b> The results of any ambient air monitoring carried out within the processes boundary in order to demonstrate compliance with the Health and Safety at Work Act 1974 and its associated Regulations shall be forwarded to the Local Authority within nine months of this Authorisation being issued and at a frequency of no less than once yearly thereafter.</p>	<p>IMMEDIATELY</p>

<p><b>In Document B Section 2.0 'Monitoring, Sampling and Measurement of Emissions'</b></p> <p><b>DELETE Conditions:</b></p> <p><b>2.11</b> Where non-continuous quantitative monitoring is required, the frequency may be varied. Where there is consistent compliance with emission limits, regulators may consider reducing the frequency. When determining “consistent compliance” factors to consider include:</p> <p>(a) the variability of monitoring results, for example, results which range from 15 – 45 mg/Nm<sup>3</sup>, against an emission limit of 50 mg/Nm<sup>3</sup> might not qualify for a reduction in monitoring; and</p> <p>(b) the margin between the results and the emission limit, for example, results which range from 45 - 50 mg/Nm<sup>3</sup> when the limit is 50 mg/Nm<sup>3</sup> might not qualify for a reduction in monitoring.</p> <p><b>2.12</b> Consistent compliance shall be demonstrated using the results from at least:</p> <ul style="list-style-type: none"> <li>• three or more monitoring exercises within two years; or</li> <li>• two or more monitoring exercises in one year supported by continuous monitoring</li> </ul> <p><b>2.13</b> Regulators, when considering reducing non-continuous monitoring frequencies shall take any significant process changes, which might have affected the monitored emission, into account.</p> <p><b>2.14</b> The frequency of non-continuous quantitative monitoring shall be increased, for example, as part of the commissioning of new or substantially changed activities, or where emission levels are near to or approach the emission concentration limits.</p>	<p>IMMEDIATELY</p> <p>IMMEDIATELY</p> <p>IMMEDIATELY</p> <p>IMMEDIATELY</p>
<p><b>In Document B Section 2.0 'Monitoring, Sampling and Measurement of Emissions'</b></p> <p><b>INSERT new condition</b></p> <p><b>2.16</b> The operator shall keep records of monitoring, inspections, staff training, abnormal emissions and all other documentation required by the conditions of this permit in a site logbook. The records shall be kept on site and made available for inspection for a minimum of two years.</p>	<p>IMMEDIATELY</p>

<p><b>IN Document B Section 3 ' Furnace and Melting Operation'</b></p> <p><b>DELETE</b> Condition 3.2: The use of flux during melting operations shall not exceed the manufacturers recommended dose.</p> <p>And replace by <b>INSERTING</b> new Condition:</p> <p><b>3.4</b> The use of grain modifiers, oxidation control materials, fluxes and degassing agents should be reduced to a minimum and in any case should not exceed the recommended dosage</p>	<p>IMMEDIATELY</p> <p>IMMEDIATELY</p>
<p><b>IN Document B Section 3 ' Furnace and Melting Operation', Condition 3.3</b></p> <p>After the words 'the furnaces shall'</p> <p><b>INSERT</b> the words: 'remain covered at all times'</p>	<p>IMMEDIATELY</p>
<p><b>IN Document B Section 4.0 'Stacks, Ducts and Process Vents'</b></p> <p><b>INSERT</b> new Conditions:</p> <p><b>4.2</b> Emissions from metal finishing operations shall only be emitted via the dust filtration system in the enclosed finishing area.</p> <p><b>4.3</b> All chimneys and process vents shall not be fitted with any restriction such as a cap or cowl at the discharge point.</p> <p><b>4.4</b> The efflux velocity of discharged gases shall exceed 15m/s.</p> <p><b>4.5</b> Flues, ductwork and the sand silo shall be visually inspected at least annually for wear and tear and any defects shall be remedied as soon as possible. The flues and ductwork shall be cleaned to prevent accumulation of materials as part of this maintenence programme. Details of the inspection, any defects and remedial action taken shall be recorded in the site logbook.</p>	<p>IMMEDIATELY</p> <p>IMMEDIATELY</p> <p>IMMEDIATELY</p> <p>IMMEDIATELY</p>
<p><b>In Document B Section 5.0 'General Operations'</b></p> <p>Into Condition 5.5 <b>INSERT</b> the words:</p> <p>'Solids shall be cleaned by vacuum sweeping. Dry sweeping of dusty spillages shall not be permitted. Liquid spillages shall be cleaned using appropriate spillage containment equipment. Solvents spillages shall be cleaned in accordance with Clause 5.11 and spill kits shall be available in all areas where solvents are used.'</p>	<p>IMMEDIATELY</p>

