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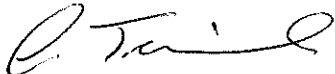


Variation Reference number 159/18

**Schedule 2**

<b>Operator</b>	<b>Kirk Darryl Shenton and Helen Christina Shenton</b>
<b>Installation Address</b>	Madeley Brass Castings Unit B8 Court 2000 Industrial Estate Bridgnorth Road Madeley Telford TF7 4JB
<b>Permit Reference</b>	07/00064/PPCB/181018
<b>Grid Reference</b>	SJ 69909 05219

Kirk Darryl Shenton and Helen Christina Shenton is hereby permitted by Telford & Wrekin Council to carry out a non-ferrous metal activity of as defined under Schedule 1, Part 2, Section 2.2, Part B(a) of The Environmental Permitting (England and Wales) Regulations 2016 ("The Regulations") and other activities as listed and described below within the installation boundary marked in red on the attached plan in Appendix 1 and in accordance with the conditions within this permit.

Signed: 

**Clair Travis**

Date: 18 OCTOBER 2018

**Environmental Health Officer**

**Authorised by the Borough of Telford and Wrekin to sign in that behalf**



Provenance	Relevant Dates
Date Application Made (Deemed application)	01/04/2004
Date 'Duly Made'	01/04/2004
Date Permit First Issued	07/03/2006
Date of Variations	25/02/2016
Date of Variations	14/02/2017
Date of Latest Variation	18/10/2018

**Introductory Note** – This Introductory note does not form part of the permit.

#### **Determination of application**

Particular conditions have been inserted as representing the authority's judgement of what constitutes BAT, having regard to the statutory guidance issued by the Secretary of State and to all site specific considerations.

#### **Description of the Installation**

Madeley Brass Castings is a small non-ferrous foundry specialising in small decorative castings produced in brass, aluminium and bronze.

Typical annual usage of metals is 6 tonnes.

Scrap brass, aluminium and bronze are melted in a crucible with no more than an 80kg capacity. There is one small furnace on site. The furnace is fuelled using gas oil. The furnace is connected to a stack that is unabated.

Moulds are made from reclaimed green sand which has been ground and graded using the sand mill on site. The sand mill crushes the sand into small particles and discharge into a wheelbarrow. The stockpiles of pre-milled and post-milled sand is within the foundry building and not stored externally. Occasionally cores are manufactured using a CO<sub>2</sub> binder with the gas being provided by a cylinder.

Once metals are melted, the metals are poured into sand moulds which are allowed to cool on the foundry floor. Once cool, the casting is knocked out of the sand mould and the sand from the mould is put to be one side to be reclaimed.

Finished items are fettled/ grinded on the finishing machine and the dust is extracted to LEV unit. This is an enclosed bag filter unit with no external extraction stack.

#### **Justification for the removal of monitoring requirements**

Below is Telford and Wrekin Council's justification for removing the requirement for monitoring at this site



### **Calculating maximum capacity**

The maximum weeks available for firing the furnace based on a 5 day week is 50 weeks. Casting is carried out approximately 3 times per day and the maximum capacity of each firing is 80kg of molten metal. This approximates their daily metal usage as 240Kg per day.

The Regulations state:

*Melting, including making alloys of, non-ferrous metals (other than tin or any alloy which in molten form contains 50 per cent or more by weight of tin), including recovered products (such as refining or foundry casting) in plant with a melting capacity of 4 tonnes or less per day for lead or cadmium or 20 tonnes or less per day for all other metals.*

Madeley brass castings use approximately 240Kg per day opposed to up to 20 tonnes which the regulations allow. Their annual usage of metals in 2017 was 6.6 tonnes. In comparison and based on the regulations above, the annual usage required by the regulations is 5,000 tonnes or less per annum based on 50 weeks/5days.

They do use green sand for moulds and they do use flux. The flux they use is low fluoride eco flux 146 (checked online). Both have potential to release emissions, however with regard to BAT, they are using low fluoride flux.

They carry out a small amount of fettling/finishing, which is connected to an enclosed abatement plant (no external release).

The closest high risk sensitive receptor is 294 metres away.

The installation does not have the potential to increase its usage to anywhere near the 20 tonnes per day due to the size of the installation. Taking a proportionate approach, the level of emissions is unlikely to warrant abatement for the furnace.

The BAT used on site is sufficient to contain fugitive releases from all other related operations. This installation does not have any history of complaints of nuisance.

