Sheffield City Council

POLLUTION PREVENTION AND CONTROL ACT 1999
ENVIRONMENTAL PERMITTING (ENGLAND & WALES) REGULATIONS 2016

Permit Number: 2.2/089806/JT

Installation Address:
Leadbond Limited trading as John Street Platers
Speedicut Works
Harleston Street
Sheffield
S4 7QB

In accordance with Regulation 13(1) of the Environmental Permitting (England and Wales) Regulations 2016, Leadbond Limited trading as John Street Platers is hereby permitted to operate a scheduled activity at the address detailed above, namely melting zinc or a zinc alloy in conjunction with a galvanising activity at a rate of 20 or less tonnes per day as described in Schedule 1, Part 2, Chapter 2, Section 2.2, Part B(c) and subject to the following Permit conditions.

Signed **Dated this day: 30th November 2017**

Commercial Team Manager
Authorised by Sheffield City Council to sign on their behalf

The Secretary of States Guidance Notes PG2/02(13) “Statutory Guidance for Hot Dip Galvanizing Processes” has provided the framework for the conditions in this Permit.

Name & Address of Operator:

Leadbond Limited Trading as John Street Platers
Speedicut Works
Harleston Street
Sheffield
S4 7QB

Company registration number: 1694487

Site contact: Rupert Cobain Tel: 0114 272 7212
Email: sales@ukmetalfinishing.co.uk

Registered Office:

Leadbond Limited Trading as John Street Platers
Speedicut Works
Harleston Street
Sheffield
S4 7QB

Address of Permitted Installation:

Leadbond Limited Trading as John Street Platers
Speedicut Works
Harleston Street
Sheffield
S4 7QB

Holding Company: No

Talking to Us

Any communication with Sheffield City Council should be made to the following address quoting your Permit number:2.2/089806/JT

epsadmin@sheffield.gov.uk or ippc@sheffield.gov.uk

Telephone: (0114) 273 4651

Our Address:
ENVIRONMENTAL PROTECTION SERVICE
SHEFFIELD CITY COUNCIL
5th FLOOR (NORTH)
HOWDEN HOUSE
1 UNION STREET
SHEFFIELD
S1 2SH

Contents

Explanatory Note to Pollution Prevention and Control Permit for Part B Installations
(This note does not form a part of the Permit)

The following Permit is issued under Regulation 13(1) of the Environmental Permitting (England and Wales) Regulations 2016 (S.I. 2016 No.1154), as amended, ("the EP Regulations") to operate an installation carrying out activities covered by the description in Section 2.2 of Schedule 1 of those Regulations, to the extent authorised by the Permit.

Process Changes

Under the provisions of the EP Regulations, you are required to notify the Council of any proposed change in operation at least 14 days before making the change. This must be in writing and must contain a full description of the proposed change in operation and the likely consequences. Failure to do so is an offence.

If you consider that a proposed change could result in the breach of the existing permit conditions or is likely to require the variation of permit conditions then you may apply in writing under Regulation 20(1) of the EP Regulations. Additionally, if this involves a SUBSTANTIAL CHANGE to the installation you will be required to submit an application, pay the relevant fee and advertise the application accordingly. You may serve a Notice on the Council requesting that they determine whether any change that is proposed would constitute a substantial change before you proceed with application.

Variations to the Permit

The Permit may be varied in the future by the Council serving a Variation Notice on the Operator. If the Operator wishes any of the Conditions of the Permit to be changed, a formal Application must be submitted.

Surrender of the Permit

Where the Operator of a Part B installation or mobile plant ceases or intends to cease the operation of the activity the Operator may notify the regulator of the surrender of the whole permit, in any other case, notify the regulator of the surrender of the permit in so far as it authorises the operation of the installation or mobile plant which he/she has ceased or intends to cease operating. The notification shall contain information as described in Regulation 24 or 25 of the EP 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 21 of the EP Regulations. A transfer will be allowed unless Sheffield City Council 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.