<p><b>In Document B Section 5.0 'General Operations'</b></p> <p><b>DELETE</b> Condition 5.10:</p> <p>Staff at all levels shall receive the necessary training and instruction in their duties relating to control of the activities and emissions to air. Records shall be kept which details all relevant training provided to staff, and these records shall be kept for a minimum of 2 years.</p> <p>And replace by <b>INSERTING</b>:</p> <p><b>5.16</b> The operator shall maintain a statement of training requirements for each operational post and keep a record of the training received by each person whose actions may have an impact on the environment. These documents shall be made available to the regulator on request.</p> <p>The training of all staff with responsibility for operating the activity shall include:</p> <ul style="list-style-type: none"> <li>• Awareness of their responsibilities under the Permit; in particular how to deal with conditions likely to give rise to emissions, such as in the event of spillage;</li> <li>• Minimising emissions on start up and shut down; and</li> <li>• Action to minimise emissions during abnormal conditions.</li> </ul>	<p>IMMEDIATELY</p> <p>IMMEDIATELY</p>
<p><b>In Document B Section 5.0 'General Operations'</b></p> <p><b>INSERT</b> new conditions:</p> <p><b>5.17</b> All dusty or potentially dusty materials should be stored in silos or enclosed containers. Where the storage is open within a building then suitable precautions must be taken to prevent wind whipping.</p> <p><b>5.18</b> Dusty wastes shall be stored in closed containers and handled in a manner that avoids fugitive emissions of dust. Waste filters from dust extraction plant shall be stored in sealed bags prior to disposal.</p> <p><b>5.19</b> Internal transport of dusty materials should be carried out so as to prevent or minimise fugitive dust emissions.</p> <p><b>5.20</b> Spent moulds that are awaiting breakdown prior to reclamation shall be stored in enclosed containers that prevent wind whipping and shall remain closed or covered whilst not in use.</p>	<p>IMMEDIATELY</p> <p>IMMEDIATELY</p> <p>IMMEDIATELY</p> <p>IMMEDIATELY</p>

<p><b>5.21</b> External surfaces, open yards and storage areas should be inspected for repair at least annually and cleaned if necessary to prevent the accumulation of dusty material. Cleaning operations shall be carried out where necessary in a manner that minimises emissions of particulate matter to air and dry sweeping shall not be used.</p> <p><b>5.22</b> A high standard of housekeeping should be maintained in all areas of the installation at all times. The operator shall prepare and maintain a documented housekeeping schedule and the installation shall be inspected at least once per week. The schedule and details of these inspections and cleaning shall be recorded in the site logbook.</p>	<p>IMMEDIATELY</p> <p>IMMEDIATELY</p>
<p><b>INSERT</b> new Section 6 and Conditions</p> <p><b><u>6.0 Site Operations</u></b></p> <p><b>6.1</b> During delivery of sand to the silo displaced air shall only be vented through the bag filters or back vented to the delivery tanker in order to minimise emissions. Particular care should be taken to avoid over pressurisation of the silo.</p> <p><b>6.2</b> During charging of the silo care shall be taken to ensure that the transfer lines are securely connected to the tanker discharge point and the silo delivery inlet point.</p> <p><b>6.3</b> The seating of the pressure valves shall be checked before a delivery takes place. Immediately it appears that the valve has become unseated deliveries shall cease and no further delivery shall take place until the valve has been examined and re seated if necessary. The details of the inspection and any replacements/repairs shall be recorded in the site logbook.</p> <p><b>6.4</b> Bag filters serving the silo shall be visually inspected before each delivery occurs and be replaced or repaired as necessary and before another delivery takes place. The details of the inspection and any repair or replacement shall be noted in the site logbook.</p> <p><b>6.5</b> The silo shall be equipped with audible and or high level alarms to warn of overfilling. The alarms shall be checked before each delivery takes place and noted in the site logbook.</p> <p><b>6.6</b> A visual assessment of particulate emissions from the inlet connections and the arrestment plant on the silo shall be carried out for the duration of all bulk and sand deliveries by the delivery driver or designated site personnel. If emissions are visible during silo charging then the delivery shall cease immediately</p>	<p>IMMEDIATELY</p> <p>IMMEDIATELY</p> <p>IMMEDIATELY</p> <p>IMMEDIATELY</p> <p>IMMEDIATELY</p> <p>IMMEDIATELY</p>

and the cause of the problem rectified prior to further deliveries taking place. Tanker drivers shall be informed of the correct procedure to follow. Any emission of particulates during delivery shall be noted in the site logbook.	
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Signed on behalf of Coventry City Council

..... Date.....

