

Permit with introductory note

**Pollution Prevention and Control (England and Wales)
Regulations 2000 (as amended)**

Installation address

**Fowler & Holden (Grimsby) Ltd
Railway Street
Grimsby
North East Lincolnshire
DN32 7DB**

Permit Reference: EP/200200008/V1

Contact Details:

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Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended) (S.I.2000 No. 1973) ("the PPC Regulations") to operate an installation carrying out one or more of the activities listed in Part B to Schedule 1 of those Regulations, to the extent authorised by the Permit.

The permit includes conditions that have to be complied with. It shall be noted that aspects of the operation of the installation which are not regulated by those conditions are subject to the condition implied by Regulation 12(10) of the PPC Regulations, that the Operator shall use the best available techniques for preventing or, where that is not practical, reducing emissions from the installation.

Techniques include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned.

Brief description and installation regulated by this permit

Foundry Process as prescribed by Section 2.2 Part B of Schedule I of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended). Fowler and Holden Ltd operate an Iron, Steel and Non-Ferrous Metal Foundry process.

Fowler and Holden Ltd utilise a mains frequency Inductotherm VIP electric induction furnace of nominal capacity 0.5 tonnes. Pig iron and clean (grade 1) steel scrap is used for the production of small and medium sized castings. Moulds are made of chemically bonded Alphaset) or untreated green Mansfield sand. Cores are made in the same chemically bonded sand.

The green Mansfield sand is returned to its own sand reclamation plant for reuse. The Alphaset sand is reclaimed in a reclamation plant fitted with bag filters and is transported via enclosed pipes to a silo fitted with bag filter for storage. Castings are finished utilising plant detailed in appendix A of the permit.

Confidentiality

The Permit requires the Operator to provide information to North East Lincolnshire Council. The Council will place the information onto the public registers in accordance with the requirements of the PPC Regulations. If the operator considers that any information provided is commercially confidential, it may apply to North East Lincolnshire Council to have such information withheld from the register as provided in the PPC Regulations. To enable North East Lincolnshire Council to determine whether the information is commercially confidential, the Operator shall clearly identify the information in question and shall specify clear and precise reasons.

Variations to the permit

This Permit may be varied in the future. If at any time the activity or any aspect of the activity regulated by the following conditions changes such that the conditions no longer reflect the activity and require alteration, the Regulator shall be contacted.

Surrender of the permit

Where an Operator intends to cease the operation of an installation (in whole or in part) the regulator shall be informed in writing, such notification must include the information specified in regulation 20(3) of the PPC regulations.

Transfer of the permit or part of the permit

Before the Permit can be wholly or partially transferred to another person, a joint application to transfer the Permit has to be made by both the existing and proposed holders, in accordance with Regulation 18 of the PPC Regulations. A transfer will be allowed unless the Authority considers that the proposed holder will not be the person who will have control over the operation of the installation or will not ensure compliance with the conditions of the transferred Permit.

Responsibility under workplace health and safety legislation

This Permit is given in relation to the requirements of the PPC regulations. It must not be taken to replace any responsibilities you may have under Workplace Health and Safety legislation.

Statutory Guidance

This permit has been based on the following statutory guidance note, published by the Department of Environment, Farming and Rural Affairs (DEFRA):-

“Iron, Steel & Non-Ferrous Metal Foundry Process“ Ref: PG 2 / 4 (04)

This can be obtained from the following web page:

<http://www.defra.gov.uk/environment/airquality/lapc/pgnotes/default.htm>

Appeal against permit conditions

Anyone who is aggrieved by the conditions attached to a Permit can appeal to the Secretary of State for the Environment, Food and Rural Affairs. Appeals must be made in accordance with the requirements of Regulation 27 and Schedule 8 of the PPC regulations.

Appeals should be received by the Secretary of State for Environment, Food and Rural Affairs. The address is as follows:

The Planning Inspectorate
Environmental Appeals Administration
Room 4/19 – Eagle Wing
Temple Quay House
2 The Square, Temple Quay
BRISTOL
BS1 6PN
Tel: 0117 372 8812
Fax: 0117 372 6093

Please Note

An appeal brought under paragraph (1) (c) or (d) in relation to the conditions in a permit 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 conditions not subject to the appeal and to direct the local authority either to vary any of these other conditions.

End of introductory note

Permit issued under the Pollution Prevention and Control Regulations 2000

Permit

Permit Number
EP/200200008/V1

North East Lincolnshire Council (the Regulator) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973) hereby permits.

