



PPC Permit ref: **028**  
Variation ref: **001**

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

### Variation Notice

**Atritor Ltd**  
**Edgewick Park Industrial Estate**  
**Canal Road**  
**Foleshill**  
**Coventry**  
**CV6 5RD**

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 **028** granted under regulation 9(1) of the 2000 Regulations in respect of the operation of the installation at:

**Atritor Ltd**  
**Edgewick Park Industrial Estate**  
**Canal Road**  
**Foleshill**  
**Coventry**  
**CV6 5RD**

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

.....M. Muller..... Date.....10<sup>th</sup> March 2006.....  
Acting Principal Environmental Health 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.

PPC Permit ref: **028**

Variation ref: **001**

**Schedule 1**

<b>Variation to the Conditions of the Permit</b>	<b>Date(s) on which the variations are to take place</b>
<p><b>In Document B, Brief Description of the Installation delete the words:</b></p> <p>“The general location of the Authorised Process is shown on the attached plan PPC/028/A page 16. The Installation boundary is marked in red on this plan. The internal layout of the premises is shown on the attached plan PPC/28/B page 17”.</p> <p><b>And replace with the words:</b></p> <p>“The attached plan PPC/028/A shows the installation boundary and the location of the emission point PMA1 and areas PMA2 and the blanked off vent F7”</p> <p><b>In Document B, Table 1, amend row 2 as follows:</b></p> <p><b>Column 2 shall read:</b> “Sand reclamation, melting vessel and cooling tunnel.”</p> <p><b>Column 3 shall read:</b> “Particulates from sand handling, charging and tapping operations or from contaminants such as oil or paint from the scrap, VOCs from resins, hardeners and catalysts and their reactions during mixing and curing and carbon monoxide and carbon dioxide from casting, pouring and knocking out.”</p> <p><b>Column 5 shall read:</b> “Wet arrestment plant (PMA1)”</p> <p><b>In Document B, Table 1, delete row 3</b></p>	<p>Immediately</p> <p>Immediately</p> <p>Immediately</p> <p>I</p> <p>Immediately</p>

<p><b>In Document B, Table 1, amend row 4 as follows:</b></p> <p><b>Column 4 shall read:</b> “None (this vent has been blanked off, therefore no emissions to atmosphere).”</p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, Clause 1.5 insert the words:</b></p> <p>“, cooling tunnel”</p> <p>after the words “(which serves the sand reclamation process / sand mill”</p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, delete Clause 1.6</b></p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, Clause 1.8 delete the words:</b></p> <p>“attached to the chimney marked F6 on the attached plan marked PPC/028/B. All emissions of particulate matter from this stack shall not exceed 20 mg/m<sup>3</sup> by 31<sup>st</sup> October 2006”</p>	<p>Immediately</p>
<p><b>and replace with the words:</b></p> <p>“ducted to the wet arrestor and the stack marked PMA1 on the attached plan marked PPC/028/”</p>	<p>by 30<sup>th</sup> June 2006</p>
<p><b>In Document B, Emission Limits and Controls, Clause 1.9 delete the words:</b></p> <p>“Steel castings”</p>	<p>Immediately</p>
<p><b>and replace with the words:</b></p> <p>“The cast moulds”</p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, Clause 1.9 delete the words:</b></p> <p>“vents F1, F2, F3 and F4”</p>	<p>Immediately</p>
<p><b>and replace with the words:</b></p>	<p>by 30<sup>th</sup> June 2006</p>

<p>“stack PMA1”</p> <p><b>In Document B, Emission Limits and Controls, Clause 1.9 delete the words:</b></p> <p>“All emissions of particulates from stacks F1, F2, F3, and F4 shall not exceed 20mg/m<sup>3</sup> by 31<sup>st</sup> October 2006”</p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, re-write Clause 1.10 to read:</b></p> <p>“1.10 Vent F7 serving the core and mould making area shall be blanked off”</p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, delete Clause 1.11.</b></p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, Clause 1.12, delete the words:</b></p> <p>“, 1.8, 1.9 and 1.10”</p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, Clause 1.4 after the words: “clauses 1.1 “ Insert the words:</b></p> <p>“, 1.2, 1.3”</p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, Clause 1.15, delete the words:</b></p> <p>“, 1.5, 1.8, 1.9 and 1.10”</p> <p><b>and replace with the words:</b></p> <p>“and 1.5”</p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, Clause 1.18 delete the words:</b></p> <p>“on a monthly basis”</p>	<p>Immediately</p>
<p><b>and replace with the words:</b></p> <p>“before each delivery occurs”</p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, at the end of Clause 1.19 add the following sentence:</b></p>	<p>Immediately</p>