Neil Chaplin, Environmental Protection Officer

An authorised officer of the Council



## Guidance for Operators receiving a Variation Notice

(This guidance does not form part of the Variation Notice, but it is for the guidance of those served with the notice).

### Dealing with Variation Notice

This notice varies the terms of the permit specified in the Notice by amending or deleting certain existing conditions and/or adding new conditions. The Schedule attached to the notice explain which conditions have been amended, added or deleted and the dates on which these have effect.

The Council may have included a 'consolidated permit' which takes into account these and / or previous variations. In cases where a consolidated permit is not included this variation notice must be read in conjunction with your permit document.

### Offences

#### Failure to comply

With a variation notice is an offence under regulation 32 of the 2000 Regulations. A person guilty of an offence under this regulation could be liable to (i) a fine of up to £20,000 or improvement for a term not exceeding 6 months or both; or (ii) to a fine or imprisonment for a term not exceeding 5 years or both, depending on whether the matter is dealt with in Magistrates Court or Crown Court.

### Appeals

Under regulation 27(2) of the 2000 Regulations operators have the right to appeal against a suspension notice. The right to appeal does not apply in circumstances where the notice implements a direction of the Secretary of State given under regulations 12(15) (directions to regulators), 36 (general directions to regulators), paragraph (4) of regulation 27 (Appeals), paragraph 14(6) of Schedule 4 (directions determining applications for permits) or 6(6) of Schedule 7 (directions determining variation of permits).

Appeals against a variation notice do not have the effect of suspending operation of the notice. Appeals do not have the affect of suspending permit conditions, or any of the mentioned notices.

Notice of appeal against a variation notice must be given within two months of the date of the notice, which is the subject matter or the appeal. The secretary of State may in a particular case allow notice of appeal to be given after the expiry of this period, but would only do so in the most compelling circumstances.

#### How to appeal

There are no forms or changes for appealing. However, for an appeal to be valid, appellants (the person/operator making the appeal) are legally required to provide (see Schedule 8 of the 2000 Regulations, paragraph 1):

- Written notice of the appeal
- A statement of the grounds of appeal;

- A statement indicating whether the appellant wishes the appeal to be dealt with by written representations procedure or a hearing —a hearing must be held if either the appellant or enforcing authority requests this, or if the Planning Inspector or the Secretary of State decides to hold one;
- (appellants must copy the above three items to the local authority when the appeal is made)
- a copy of any relevant application;
- a copy of any relevant permit
- a copy of any relevant correspondence between the appellant and the regulator; and
- a copy of any decision or notice, which is the subject matter of the appeal.

Appellants should state whether any of the information enclosed with the appeal has been the subject of a successful application for commercial confidentiality under regulation 31 of the 2000 Regulations, and provide relevant details. Unless such information is provided all documents submitted will be open to inspection.

Further guidance on commercial confidentiality can be found in chapter 8 of the LA-IPPC and LAPPC manual.

### **Where to send your appeal documents**

Appeals should be despatched on the day they are dated, and addressed to:

The planning Inspectorate  
 Environmental Appeals Administration  
 Room 4/19 – Eagle Wing  
 Temple Quay House  
 2 The Square  
 Temple Quay  
 Bristol BS1 6PN

On receipt of an appeal and during the appeal process the main parties will be informed about the next steps, and will also normally be provided with additional copies of each other's representations.

To withdraw an appeal – which may be done at any time – the appellant must notify the Planning Inspectorate in writing and copy the notification to the local authority who must in turn notify anyone with an interest in the appeal.

### **Costs**

Guidance from the Planning Inspectorate states that operator and regulator would be normally expected to pay their own expenses during an appeal. Where a hearing or enquiry is held as part of the appeal process, by virtue of Schedule 8, paragraph 4(10) of the 2000 Regulations, either the appellant or the local authority can apply for costs. Applications for costs are normally heard towards the end of the proceedings and will only be allowed if the party claimed them can show that the other side behaved unreasonably and put them to unnecessary expense. There is no provision for costs to be awarded where appeals are dealt with by written representatives.

## Commercial Confidentiality

An operator may request certain information to remain confidential i.e. not be placed on the public register. The operator must request the exclusion from the public register of commercially confidential information at the time of supply of the information requested by this notice or any other notice. The operator should provide clear justification for each item wishing to be kept from the register. The amount of information excluded from the register should be kept to the minimum necessary to safeguard the operator's commercial advantage. It may assist the local authority if the information the operator considers to be commercially confidential is submitted in a way which will allow it to be easily removed should the claim be granted, for example on separate pages, marked 'claimed confidential'. The onus is on the operator to provide a clear justification for each item to be kept from the register. It will not simply be sufficient to say that the process is a trade secret.