### **Summary**

Due to the distance of receptors, the type of materials melted, the fuel used and the foundry techniques, it has been determined that that this installation will still require a permit to control emissions.

However, due to the extremely low levels of material throughput, and the risk of significant pollution being lower than that of a typical foundry, it is reasonable to remove the requirement to carry out quantitative extractive monitoring from the permit until such time as either complaints are received by the Council and/ or there is a significant rise in production, and/or a negative effect of the air quality standards for the area has been identified. Conditions to reflect this will be included in the permit.

### **End of Introductory Note**



## Permit Conditions

### General

1. The best available techniques shall be used to prevent, or where that is not practicable, reduce the emissions from the installation in relation to any aspect of the activity which is not specifically regulated by any condition of this permit.
2. An appropriate person (and deputy) shall be appointed as the primary point of contact with the regulator. The regulator shall be informed in writing of the appointed person (and deputy). In the event of a different person being appointed, the regulator shall be informed without delay.
3. A copy of this permit shall be kept at the installation. All relevant staff shall be made aware of its content and shall be told where it is kept.
4. If the operator proposes to make a change in the operation of the installation, they must, at least 14 days before making the change, notify the regulator on the appropriate form. The notification must contain a description of the proposed change in operation. A 'change in operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.
5. All records required to demonstrate compliance with any conditions of this Permit shall be kept in an organised manner. The records shall be kept electronically or in paper form. Records:
  - a) Must be legible and any amendment entered into a record shall be made in such a way as to leave the original clear and legible.
  - b) Records shall be kept for a period of 3 years, unless otherwise stated.
  - c) Records shall be kept on-site for a minimum of 12 months. Records kept off-site, must be made available within 7 days of any request by the regulator.
6. All documentation required to be submitted to the regulator to demonstrate compliance with relevant conditions, shall be submitted in an electronic format. Submissions shall be sent to: [environmental.health@telford.gov.uk](mailto:environmental.health@telford.gov.uk)

### Emissions

7. Emissions from the furnace shall be contained and extracted to atmosphere through a stack that is at least 2 metres above the building roof ridge height.
8. An assessment of visible and olfactory emissions shall be carried out at least once a day while operations are being carried out (excluding start-up and shut down). A record of the assessment including any corrective action shall be made available for inspection.
9. Excluding start-up and shut down, all emissions to atmosphere, including fugitive emissions, shall be free from persistent visible emissions.



10. All emissions to air, including fugitive emissions, shall be free from offensive odour.
11. Where in the opinion of the regulator, there are visible or odourous emissions beyond the installation boundary detailed in Appendix 1, the emission monitoring requirements of Appendix 2 shall be carried out within the timescale specified by the regulator.
12. The fuel oil used for the furnace or other combustion plant shall have a certified sulphur content of no more than 1% wt/wt sulphur in fuel, or, if gas oil is used, no more than 0.1% wt/wt.
13. If in the opinion of the Regulator there has been a substantial change to the installation the emission monitoring requirements of Appendix 2 shall be carried out within the timescale specified by the regulator.

#### **Operations**

14. No chloride containing flux shall be used within the installation. Fluxes that are used shall be of a 'low fume' type.
15. All grinding, fettling, finishing, shotblasting and any other casting finishing activities, shall be connected dust arrestment plant. The dust arrestment plant shall be of the type that does not emit to atmosphere.
16. Dusty operations as described in condition 14, shall not be carried out without the dust arrestment plant being operational.
17. All potentially dusty activities shall be carried out within the installation building.
18. All dusty or potentially dusty materials shall be stored within the installation building. Suitable precautions shall be taken to prevent wind whipping when the installation doors are open.
19. The number of start-ups and shut downs shall be kept to the minimum that is reasonably practicable.
20. All appropriate precautions shall be taken to minimise emissions during start-up and shutdown.
21. In the case of abnormal emissions, malfunction or breakdown leading to abnormal emissions the operator shall:
  - a. investigate and undertake remedial action immediately;
  - b. adjust the process or activity to minimise those emissions; and
  - c. promptly record the events and actions taken.
22. If there is any emission that is likely to have an effect on the local community, then the Regulator shall be informed without delay.



23. A high standard of housekeeping shall be maintained.
24. All spillages shall be cleared as soon as possible; solids by vacuum cleaning, wet methods, or other appropriate techniques. Dry sweeping of dusty spillages shall not be permitted.
25. All dusty wastes awaiting removal, shall be stored in closed containers.