<p>“Details of any repairs undertaken on the low level warning light system shall be recorded in the log book described in Clause 2.11”.</p>	
<p><b>In Document B, Emission Limits and Controls, delete Clause 1.20</b></p>	<p>Immediately</p>
<p><b>In Document B, Emission Limits and Controls, Clause 1.21 delete the words:</b></p>	<p>Immediately</p>
<p>“at least once per week or”</p>	
<p><b>and delete the words</b></p>	<p>Immediately</p>
<p>“, whichever is the longer period”</p>	
<p><b>In Document B, Emission Limits and Controls, at the start of Clause 1.23 insert the words:</b></p>	<p>Immediately</p>
<p>“ A visual assessment of particulate emissions from the inlet connections and the arrestment plant on the silo marked on the attached plan marked PPC/028/A shall be carried out for the duration of all bulk sand deliveries by the delivery driver.</p>	
<p><b>In Document B, Emission Limits and Controls, at the end of Clause 1.23 insert the words:</b></p>	<p>Immediately</p>
<p>“The start and finish times of all deliveries shall be recorded in accordance with Clause 2.11”</p>	
<p><b>In Document B, Monitoring, Sampling and Measurement of Emissions, Clause 2.1 replace the words:</b></p>	<p>Immediately</p>
<p>“31<sup>st</sup> July 2005”</p>	
<p><b>with the words</b></p>	<p>Immediately</p>
<p>“31<sup>st</sup> July 2006”</p>	
<p><b>and delete the words:</b></p>	<p>Immediately</p>
<p>“stacks PMA1, F1, F2, F3, F4, F6 and F7”</p>	

<p><b>and replace with the words:</b></p> <p>“stack PMA1”</p>	Immediately
<p><b>and delete the words:</b></p> <p>“clauses 1.5, 1.8, 1.9 and 1.10”</p>	Immediately
<p><b>and replace with the words:</b></p> <p>“clause 1.5.”</p>	Immediately
<p><b>In Document B, Monitoring, Sampling and Measurement of Emissions, Clause 2.3 delete the words:</b></p> <p>“clauses 1.5, 1.8, 1.9 and 1.10”</p>	Immediately
<p><b>and replace with the words:</b></p> <p>“clause 1.5”</p>	Immediately
<p><b>In Document B, Monitoring, Sampling and Measurement of Emissions, Clause 2.4 delete the words:</b></p> <p>“clauses 1.5, 1.8, 1.9 and 1.10”</p>	Immediately
<p><b>and replace with the words:</b></p> <p>“clause 1.5”</p>	Immediately
<p><b>In Document B, Monitoring, Sampling and Measurement of Emissions, delete Clause 2.5.</b></p>	Immediately
<p><b>In Document B, Monitoring, Sampling and Measurement of Emissions, Clause 2.7 delete the words:</b></p> <p>“stacks marked PMA1, F1, F2, F3, F4, F6 and F7”</p>	Immediately
<p><b>and replace with the words:</b></p> <p>“stack PMA1”</p>	Immediately
<p><b>and delete the words:</b></p> <p>“, 1.8, 1.9 and 1.10”</p>	Immediately

<p><b>In Document B, Monitoring, Sampling and Measurement of Emissions, Clause 2.8 delete the word</b></p>	<p>Immediately</p>
<p>“daily”</p>	
<p><b>and replace with the words:</b></p>	<p>Immediately</p>
<p>“a minimum of once per week prior to the commencement of foundry operations”</p>	
<p><b>and at the end of the clause insert the following sentence:</b></p>	<p>Immediately</p>
<p>“Foundry operations (except fettling, grinding and shot blasting in the area marked PMA2) shall not take place unless the wet arrestor is in correct working order.”</p>	
<p><b>In Document B, Monitoring, Sampling and Measurement of Emissions, Clause 2.9 after the word “checked” inert the word:</b></p>	<p>Immediately</p>
<p>“thoroughly”</p>	
<p><b>and delete the words:</b></p>	<p>Immediately</p>
<p>“in accordance with the manufacturer’s instructions”</p>	
<p><b>In Document B, Monitoring, Sampling and Measurement of Emissions, delete Clause 2.12.</b></p>	<p>Immediately</p>
<p><b>In Document B, Materials Handling, delete Clause 3.6</b></p>	<p>Immediately</p>
<p><b>In Document B, Stacks, Ducts and Process Vents, delete Clause 4.1</b></p>	<p>Immediately</p>
<p><b>In Document B, Stacks, Ducts and Process Vents, Clause 4.3 delete the words:</b></p>	<p>Immediately</p>
<p>“the stacks marked F1, F2, F3, F4, F6 and F7”</p>	
<p><b>and replace them with the words:</b></p>	<p>Immediately</p>