The general principle is that information should be freely available to the public. Information that maybe considered commercially confidential is that which if it "were being contained within the register would prejudice to an unreasonable degree the commercial interests of an individual or any other person" (regulation 31(12) of the 2000 Regulations).

Local Authorities will also take into account whether the information at issue could be obtained or inferred from other publicly accessible sources.

The local authority will determine this request within 28 days of the date of such an application and will issue a Determination Notice detailing their decision. The notice may specify a time period over which the information is to remain commercially confidential (if not specified, it will be four years beginning with the date of the determination). The operator may appeal to the Secretary of State within 21 days of the notification of the decision.

If the application is granted the local authority will place a statement on the public register stating that certain information has been withheld and stating the reason why, plus whether the information is relevant to a permit condition, and whether the permit condition has been complied with.

The local authority may consider that certain areas of the information are commercially confidential, and others are not. If this is the case it will be stated in the determination notice. The operator may appeal against this in the normal manner.

Further guidance on commercial confidentiality can be found in Chapter 8 of the LA-IPPC and LAPPC manual.

## **National Security**

Information may be excluded from the public register on the grounds of National Security. If it is considered that the inclusion of information on a public register is contrary to the interests of national security, the operator may apply to the Secretary of State, specifying the information and indicating the apparent nature of risk to national security. The operator must inform the local authority of such an application, who will not include the information on the public register until the Secretary of State has decided the matter.

**POLLUTION PREVENTION & CONTROL (ENGLAND AND WALES)  
REGULATIONS 2000**

**DOCUMENT A : PERMIT**

**Hytec Castings Limited**

Reference Number **PPC/70.**

Coventry City Council (“the Council”) in accordance with Section 10(2) of the Pollution Prevention & Control (England and Wales) Regulations 2000 (“The Regulations”), hereby permits:

**Hytec Castings Ltd**

Whose registered office is:

**Hytec Castings Ltd  
Barlow Road  
Aldermans Green Industrial Estate  
Coventry  
West Midlands  
CV2 2LD**

**INFORMATION ONLY**

to operate a Part B installation involving a coating activity, as prescribed in Section 6.4 Part B of Schedule 1 to The Regulations, at:

**Hytec Castings Ltd  
Barlow Road  
Aldermans Green Industrial Estate  
Coventry  
CV2 2LD**

The permit is subject to the conditions specified in this document consisting of 13 pages and comprising documents A, B and C, plans PPC/70/A and Appendix 1.

Signed.....

Alan Bennett, Head of Environmental Health  
A person authorised to sign on behalf of the Council

Dated.....

## **SCOPE**

The installation comprises not just any relevant unit carrying out a Part B activity listed in Schedule 1 to the Regulations, but also directly associated activities which have a technical connection with that activity and which could have an effect on pollution.

All pollutant concentrations shall be expressed at reference conditions of 273K and 101.3kPa, without correction for water vapour content.

Technical Guidance documents used in the preparation of this document:

- Secretary of States Guidance Note PG 2/4(97) and PG 2/6(97)
- Secretary of State's Guidance – General Guidance Manual on Policy and Procedures for A2 and B installations. ISBN 0-85521-028-1

Date Annual Fee Required: 1st April of each financial year

Date For Full Compliance: Date permit issued

Permit Prepared By: Neil Wait  
Permit Checked By: Michelle Muller

## **LEGISLATION**

1. Pollution Prevention and Control Act 1999.
2. Pollution Prevention and Control Regulations 2000 as amended, schedule 1 as amended

## **BRIEF DESCRIPTION OF THE INSTALLATION REGULATED BY THIS PERMIT**

Definitions referred to in this permit

- An **Activity** is an industrial activity forming part of an installation. Different types of activity are listed within Schedule 1 of the PPC Regulations and are broadly broken down into industrial sectors. Other “associated” activities may also form part of an installation.
- An **Installation** comprises not just any relevant unit carrying out a B activity listed within Schedule 1 to the PPC Regulations, but also directly associated activities which have a technical connection with a schedule 1 activity and which could have an effect on pollution.
- An **Operator** is the person (e.g. a company or individual) who has control over the operation of an installation.
- **Volatile organic compound (VOC)** shall mean any organic compound having at 293K a vapour pressure of 0.01 kPa or more, or having a corresponding volatility under the particular conditions of use.
- **Organic solvent** shall mean any VOC which is used alone or in combination with other agents, and without undergoing a chemical change, to dissolve raw materials, products or waste materials, or is used as a cleaning agent to dissolve contaminants, or as a dissolver, or as a dispersion medium, or as a viscosity adjuster, or as a surface tension adjuster, or a plasticiser, or as a preservative.
- **Stack** includes structures and openings of any kind from or through which substances may be emitted to air.
- **Duct** includes enclosed structures through which gaseous substances may be conveyed.
- **Process vent** includes open terminations of ducts.
- **Authorised Officer** shall mean an officer authorised to carry out duties under the Pollution Prevention and Control Act 1999 and subordinate regulations
- **Logbook** shall mean any electronic or paper means of storage of the required information as agreed by the regulator
- **Local Authority** shall mean Coventry City Council
- **"m"** means metre
- **"m/s"** means metres per second

The general location of the Authorised Process is marked in red on the attached plan PPC/70/A.