Fowler & Holden (Grimsby) Ltd ("the operator"),

Whose registered office is


Fowler & Holden (Grimsby) Ltd
Railway Street
Grimsby
North East Lincolnshire
DN32 7DB

To operate an installation at

Fowler & Holden (Grimsby) Ltd
Railway Street
Grimsby
North East Lincolnshire
DN32 7DB

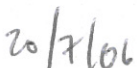
to the extent authorised by and subject to the conditions of this Permit and within the boundary identified in condition A

Signed



Tony Neul
Neighbourhood Improvement Manager
Authorised to sign on behalf of
North East Lincolnshire Council

Dated



CONDITIONS

Extent and limit of the installation

- A The operator is authorised to carry out the activities and/or associated as specified and within the boundary shown in red on the plan below:-



Foundry Process as prescribed by Section 2.2 Part B of Schedule I of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended). Fowler and Holden Ltd operate an Iron, Steel and Non-Ferrous Metal Foundry process.

Fowler and Holden Ltd utilise a mains frequency Inductotherm VIP electric induction furnace of nominal capacity 0.5 tonnes. Pig iron and clean (grade 1) steel scrap is used for the production of small and medium sized castings. Moulds are made of chemically bonded Alphasert) or untreated green Mansfield sand. Cores are made in the same chemically bonded sand.

The green Mansfield sand is returned to its own sand reclamation plant for reuse. The Alphasert sand is reclaimed in a reclamation plant fitted with bag filters and is transported via enclosed pipes to a silo fitted with bag filter for storage. Castings are finished utilising plant detailed in appendix A of the permit.

Interim Conditions

- 1.1 The following INTERIM CONDITIONS are to be maintained until the process is upgraded to the standard required in The Secretary of State's Guidance for Iron, Steel & Non-Ferrous Metal Foundry Process – Ref: PG 2/4 (04) (herein after referred to as 'the guidance')

The interim conditions below may be reviewed or varied at any time but will be reviewed or varied in the following circumstances:-

- ✚ Where a complaint is attributable to the operation of the process and is, in the opinion of the regulator, justified; or
- ✚ Where new knowledge develops on the potential harmful effects of emissions.

- 1.2 The process shall be upgraded to the standard required in the guidance whenever the opportunity arises but no later than the compliance dates stated within table 1 of the guidance note. The 'Compliance Dates' shown within the table shall be interpreted as being within 12 and 24 months of the date of this permit.

A programme for upgrading shall be submitted to the regulator within 6 months of the date of this permit. Proposed monitoring shall be included.

Emmision Limits and Controls

- 2.1 All emissions to air other than steam or condensed water vapour shall be free from droplets and free from persistent fume and persistent mist.
- 2.2 All emissions shall be free from offensive odour outside the process boundary as perceived by an authorised officer of North East Lincolnshire Council.
- 2.3 Emissions from the Inductotherm furnace shall be free from visible smoke in normal operation except when charging and pouring when emissions shall not exceed the equivalent of Ringlemann Shade 1 as described in BS2742: 1969. All operations likely to give rise from emissions of particulate matter during the production of S.G. iron shall be undertaken with the Tundish cover for the ladle fitted.

Monitoring, Sampling and Measurement of Emissions

- 3.1 Visual assessment of emissions of particulate matter from the furnace roof extractors, sand reclamation filter units, return silo filter unit, double ended grinder fettling booth and the rotary barrel shot blast cabinet filter unit shall be made frequently and at least once a day when operational. The results of this assessment shall be recorded in the log book required to be kept in accordance with condition 3.5.
- 3.2 The mechanical shaker bag filtration system fitted to the rotary barrel shot blast cabinet, the Alphaset sand reclamation unit, and the double ended grinder fettling booth shall be inspected for correct operation and the manual shakers operated at least once a day. The results of the inspection and the cleaning operations shall be recorded in the logbook required to be kept in accordance with condition 3.5.

- 3.3 The bag filter and pressure relief valve fitted to the sand silo shall be inspected and cleaned monthly. The inspection and cleaning operation shall be recorded in the logbook required to be kept in accordance with condition 3.5.
- 3.4 The arrestment plant fitted in accordance with Conditions 3.1, 3.2 and 3.3 above shall be serviced annually. The service and any replacement parts fitted shall be recorded in the logbook required to be kept in accordance with condition 3.5.
- 3.5 A logbook shall be kept containing a record of all visual assessments made in accordance with Conditions 3.1 to 3.4 and 7.1. The record shall include the time and date of the assessments, the result, and the name of the person undertaking the assessment. The logbook shall be kept available for inspection by an Authorised Officer of North East Lincolnshire Council on the premises occupied by the process and shall contain at least two years of records.
- 3.6 A log shall be kept monitoring the usage rates of the green sand reclamation plant. The log shall include the date, time and period that the plant is in use. These details shall be kept with the logbook in accordance with condition 3.5.