<p>“stack marked PMA1”</p> <p><b>and delete the words:</b></p> <p>adequate to ensure the dispersal of pollutants from the stack”</p> <p><b>and replace them with the words:</b></p> <p>“15 m/s.”</p> <p><b>In Documents A and B, remove all references to Plan PPC/028/B and change these to references to Plan PPC/028/A</b></p> <p><b>Insert amended Plan PPC/028/A.</b></p>	<p>Immediately</p> <p>Immediately</p> <p>Immediately</p> <p>Immediately</p>
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Signed on behalf of Coventry City Council

.....M. Muller..... Date.....10<sup>th</sup> March 2006.....  
 Acting Principal Environmental Health Officer  
 An authorised officer of the Council



**POLLUTION PREVENTION & CONTROL ACT 1999  
POLLUTION PREVENTION & CONTROL (ENGLAND AND WALES)  
REGULATIONS 2000**

**DOCUMENT A : PERMIT**

**Atritor Ltd**

Reference Number **PPC/028**.

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:

**Atritor Ltd**

Whose registered office is:

**Atritor Ltd  
Edgewick Park Industrial Estate  
Canal Road  
Foleshill  
Coventry  
CV6 5RD**

to operate a Part B installation involving the activity of melting iron, steel and other ferro-alloy casting and ancillary foundry operations, as prescribed in Section 2.1 Part B of Schedule 1 to The Regulations, at:

**Atritor Ltd  
Edgewick Park Industrial Estate  
Canal Road  
Foleshill  
Coventry  
CV6 5RD**

The permit is subject to the conditions specified in this document consisting of 15 pages and comprising documents A, B and C, Appendix 1 and plan PPC/028/A.

Signed.....

Susan Simmons, Manager of Environmental Protection  
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 PG2/4(04) – Iron, Steel and Non Ferrous Metal Foundry Processes
- Secretary of States Guidance Note PG2/3(04) – Electrical, Crucible and Reverberatory Furnaces
- 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: Michelle Muller

Permit Checked By: Phil Parkes

## **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 (eg 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 attached plan PPC/028/A shows the installation boundary and the location of the emission point PMA1 and areas PMA2 and the blanked off vent F7”

## Description of Installation

This permit is for the melting of 'clean' scrap iron and steel in two mains frequency coreless induction furnaces with a capacity of not more than one and a half tonnes per hour each. It shall include the casting and ancillary foundry operations, including

- Manufacture of moulds using green sand bonded with clay and coal dust and chemically bonded sands using phenolic resins and hardener
- Core making involving alcohol based coating
- Knock out
- Fettling, grinding, shot blasting and finishing
- Sand reclamation.

All of the above are to take place within the site outlined in red on the attached plan numbered PPC/028/A. The site shall be limited to a production capacity of 20 tonnes per day.

**Table 1**

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

Row Number	Area/Machinery Identification	Pollutants Emitted	Emission Limit in Permit	Abatement Plant Required
1	Fettling, grinding and shot blasting (Area PMA2)	Particulate matter	None (emissions are discharged back into the workplace)	Bag filters
2	Sand reclamation, melting vessel and cooling tunnel	Particulates from sand handling, charging and tapping operations or from contaminants such as oil or paint from the scrap, VOCs from resins, hardeners and catalysts and their reactions during mixing and curing and carbon monoxide and carbon dioxide from casting, pouring and knocking out..	Particulates: 50 mg/m <sup>3</sup>	Wet arrestment plant (PMA1)
Deleted	Deleted	Deleted	Deleted	Deleted
4	Core shop (F7)	Particulates from sand handling VOCs from resins,	None (this vent has been blanked off, therefore no emissions to atmosphere).	None required
5	Sand silo	Particulates	No visible emissions	Bag filters
6	Open doors	Fugitive emissions of particulates and fumes	No visible emissions	None required
7	yards	Fugitive emissions of particulates	No visible emissions	None required