## Description of Installation

This permit is for the manufacture of aluminium castings within the process boundary outlined in red on the attached plan numbered 1.

The process commences with the delivery and storage of alloy ingots, resins and catalysts to a materials store and the delivery of sand to a storage hopper.

Sand is then mixed using resin and a catalyst as a bonding agent in a sealed ribbon-flow mixing machine to produce the moulds.

Aluminium alloy ingots with clean runners, risers and reject castings are then melted by the process of heating to 770 degrees centigrade by four electric furnaces.

The refining of metal, using metallic sodium as a grain refiner and powdered flux when necessary.

The manufacture of cold sand moulds and cast releasing in a partially enclosed knockout area.

The degradation of sand moulds and recycling of sand by the Omega thermal sand reclamation unit for future reuse in the sand mix.

# INFORMATION ONLY

**Table 1**

**List of Process Areas within the Installation and Associated Emission Points, Pollutants of Concern and Abatement Plant Required**

<b>Row Number</b>	<b>Area/Machinery Identification</b>	<b>Pollutants Emitted</b>	<b>Emission Limit in Permit</b>	<b>Abatement Plant Required</b>
1	Thermal Sand Reclamation Unit	Volatile Organic Compounds	VOC 30mg/m <sup>3</sup> ,	None
2	Whole Process	Particulate Matter	Free from visible smoke	None

## DOCUMENT B

### CONDITIONS

All conditions shall have immediate effect unless stated otherwise.

#### **1.0 EMISSION LIMITS AND CONTROLS**

- 1.1 All emissions to air (including fugitive emissions) shall be colourless, free from persistent mist and free from fume or droplets.
- 1.2 All emissions to air shall be free from visible smoke during normal operation and in any case shall not exceed the equivalent of Ringleman shade 1 as described in British Standard BS 27642:1969.
- 1.3 All emissions to air shall be free from offensive odour outside the process boundary.
- 1.4 Emissions of volatile organic compounds from the thermal sand reclamation unit shall not exceed 30mg/m<sup>3</sup>.

#### **2.0 MONITORING, SAMPLING AND MEASUREMENT OF EMISSIONS**

- 2.1 The furnaces shall be continually monitored and regulated for temperature. The maximum temperature achieved by the aluminium shall be recorded in a logbook for each melting operation.
- 2.2 DELETED
- 2.3 A detailed inventory of all organic solvents used shall be kept for at least four years. This shall include details of all solvents, organic resins and catalysts used. This inventory shall be submitted to the Local Authority every 12 months and in all cases the use of solvents, resins and catalysts shall be minimised to the greatest extent possible. The inventory shall be forwarded within six weeks of the due date.
- 2.4 DELETED
- 2.5 Emissions from the thermal sand reclamation plant shall be tested at least once a year for volatile organic compounds to demonstrate compliance with clause 1.4. The monitoring shall consist of a manual extractive test.
- 2.6 The results of all non-continuous emission testing shall be supplied, in writing, to the local authority within eight weeks of completion of the sampling.
- 2.7 The local authority shall be notified of any periodic monitoring carried out in accordance with Clause 2.5 not less than seven days prior to sampling taking place.



- 2.8 Adverse results from **any** monitoring activity (both continuous and non-continuous) shall be investigated by the operator as soon as the monitoring data has been obtained/received. The operator shall:
- identify the cause and take corrective action;
  - record as much detail as possible regarding the cause and extent of the problem, and the action taken by the operator to rectify the situation;
  - re-test to demonstrate compliance as soon as possible; and
  - notify the regulator.
- 2.9 In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the operator must:
- investigate immediately and undertake corrective action;
  - adjust the process or activity to minimise those emissions; and
  - promptly record the events and actions taken.
- 2.10 The regulator must be informed without delay if there is an emission that is likely to have an effect on the local community.
- 2.11 DELETED
- 2.12 DELETED
- 2.13 DELETED
- 2.14 DELETED
- 2.15 The monitoring required by conditions 1.1, 1.2 and 1.3 shall be undertaken at least once per day whilst the installation is operational. The time, location of the monitoring, wind direction and results of these assessments shall be recorded in the site logbook. Where this monitoring shows abnormal visual or olfactory emissions, or where in the opinion of an Inspector from this Local Authority abnormal emissions exist, the operator shall investigate the cause of the emission and undertake remedial action immediately. Details of the emission and remedial action shall be recorded in the site logbook. The logbook shall be retained on site for a minimum of two years.
- 2.16 The operator shall keep records of monitoring, inspections, staff training, abnormal emissions and all other documentation required by the conditions of this permit in a site logbook. The records shall be kept on site and made available for inspection for a minimum of two years.