#### **Maintenance**

26. The dust arrestment plant and its filters shall be checked weekly for defects. Where defects are found, corrective action shall be taken promptly. All findings on the weekly inspections shall be recorded and made available for the Regulator.
27. Flues and ductwork shall be inspected, repaired and cleaned at least annually to prevent accumulation of materials, as part of the routine maintenance programme.
28. The operator shall have the following available for inspection by the regulator:
  - a. A written maintenance/servicing programme for all pollution control equipment; and
  - b. A record of maintenance that has been undertaken.
29. Spares and consumables, in particular, those subject to continual wear, shall be held on site, or available at short notice from guaranteed local suppliers, so that the dust arrestment plant breakdowns can be rectified rapidly.

#### **Training**

30. All staff whose functions could impact on air emissions from the activity shall receive appropriate training on those functions. This shall include:
  - a. awareness of their responsibilities under the permit;
  - b. steps that are necessary to minimise emissions during start-up and shutdown;
  - c. actions to take when there are abnormal conditions, or accidents or spillages that could, if not controlled, result in emissions.

A record of the training shall be made available to the Regulator.



### Appendix 1. Location of Installation and boundary

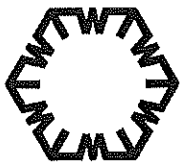






## Appendix 2

1. Emissions from final point of discharge to atmosphere serving the furnace listed in shall not exceed the emission limits of the substances and chemicals listed in Table 1 below.
2. To demonstrate compliance with appendix 2, condition 1, the operator shall employ a company/person qualified to carry out the monitoring to the standards specified in Table 1 below.
3. The operator shall notify the regulator at least 7 days before any monitoring exercise to determine compliance with emission limit values. The operator shall state the provisional time and date of monitoring, pollutants to be tested and the methods to be used.
4. The results of the monitoring exercise shall be forwarded to the regulator within 8 weeks of completion of the monitoring.
5. Adverse results from any monitoring exercise shall be investigated by the operator as soon as the monitoring data has been obtained. The operator shall:
  - a. identify the cause and take corrective action;
  - b. clearly record as much detail as possible regarding the cause and extent of the problem, and the remedial action taken;
  - c. re-test to demonstrate compliance as soon as possible; and inform the regulator of the steps taken and the re-test results.



Telford & Wrekin

C O U N C I L

Pollution Prevention Control Act 1999  
Environmental Permitting (England and  
Wales) Regulations 2016

<b>Table 1 - Emission limits and monitoring requirements for the foundry stack</b>		
<b>Substance</b>	<b>Emission limit</b>	<b>Type of monitoring</b>
Total particulate matter	20mg/m <sup>3</sup>	Manual extractive testing using the appropriate Standard
Copper	5mg/m <sup>3</sup>	
Nickel		
Lead	1mg/m <sup>3</sup>	Manual extractive testing using BS EN 14385 and associated MID 14385
Cadmium		
Chromium and Vanadium	1mg/m <sup>3</sup> in combination	
Tin and tin compounds (expressed as tin)	5mg/m <sup>3</sup>	Manual extractive testing using the appropriate Standard
VOC	30mg/m <sup>3</sup>	Manual extractive testing using the appropriate Standard
Fluoride (expressed as hydrogen fluoride)	5mg/m <sup>3</sup>	Manual extractive testing using the appropriate Standard
Dioxins	1ng/m <sup>3</sup>	Manual extractive testing using the appropriate Standard

**End of Permit Conditions**



**This section does not form part of the permit, but contains guidance relevant to it.**

### **Inspections**

Regular inspections will be made by officers of Telford & Wrekin Council (without prior notice), in order to check and ensure full compliance with this permit. Inspection will be carried out in accordance with a risk assessment, and/or following from any complaints or applications.

### **BAT (Best Available Techniques)**

Article 2(11) of the IPPC Directive defines "best available techniques" as follows:

*"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 that is not practicable, generally to reduce emissions and the impact on the environment as a whole".*

- "techniques" shall include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned,
- "available" techniques shall mean those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the Member State in question, as long as they are reasonably accessible to the operator,
- "best" shall mean most effective in achieving a high general level of protection of the environment as a whole.

In determining the best available techniques, special consideration should be given to the items listed in Annex IV of the Directive.

### **Confidentiality**

The permit requires the operator to provide information to the regulator. The regulator will place the information onto the public register in accordance with the Regulations. If the operator considers that any information provided is commercially confidential, it may apply to the council to have such information withheld from the register as provided in the Regulations.

### **Health and Safety at Work and Other Statutory Requirements**

Compliance with this permit does not necessarily infer compliance with any other legislation.