Materials Handling

- 4.1 All reclaimed and clean, dry sand shall be stored in the purpose built silo, sealed bags or closed skips.
- 4.2 The storage of dusty or potentially dusty materials including sand awaiting reclamation or disposal, and the loading to and from stockpiles shall be carried out in a manner so as to minimise the emissions to air. Dust suppression shall be utilised as necessary. All such material shall be stored in covered containers, purpose built silos or undercover where practical. Where dusty materials are stored in the open air the storage area shall be provided with protection against wind whipping.
- 4.3 Spillages shall be cleared up as soon as is practicably possible and in the case of solid materials by utilising vacuum cleaning, wet methods, dampening or another method as approved by the Local Authority. General cleaning shall be undertaken as necessary and the site surveyed for the build up of excess waste material and dust on a monthly basis. The results of which, together with details of the action undertaken to clean the site, shall be recorded in the logbook required to be kept in accordance with Condition 3.5. Dry sweeping of spillages shall not be permitted.
- 4.4 All processes likely to emit particulate matter into the air excluding the storage and transfer of raw and waste materials shall be undertaken in an enclosed area or sheltered building to minimise emissions to air. This condition shall apply to knock out operations.
- 4.5 All residues produced shall be handled and stored in a manner so to minimise emissions to air. Dust suppressions shall be utilised as necessary.
- 4.6 The silos shall not be filled without the arrestment plant fitted and operational.

- 4.7 All finishing operations to castings capable of producing particulate matter emissions, (except shot blasting), shall be undertaken in the fettling booth or within an enclosed area. The fettling booth for the double ended grinder shall not be used without a dust extractor fitted and operational. The extraction units shall be fitted with bag filter elements.
- 4.8 All shot blasting of castings shall be undertaken in the rotary barrel shot blasting unit. The unit shall not be used without the bag filtration plant fitted and operational.
- 4.9 All sand reclamation shall be undertaken in the sand reclamation units. These units shall not be used without dust extraction and arrestment plant fitted and operational, accept as followed by Condition 3.5.

Sand Mould and Core Mixing

- 5.1 All mixing of sand and binders and mould formation shall be undertaken within the enclosed areas.

Furnace and Melting Operations

- 6.1 Contaminated materials shall not be introduced into the furnace which is likely to produce emissions that may contravene Conditions 2.2 or 2.3 above.

General Operations

- 7.1 All malfunctions or breakdowns leading to abnormal emissions shall be dealt with promptly and if necessary, process operations shall be adjusted to mitigate the effects of the malfunction/breakdown until normal operations can be re stored. All such malfunctions shall be recorded in the logbook required to be kept in accordance with Condition 3.5, together with any details of the reasons for them and the corrective action taken. Any emissions likely to have an effect on the local community shall be notified to the regulator.
- 7.2 Both essential spares and consumables shall be held (or available locally at short notice) for all plant and machinery likely to prevent or cause emissions to air of any substance listed in Schedule 5 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended). Alternatively, a service contract for the arrestment plant, which includes a priority attendance requirement for arrestment plant failure, shall be held with a suitable contractor. A list of the above essential spares and consumables shall be held on site for inspection by North East Lincolnshire Council at any time.
- 7.3 All staff whose duties include the operation of plant and machinery likely to either prevent or cause emission to air of any substance listed in Schedule 5 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended) shall receive the appropriate training and instructions as specified in paragraph 66 of Process Guidance Note PG2/4(96). A written ongoing training programme for environmental issues shall be developed and held on site for inspection by officers of North East Lincolnshire Council at any time. Training records of staff shall be held on site and updated in accordance with the training programme.

Appendix A

Plant Details

One Furnaces	0.5 tonnes capacity Inductotherm VIP electric mains frequency induction furnace.
One Sand Silos	Fitted with bag filtration.
Two Sand Reclamation Units	Two sealed units (except at the loading point) including dust extraction units. Alphaset unit fitted with mechanically cleaned bag filtration units. Greensand unit used infrequently – usage monitored. Currently no abatement fitted.
One Fettling Booth	Double ended grinder fitted with an enclosed booth with mechanically cleaned unit.
Shot Blast Cabinet	An enclosed cabinet incorporating Rotary Barrelshot blast unit. Linked to a mechanically cleaned bag filtration unit.

Glossary of Terms/Definitions:

The Guidance	The Secretary of States Guidance Note 2/4(04) for Iron, Steel and Non-Ferrous Metal Foundry Processes. Available for free download from Defra's website.
Activity	One or more stationary technical units falling within the defined sections of the Schedule 1 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (as amended).
EPA	Environmental Protection Act, the former pollution control regime, now redundant due to the implementation of PPC.
Installation	One or more stationary technical units comprising at least one activity or activities falling within the description of Schedule 1 of the Pollution Prevention and Control Regulations 2000 (as amended) within a defined area.
PPC	Pollution Prevention and Control, the new pollution control regime replacing that under EPA.
Regulator	Means the Pollution Control Unit, North East Lincolnshire Council. When contacting the regulator it is not sufficient to contact any other part of the council other than the Pollution Control Unit at the address specified on page 2 of the permit document.
Permit	The written authority to operate a process prescribed for Local Authority Pollution Control

End of Permit