### **3.0 FURNACE AND MELTING OPERATION**

- 3.1 Only virgin aluminium (alloy) ingots and clean, runners, risers and reject castings shall be melted in the furnace.
- 3.2 DELETED
- 3.3 When metal pouring is not taking place the furnaces shall remain covered at all times.
- 3.4 The use of grain modifiers, oxidation control materials, fluxes and degassing agents should be reduced to a minimum and in any case should not exceed the recommended dosage.

### **4.0 STACKS, DUCTS AND PROCESS VENTS**

- 4.1 Emissions from the breaking down of moulds shall only be emitted via the dust filtration system in the partially enclosed knockout area.
- 4.2 Emissions from metal finishing operations shall only be emitted via the dust filtration system in the enclosed finishing area
- 4.3 All chimneys and process vents shall not be fitted with any restriction such as a cap or cowl at the discharge point
- 4.4 The efflux velocity of discharged gases shall exceed 15m/s
- 4.5 Flues, ductwork and the sand silo shall be visually inspected at least annually for wear and tear and any defects shall be remedied as soon as possible. The flues and ductwork shall be cleaned to prevent accumulation of materials as part of this maintenance programme. Details of the inspection, any defects and remedial action taken shall be recorded in the site logbook.

### **5.0 GENERAL OPERATIONS**

- 5.1 Emissions from the transfer of sand to the hopper shall only be emitted via the bag filters.
- 5.2 Any stocks of raw and recovered sand shall be stored in the hopper.
- 5.3 Containers of flux or resin shall be kept sealed when not being discharged in order to minimise potential spillage.
- 5.4 Spillages of flux material shall be cleared up according to the nature of the material.

- 5.5 Any spillage of liquid or solid matter shall be cleaned immediately. Solids shall be cleaned by vacuum sweeping. Dry sweeping of dusty spillages shall not be permitted. Liquid spillages shall be cleaned using appropriate spillage containment equipment. Solvents spillages shall be cleaned in accordance with Clause 5.11 and spill kits shall be available in all areas where solvents are used.
- 5.6 Waste dross and sand shall be stored in lidded containers.
- 5.7 All residues produced including those produced by arrestment plant shall be segregated and stored so as to allow recycling or reuse of residues where appropriate.
- 5.8 The operator shall undertake regular cleaning and preventative maintenance including inspection and repair/replacement on all plant and equipment concerned with the emission, capture, transport and control of emissions to atmosphere. Where necessary manufacturers guidelines shall be used to determine the regularity of maintenance. Records of preventative maintenance including inspections and any works undertaken shall be kept on site and made available to the local authority inspector on request.
- 5.9 Spares and consumables for plant and equipment used in the installation in particular that subject to continual use or wear shall be held on site or shall be available at short notice. Such plant or equipment shall not be used unless that plant or equipment is capable of working in accordance with the conditions of this permit.
- 5.10 DELETED
- 5.11 Any malfunction of plant or spillage of solvent based materials shall be remedied as soon as possible and process operations altered whilst the necessary work is undertaken.
- 5.12 Any incident likely to give rise to adverse atmospheric emissions or emissions that may have an impact on the local community shall be notified to the local authority immediately, and the details of incident including remedial action taken recorded in the process log book.
- 5.13 The operator shall make available on demand and without charge any of the records required to be kept by this permit.
- 5.14 Operators shall put in place some form of structured environmental management system (EMS), whether by adopting published standards (ISO 14001 or the EU Eco Management and Audit Scheme [EMAS]) or by setting up an EMS tailored to the nature and size of the particular process.

- 5.15 If there is any intention to change any aspect of the prescribed installation from the description contained in the beginning of this permit, or any other aspect which may affect the substances or concentration or amount of substances being emitted to atmosphere, the operator shall notify the regulator of the proposed changes at least 4 weeks in advance before the changes take place.
- 5.16 The operator shall maintain a statement of training requirements for each operational post and keep a record of the training received by each person whose actions may have an impact on the environment. These documents shall be made available to the regulator on request.