### **Notification of Changes to the activity or Operator**

If the operator proposes to make a change in the operation of the installation, they must, at least 14 days before making the change, notify the regulator on the appropriate form. The notification must contain a description of the proposed change in operation. A 'change in operation' means a change in the nature or functioning, or an extension, of the installation, which may have consequences for the environment.

The operator may be liable to prosecution if they operate otherwise than in accordance with the conditions and plant described in this permit.



### **Transfer of the permit**

Before the permit can be wholly or partially transferred to another person, an application to transfer the permit has to be made jointly by the existing and proposed operators. A transfer will be allowed unless the regulator considers the proposed operator will not be the person who will have control over the operation of the installation, or will not comply with the conditions of the transferred permit.

### **Surrender of the permit**

Where the operator intends to cease the operation of an installation (in whole or in part). In the case of Part B Permits, the operator must notify the Council on the appropriate form in accordance with Regulation 24. For A2 permits, the operator must apply for a surrender, using the appropriate form and in accordance with Regulation 25 and part 1 of Schedule 5.

### **Risk Rating**

Procedures and records shall be examined during inspections and will be referred to during the Department of Food and Rural Affairs (DEFRA) risk rating, carried out to determine the risk category: LOW, MEDIUM or HIGH which will determine the annual subsistence fee and the inspection frequency of the regulator.

### **Enforcement**

The operator will be liable to enforcement action where: -

- a) the operator fails to comply with or contravenes any permit condition;
- b) a change is made to the installation operation without prior notification of the change to the regulator;
- c) intentional false entries are made in any record required to be kept under the conditions of the permit;
- d) false or misleading statement is made.

Any enforcement action is taken in accordance with the regulator's enforcement policy.  
<http://www.telford.gov.uk/NR/rdonlyres/240C3F4A-8E36-4C12-8311-E4E57A3DF8CC/26214/MicrosoftWordEnvironmentalHealthandWellbeingEnforc.pdf>

### **Annual Subsistence Charge**

An annual subsistence fee is payable in order to operate your installation. An invoice will be issued annually by the regulator which will include details of how to pay. The charges are based on the DEFRA risk rating. Details of the risk assessment can be found at <http://www.defra.gov.uk/environment/ppc/localauth/fees-risk/risk.htm> .

You are reminded that failure to pay the subsistence fee may result on the Permit being revoked. It is an offence to operate a regulated facility without a permit and upon summary conviction liable to a maximum fine and/or imprisonment.



### **Appeal against Regulatory Action**

The operator can appeal against regulatory action by the regulator to the Secretary of State for Environment, Food & Rural Affairs. Appeals must be made in accordance with Regulation 31 and sent to the Secretary of State for Environment Food and Rural Affairs. The appeal form can be found at:

[http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental\\_appeals/environmental\\_perm\\_itting\\_appeal\\_form.pdf](http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental_appeals/environmental_perm_itting_appeal_form.pdf)

Guidance on the appeal procedure can be found at

[http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental\\_appeals/environmental\\_perm\\_itting\\_guidance\\_notes.pdf](http://www.planning-inspectorate.gov.uk/pins/environment/environment/environmental_appeals/environmental_perm_itting_guidance_notes.pdf)

There are time limits for making an appeal as follows:

- a) in relation to an appeal against a revocation notice, before the notice takes effect;
- b) in relation to the withdrawal of a duly-made application under paragraph 4(2) of Schedule 5, not later than 15 working days from the date of the notice served under that paragraph;
- c) in relation to a variation notification, a suspension notice, an enforcement notice or a landfill closure notice, not later than 2 months from the date of the notification or notice;
- d) in any other case not later than 6 months from the date of the decision or deemed decision.

Please note:

**An appeal will not suspend the effect of the conditions appealed against;** the conditions must still be complied with.

In determining an appeal against one or more conditions, the Act allows the Secretary of State in addition to quash any of the other conditions not subject to the appeal and to direct the local authority either to vary any of these other conditions or to add new conditions.

### **Contact Numbers for the Regulator**

The Regulator is the Public Protection Team of Telford & Wrekin Council. They can be contacted on 01925 381 818. You may also contact them by email at any time. [environmental.health@telford.gov.uk](mailto:environmental.health@telford.gov.uk)

### **Correspondence Address**

All correspondence to Telford & Wrekin Council relating to this information shall be addressed to: Customer and Neighbourhood services, Public Protection, Telford and Wrekin Council, Addenbrooke House, Telford, TF3 4NT