Annual Subsistence Fee

In accordance with Regulation 66 of the EP Regulations, the holder of a permit is required to pay a fee for the subsistence of the Permit. This fee is payable annually on 1st April. You are advised that under the provisions of Regulation 66 (5) of the EP Regulations, if you fail to pay the fee due promptly, Sheffield City Council may revoke the Permit. You will be contacted separately each year in respect to this payment.

Public Register

The Council is required by Regulation 46 of the EP Regulations to maintain a Public Register containing information on all LAPPC installations and mobile plant. The register is available for inspection by the public free of charge during office hours by prior appointment (Monday to Friday 9.00 am to 5.00 pm) at the following address:

Environmental Protection Service
Sheffield City Council
5th Floor 5 (North)
Howden House
1 Union Street
Sheffield
S1 2SH

Tel: 0114 273 4651 or email epsadmin@sheffield.gov.uk

Confidentiality

Sheffield City Council has a duty to consider the question of confidentiality of information supplied to it. If any information supplied is considered confidential, a statement of which information this applies to and the reasons why it is considered confidential should be specified. The Operator is reminded that he may apply to Sheffield City Council for the exclusion of information from the public register under the provisions of the Environmental Permitting (England and Wales) Regulations 2016.

Appeals

Under Regulation 31 of the EP Regulations, Operators have the right of appeal against the conditions attached to their permit. Chapter 5 of the EP Regulations sets out the detailed procedures.

Appeals against a Variation Notice do not have the effect of suspending the operation of the Notice. Appeals do not have the effect of suspending Permit conditions.

Notice of appeal against the conditions attached to the permit must be given within six months of the date of the Notice, which is the subject matter of the appeal.

How to Appeal

There are no forms or charges for appealing. However, for an appeal to be valid, appellants (the person/Operator making the appeal) are legally required to provide:

- 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.

Where to Send Your Appeal Documents

Appeals should be addressed to:

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

In the course of an Appeal process the main parties will be informed of procedural steps by the Planning Inspectorate.

To withdraw an appeal the appellant must notify the Planning Inspectorate in writing and copy the notification to the local authority.

Enforcement

An **Enforcement Notice** may be served if the Local Authority believes an Operator has contravened, is contravening or is likely to contravene any condition of his Permit.

A **Suspension Notice** may be served if in the opinion of the Local Authority the operation of an installation involves an imminent risk of serious pollution. This applies whether or not the Operator has breached a Permit condition.

The Local Authority can revoke a Permit by written notice at any time by serving a **Revocation Notice**. The Permit then ceases to authorise the operation of the installation.

Offences

A limited summary of the offences is listed below:

a) operation of an installation without a Permit
b) failure to comply with or contravene a Permit condition
c) failure to comply with the requirements of an enforcement or suspension notice

A full list is available under Regulation 38 of the Environmental Permitting (England & Wales) Regulations 2016.

Penalties

The maximum penalties for the above offences are a fine not exceeding £50,000 and/or up to twelve months imprisonment per offence for a summary conviction (in a Magistrates Court); and a fine and/or up to five years imprisonment for conviction on indictment (in a Crown Court).

Definitions

In relation to this Permit, the following expressions shall have the following meanings:

"Application" means the application for this Permit, together with any response to a notice served under Schedule 4 to the EPR Regulations and any operational change agreed under the conditions of this Permit.

"EPR Regulations" means the Environmental Permitting (England and Wales) Regulations S.I.2016 No. 1154, and words and expressions defined in the EPR Regulations shall have the same meanings when used in this Permit save to the extent they are explicitly defined in this Permit.

"Permitted Installation" means the activities and the limits to those activities described in this Permit.

"Monitoring" includes the taking and analysis of samples, instrumental measurements (periodic and continual), calibrations, examinations, tests and surveys.

"Regulator" means any officer of Sheffield City Council who is authorised under section 108(1) of the Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in Section 108(1) of that Act.