## **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 free from persistent visible emissions and free from droplets, other than steam or condensed water vapour.
- 1.2 All emissions to air (including fugitive emissions) shall be free from visible smoke during normal operations and in any case emissions shall not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742: 1969.
- 1.3 All emissions to air (including fugitive emissions) from the plant shall be free from offensive odour (as perceived by the local authority inspector) outside the installation boundary outlined in red on plan numbered PPC/028/A. The use of odour masking agents and / or counteractants shall not be permitted.
- 1.4 The doors to the main foundry area marked RS3 and RS4 on the attached plan marked PPC/028/A shall remain closed whenever possible to reduce the levels of fugitive emissions from the foundry and ancillary operations.
- 1.5 All emissions of particulate matter from the stack marked PMA1 on the attached plan marked PPC/028/A serving the wet arrestor (which serves the sand reclamation process / sand mill, cooling tunnel and the furnace) shall not exceed 50mg/m<sup>3</sup>.
- 1.6 Deleted
- 1.7 Emissions from the furnaces shall be captured by hoods, that shall be in a lowered position at all times whilst melting takes place or molten metal is within the vessels (except during pouring).
- 1.8 The hoods above the furnaces shall be ducted to the wet arrestor and the stack marked PMA1 on the attached plan marked PPC/028/A by 30<sup>th</sup> June 2006.
- 1.9 The cast moulds shall be moved into the sand mould cooling tunnel as soon as practicable. The sand mould cooling tunnel shall be vented atmosphere by stack PMA1 by 30<sup>th</sup> June 2006.
- 1.10 Vent F7 serving the core and mould making area shall be blanked off by 30<sup>th</sup> June 2006.
- 1.11 Deleted
- 1.12 If necessary to meet the conditions of clauses 1.1, 1.2, 1.3 and 1.5 all processes likely to emit into air any particulate matter shall be undertaken in an enclosed area or building of suitable construction to minimise emissions to air. (This shall exclude the storage and transfer of raw materials)
- 1.13 All fettling, grinding, shot blasting and finishing work that may result in the emission of particulates shall be undertaken within the area marked "Area PMA2" on the attached plan marked PPC/028/A within ventilated booths connected to dust arrestment plant. The emissions from this dust arrestment system shall not be emitted to atmosphere but directed into the workplace.

- 1.14 All emissions from foundry sand reclamation processes shall be captured and vented to the wet arrestor which terminates out of the stack marked PMA1 on the attached plan marked PPC/028/A to meet the requirements of clauses 1.1, 1.2, 1.3 and 1.5.
- 1.15 The introduction of dilution air to achieve the emission concentration limit of clause 1.5 is not permitted.
- 1.16 The use of gas oil as a fuel in the process is only permitted if the sulphur content of the fuel is 0.2% from the date of issue of this permit, and 0.1% by 1<sup>st</sup> January 2008.
- 1.17 During delivery to the silo (marked "Silo" on the attached map marked PPC/028/A and hereafter referred to as "the silo") displaced air shall either be vented to bag filters, or back vented to the delivery tanker, in order to minimise emissions. Care shall be taken to ensure that the transfer lines are securely connected to the tanker discharge point and the silo delivery inlet point, and the arrestment plant shall be of sufficient size and kept clean to avoid pressurisation during delivery.
- 1.18 The bag filter fitted with reverse jet 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 replacements / repairs shall be recorded in the log book described in clause 2.11.
- 1.19 Deliveries of sand shall not be taken unless the low level light on the silo is illuminated. Deliveries of sand shall not exceed 20 tons and no further deliveries may be received until the low level warning light is illuminated again. Details of any repairs undertaken on the low level warning light system shall be recorded in the log book described in Clause 2.11".
- 1.20 Deleted.
- 1.21 The seating of pressure relief valves shall be checked before a delivery takes place. Immediately it appears that the valve may have become unseated, the delivery 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 log book described in clause 2.11.
- 1.22 In order that fugitive emissions are minimised during the charging of the silo, care shall be taken during delivery from tankers to avoid venting of air to silos at a rate which is likely to result in over-pressurisation of the silo. Particular problems may arise during the release of air from the tankers at the end of deliveries and care shall therefore also be taken to avoid over-pressurisation of silos when venting air from tankers at this stage. These can be alleviated by the use of tankers with sufficient valvework to allow a gradual release to occur and by carefully controlled venting.
- 1.23 A visual assessment of particulate emissions from the inlet connections and the arrestment plant on the silo marked on the attached plan marked PPC/028/A shall be carried out for the duration of all bulk sand deliveries by the delivery driver. The delivery of sand shall cease if emissions of particulate matter are visible from ducting, pipework, the pressure relief valve or dust arrestment plant during silo filling. The cause of the problem shall be rectified prior to further deliveries taking place. The start and finish times of all deliveries shall be recorded in accordance with Clause 2.11.
- 1.24 All delivery drivers making deliveries of bulk sand shall be informed of the correct procedure to follow.