The training of all staff with responsibility for operating the activity shall include:

- Awareness of their responsibilities under the Permit; in particular how to deal with conditions likely to give rise to emissions, such as in the event of spillage;
  - Minimising emissions on start up and shut down; and
  - Action to minimise emissions during abnormal conditions.
- 5.17 All dusty or potentially dusty materials should be stored in silos or enclosed containers. Where the storage is open within a building then suitable precautions must be taken to prevent wind whipping.
- 5.18 Dusty wastes shall be stored in closed containers and handled in a manner that avoids fugitive emissions of dust. Waste filters from dust extraction plant shall be stored in sealed bags prior to disposal.
- 5.19 Internal transport of dusty materials should be carried out so as to prevent or minimise fugitive dust emissions.
- 5.20 Spent moulds that are awaiting breakdown prior to reclamation shall be stored in enclosed containers that prevent wind whipping and shall remain closed or covered whilst not in use.
- 5.21 External surfaces, open yards and storage areas should be inspected for repair at least annually and cleaned if necessary to prevent the accumulation of dusty material. Cleaning operations shall be carried out where necessary in a manner that minimises emissions of particulate matter to air and dry sweeping shall not be used.
- 5.22 A high standard of housekeeping should be maintained in all areas of the installation at all times. The operator shall prepare and maintain a documented housekeeping schedule and the installation shall be inspected at least once per week. The schedule and details of these inspections and cleaning shall be recorded in the site logbook.

## **6.0 SITE OPERATIONS**

- 6.1 During delivery of sand to the silo displaced air shall only be vented through the bag filters or back vented to the delivery tanker in order to minimise emissions. Particular care should be taken to avoid over pressurisation of the silo.
- 6.2 During charging of the silo care shall be taken to ensure that the transfer lines are securely connected to the tanker discharge point and the silo delivery inlet point.
- 6.3 The seating of the pressure valves shall be checked before a delivery takes place. Immediately it appears that the valve has become unseated deliveries shall cease and no further delivery shall take place until the valve has been examined and re seated if necessary. The details of the inspection and any replacements/repairs shall be recorded in the site logbook.
- 6.4 Bag filters serving the silo shall be visually inspected before each delivery occurs and be replaced or repaired as necessary and before another delivery takes place. The details of the inspection and any repair or replacement shall be noted in the site logbook.
- 6.5 The silo shall be equipped with audible and or high level alarms to warn of overfilling. The alarms shall be checked before each delivery takes place and noted in the site logbook.
- 6.6 A visual assessment of particulate emissions from the inlet connections and the arrestment plant on the silo shall be carried out for the duration of all bulk and sand deliveries by the delivery driver or designated site personnel. If emissions are visible during silo charging then the delivery shall cease immediately and the cause of the problem rectified prior to further deliveries taking place. Tanker drivers shall be informed of the correct procedure to follow. Any emission of particulates during delivery shall be noted in the site logbook.

## **DOCUMENT C**

### **RESIDUAL DUTY**

In relation to any aspect of the process not regulated by specific conditions in this permit, then Best Available Techniques shall be used:

For the purposes of the Pollution Prevention and Control (England and Wales) Regulations 2000, “best available techniques” means the most effective and advanced stage in the development of activities and their methods of operation which indicates the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where practicable, generally to reduce emissions and the impact on the environment as a whole; and for the purpose of this definition –

- a) “available techniques” means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, in the economically and technically viable conditions, taking into consideration the cost and advantages, whether or not the techniques are used or produced inside the United Kingdom, as long as they are reasonably accessible to the operator;
- b) “best” means, in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole;
- c) “techniques” includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

## **SUPPLEMENTARY NOTES**

These notes do not comprise part of the Permit PPC/70 but contain guidance relevant to the Permit.

### **Inspections and Powers of Entry**

Regular inspections will be carried out by officers of the Council (the Local Authority Inspectors) to check and ensure full compliance with the Permit conditions and residual duties. These inspections may be carried out without prior notice.

Under section 108(6) of the Environment Act 1995 authorised Local Authority Inspectors have been granted powers of entry into any premises for the purposes of discharging relevant duties.

### **Reviews**

The Local Authority has a statutory duty to review the permit at least once every 6 years or in the following circumstances set out in regulation 15 of the Pollution Prevention and Control regulations 2000:

- a) The pollution from the installation is of such significance that the existing emission limit values for the permit need to be revised or new emission limit values need to be included in the permit
- b) Substantial changes in BAT make it possible to reduce emissions from the installation or mobile plant significantly without imposing excessive costs;
- or
- c) Operational safety of the activities carried out in the installation or mobile plant requires other techniques to be used

### **Health and Safety**

This Permit is given in relation to the requirements of the Pollution Prevention and Control (England and Wales) Regulations 2000. It must not be taken to replace any workplace responsibilities the operator has under Health & Safety legislation. Whenever emission limits quoted in this Permit conflict with occupational exposure limits set under the Health and Safety at Work Act 1974 to secure the health, safety or welfare of persons at work, the tighter limit should prevail.