- 1.25 All new silos shall be fitted with an automatic system to cut off delivery in the event of pressurisation or overfilling.
- 1.26 All new or replacement silo filtration plant shall be designed to operate to an emission standard of less than 10 mg/m<sup>3</sup> for particulate matter.

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

- 2.1 By 31<sup>st</sup> July 2006 monitoring of particulate matter emissions from stack PMA1 shall have been undertaken to BS ISO 12141: 2002 or BS EN 13284: Part 1 and the results of the monitoring shall have been forwarded to this Authority. Thereafter, until further notice, non-continuous emissions monitoring of particulate matter shall be carried out annually in accordance with BS ISO 12141:2002 or BSEN 13284: Part 1 in order to demonstrate compliance with clause 1.5.
- 2.2 The operator shall ensure that adequate facilities are provided for sampling of stacks and ducts, and sampling points (on new plant) shall comply with BS EN 13284-1 or BS ISO 12141: 2002 for sampling particulate matter in stacks.
- 2.3 Monitoring to demonstrate compliance with clause 1.5 shall not take place without prior approval from the local authority.
- 2.4 At least 14 days prior to monitoring taking place to demonstrate compliance with clause 1.5 the operator shall notify the local authority of the provisional date and time of monitoring, the pollutants to be tested for and the methods to be used.
- 2.5 Deleted
- 2.6 The results of the emissions monitoring required by clause 2.1 shall be submitted to the local authority in writing within 8 weeks of the monitoring taking place.
- 2.7 If the monitoring required by clause 2.1 indicates that the emission concentration from the stack marked PMA1 on the plan marked PPC/028/A exceeds the emission limits specified in clause 1.5, the operator shall notify the local authority within 7 working days of the date the monitoring took place.
- 2.8 A visual inspection of the wet dust arrestment plant shall be carried out a minimum of once per week prior to the commencement of foundry operations to ensure correct functioning of the equipment including liquor circulation. The results of the inspection shall be recorded in the log book detailed in clause 2.11. Foundry operations (except fettling, grinding and shot blasting in the area marked PMA2) shall not take place unless the wet arrestor is in correct working order.
- 2.9 The wet arrestor serving the stack marked PMA1 marked on the plan marked PPC/028/B shall be checked thoroughly for correct functioning at least once in every 12 month period. These checks shall be recorded, in addition to any faults noted and remedial action taken. Records shall be retained on site for a minimum of 2 years and be made available to the Local Authority Inspector on request.
- 2.10 Olfactory and visual assessments of emissions from the process shall be made frequently and at least once each day whilst the process is in operation, but particularly during melting and pouring to check compliance with clauses 1.1, 1.2 and 1.3. Remedial action shall be taken in the event of any abnormal emission. The time, date, wind strength and direction, name of the observer, location of assessment and

the result of the assessment shall be recorded in the site log book, including any remedial action taken where necessary.

- 2.11 The operator shall keep records of inspections, tests and monitoring, including all non-continuous monitoring, inspections and visual assessments in a site log book.. The records shall be kept on site by the operator for at least two years and made available for the regulator to examine.
- 2.12 Deleted
- 2.13 Adverse results from any monitoring activity shall be investigated by the operator as soon as the monitoring data has been obtained / received. The cause shall be identified, and this, along with any corrective action taken shall be recorded in the site log book.
- 2.14 A detailed record shall be kept of all organic solvents used in the prescribed process and ancillary operations. The records shall include organic solvent use as mould dressings binders and core making solvents. A summary of the solvent usage details shall be forwarded to the authority every six months. Original documentation relating to solvent usage shall be retained at the premises for two years.

### **3.0 MATERIALS HANDLING**

- 3.1 Unless full, effective abatement plant is in use, incoming scrap metal shall be clean (i.e. free from significant amounts of contamination such as dirt, foreign material, oily residues, paint or other organic materials with the exception of the additives listed in clause 3.4) and a system shall be in place to ensure that only clean scrap is melted.
- 3.2 Evidence shall be provided to the operator that the necessary assessment and selection system for scrap metal is in place, including the staff who have been trained to operate it.
- 3.3 If contaminated feedstock is used, the details shall be kept and recorded in accordance with clause 2.11.
- 3.4 The following additives only may be added to the melt:  
Ferro-chrome, ferro-silicon, ferro-manganese, graphite, nickel and magnesium.
- 3.5 Knockout of casts shall take place only within the confines of the building.
- 3.6 Deleted
- 3.7 All dusty or potentially dusty materials shall be stored in silos, in covered containers, sheeted or kept wet to minimise wind whipping. Used bag filters serving the extraction units in the area marked PMA2 on the attached plan marked PPC/028/A when removed shall be stored in sealed bags or containers whilst awaiting disposal.
- 3.8 Internal transport of dusty materials shall be carried out so as to prevent or minimise air-borne dust emissions.
- 3.9 Any spillage or accumulation that is likely to be entrained or wind whipped outside of the building or takes place external to the building shall be cleared up promptly using vacuum or wet suppression methods. Dry sweeping of dusty materials shall not be used.



- 3.10 External surfaces of the process building, ancillary plant and open yards and storage areas shall be inspected at least annually and cleaned if necessary to prevent the accumulation of dusty material in circumstances where the dust may become wind entrained. Particular attention shall be paid to roofs, guttering, roadways, external storage areas and yards. Cleaning operations shall be carried out by methods which minimise emissions of particulate matter to air. Dry sweeping of dusty deposits is not permitted.
- 3.11 The use of binder chemicals shall be minimised as far as possible. Records shall be kept of the necessary binder addition in accordance with clause 2.11.

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

- 4.1 Deleted
- 4.2 All Chimneys and process vents shall not be fitted with any restriction such as a plate, cap or cowl at their final opening. (This does not apply to the following discharge points: AH3, AH4 and AH7 as these are heater discharges).
- 4.3 The efflux velocity of gases discharged through the stack marked PMA1 on the enclosed plan marked PPC/028/A shall be 15 m/s.
- 4.4 The linear velocity within the vent from the wet arrestment plant marked PMA1 on the plan numbered 01 shall not exceed 9m/s except in the case of prior approval from this Local Authority where a mist elimination device has been installed.
- 4.5 Flues, ductwork and the sand silo shall be visually inspected at least once every 12 months for wear and tear and correct working order. Any adverse conditions noted shall be remedied as soon as possible. The details of the inspection and any replacements / repairs shall be recorded in the log book described in clause 2.11.
- 4.6 Flues and ductwork shall be cleaned to prevent accumulation of materials, as part of the routine maintenance programme.
- 4.7 Stacks and ductwork shall be leak-proof and where necessary shall be adequately insulated to avoid the cooling of waste gases, condensation on internal surfaces and the formation of droplet emissions.
- 4.8 All new plant shall be designed such that emissions are extracted and ducted so that monitoring can take place in accordance with clause 2.1.

#### **5.0 GENERAL OPERATIONS**

- 5.1 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.
- 5.2 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.

- 5.3 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.
- 5.4 If there is any malfunction of plant, spillage of solvent or incident that is likely to give rise to adverse atmospheric emissions or emissions that may have an impact on the local community, the situation shall be remedied as soon as possible and process operations altered whilst the necessary work is undertaken. The local authority shall be notified immediately by telephone, and the details of incident including remedial action taken recorded in the process log book.
- 5.5 The operator shall make available on demand and without charge any of the records required to be kept by this permit.
- 5.6 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.
- 5.7 A high standard of housekeeping shall be maintained.

## 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.

## **APPENDIX 1**

### **SUPPLEMENTARY NOTES**

These notes do not comprise part of the Permit PPC/028. 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.