Installation must be operated in order to protect persons at work as well as the environment. In achieving conditions in this Permit the operator must not adopt any course of action that would put at risk the health, safety or welfare of persons at work.

### **Other Statutory Requirements**

This Permit does not detract from any other statutory requirement, such as the need to obtain planning permission, hazardous substances consent, discharge consent from the Environment Agency, building regulations approval, or a waste disposal licence.

This Permit does not authorise a contravention of any other enactment or any order made, granted or issued under any enactment, nor does it authorise a contravention of any rule or breach of any agreement.

The Operator is advised to consult the relevant Planning Department regarding changes that may be required as a result of this Permit (e.g. stack heights) as they may require planning permission.

### **Transfer of Permits**

Where the operator of an installation wishes to transfer, in whole or in part, his permit to another person, the operator and the proposed transferee shall jointly make an application to the regulator to effect the transfer. Such an application shall be accompanied by the permit and any fee prescribed in respect of the transfer.

In the case of partial transfer, where the original operator retains part of the permit, the application must make clear who will retain control over the various parts of the installation. The application must include a plan identifying which parts of the site and which activities the operator proposes transferring.

The local authority will then determine whether to allow the transfer within a two-month period, unless the local authority and the applicants agree a longer period. Where the local authority approves the transfer, the transfer will take effect from the date requested by the operator or a date that may be agreed by the local authority and the applicants.

### **Variation to Permits**

Variation to permits may be initiated either by the local authority or the operator, either in response to changes in the operation of an installation or if new conditions are needed to deal with new matters. Variations may be required in response to the following.

- Change of operation of the installation. (The operator shall notify the local authority under Section 16(1) of the Regulations.)
- In response to the findings of a periodic review of conditions.
- In response to the findings of an inspection.
- New or revised sector guidance notes

The operator should apply to the Local Authority in order to vary a permit under regulation 17 of the Regulations. The application must be in writing and, in accordance with Part 1 of Schedule 7 to the Regulations contain:

- The name, address and telephone number of the operator.
- The address of the installation.
- A correspondence address.
- A description of the proposed changes.
- An indication of the variations the operator would like to make.
- Any other information the operator wants the authority take account of.



### **Substantial Change**

A substantial change means, in relation to an installation, a change in operation, which in the opinion of the local authority may have significant negative effects on human beings or the environment.

Where the local authority deems that a proposed variation constitutes a substantial change, the operator will be informed of the process to follow.

### **Noise**

This Permit does not include reference to noise. Statutory noise nuisance is regulated separately under the provisions of Part III of the 1990 Act.

### **Appeals**

An Appeal can be made against the conditions in, or variations to this Permit as per Part IV of the Regulations. Appeals are made to the Planning Inspectorate who acts on behalf of the Secretary of State. Appeals against conditions within a Permit must be submitted within 6 months of the date of issue of the permit. Appeals against variation notices must be submitted within 2 months of the date of issue of the notice. Appeals should be despatched on the day they are dated and sent to:

The Planning Inspectorate  
Environmental Appeals Administration  
Room 4/19 – Eagle Wing  
Temple Quay House  
2 The Square  
Temple Quay  
BRISTOL  
BS1 6PN

### **HMSO Publications**

All HMSO publications can be ordered by telephone on Tel: 0870 600 5522, Fax: 0870 600 5533 or e-mail: [book.orders@tso.co.uk](mailto:book.orders@tso.co.uk)

### **Emission Monitoring Protocol**

The documented procedure by which reliable and comparable results are obtained from measurements at source is known as a Protocol.

Protocols ensure that the sampling procedures are carried out correctly and that the results obtained accurately characterise the process.

The main components of a Protocol are as follows:-

1. Calibre and quality of the sampling team.
2. A reference measurement method (standard methods may not always be available)
3. A standard methodology setting out:
  - health and safety considerations
  - pollutants of interest
  - plant operating conditions required
  - selection and location of sampling position

- sampling characteristics (e.g. isokinetic etc) and techniques
- sampling frequency
- sampling duration
- number of samples
- type (including make and model), condition and suitability of sampling equipment
- required accuracy
- variability of emissions
- analytical methods including laboratory competence and NAMAS accreditation certificate copy for each pollutant of interest
- analytical precision
- procedures to be adopted if standard methods unavailable
- calibration certificate(s) for sampling equipment
- Quality Control and Quality Assurance procedures
- Presentation of results and associated information.

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