"BAT" 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 bases for emission limit values designed to prevent, and where that is not practical, generally to reduce emissions and the impact on the environment as a whole. For those purposes:

"available techniques" means those techniques which have been developed on a scale which allows implementation in the relevant industrial sector, under 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;

"best" means, in relation to techniques, the most effective in achieving a high general level of protection of the environment as a whole; "techniques" include both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned. Schedule 2 of the Regulations shall have effect in relation to the determination of best available techniques, and;

"Fugitive Emission" means an emission to air from the permitted installation that is not controlled by an emission limit imposed by a condition of this Permit.

Where any condition of this Permit refers to the whole or parts of different documents, in the event of any conflict between the wording of such documents, the document with the most recent publication date shall be taken to be the most appropriate document to be used.

DESCRIPTION OF ACTIVITIES.

The activity at the installation is 'Hot Dip Spin Galvanising'. This is the application of zinc coating (galvanizing) by immersion of prepared steel into a bath of molten zinc (Hot Dip Galvanizing). The items are spun in a centrifuge to remove any excess zinc; this process is known as 'Hot Dip Spin Galvanizing'.
The facility operates up to 24 hours per day, 5 days a week, 50 weeks per year. The basic process steps involved in this manufacturing process are outlined in more detail below.

Basic Process Steps

Materials Delivery and Storage

The steel components are offloaded from the customers' transport and are placed and stored adjacent to the degreasing bath whilst waiting processing. All components are shot blasted at a third party facility prior to arrival to site. All items are inspected prior to being processed. If the items are not in a suitable condition for the spin galvanising process, then they will be returned to the customer for reworking.

Degreasing

The components are transferred from the customers skips and loaded into a cleaning basket. Each basket is then loaded into the degreasing bath.
The degreasing tank is made up an alkaline based cleaning solution known as EC60 Ultraclean, run at a concentration of 75grams per litre of water. This solution is run at a temperature of 60 degrees C. The components are submersed in this solution for 1 hour. A degreasing solution is used to remove any grease, oil and scale that maybe left on the product. There are no emissions to air from this process.

Fluxing

From the degreasing bath, the basket is moved to a rinse bath before being transferred to a fluxing bath.
A rinse is used to clean off any excess degreasing solution and to stop any cross contamination between tanks. This tank is filled and maintained by recycled water which has been treated and distributed by the site Effluent Treatment Plant.
The fluxing bath contains a flux solution made up of Zinc Ammonium Chloride salts. The proportion of each may vary. A substance known as 'Double Salts' is used, which has a makeup of 55% Zinc Chloride and 45% Ammonium Chloride. This solution is at a concentration of 40 grams per litre and operated at temperatures between 50 and 70 degrees C. The components are left in the solution for no longer than 1 minute. A flux is used to help the molten zinc bond with the steel component and help provide an even deposit and finish of zinc.

After fluxing, the items are placed in a titanium galvanizing spinning basket in preparation for the dipping process.

Hot dip galvanising

All galvanising is carried out in a specially designed zinc bath. The items to be galvanised are transported and moved into place by an electric driven hoist. The items are slowly transferred and lowered into the zinc bath. The galvanizing bath is a specially designed zinc melting crucible that is continuously operating. The galvanizing bath is heated directly by hot flue gases from the combustion of natural gas. The burners operate continuously (i.e. the zinc is always kept molten) ensuring the flue gases remain hot and do not give rise to emissions of water droplets or a visible plume. There is no direct contact between the flames and the metal. When not in use, the bath is covered with a steel lid to maintain the temperature of the bath.
The bath heating is of an energy efficient design that maximises heat recovery from the combustion of natural gas. The galvanizing bath is maintained at a temperature above 450 degrees C by gas fired burners that are mounted within a jacket that surrounds the bath. Optimal operation of the burners is assured by a six monthly maintenance checks by the burner supplier.
The fluxed steel components are lowered into the galvanizing bath, which contains molten zinc at a temperature of 455-460 degrees C. The galvanizing process is a metallurgical reaction between the steel components and the molten zinc which creates a zinc/iron alloy layers.

The dipping process typically gives rise to fume emissions. These emissions take place on the commencement of dipping. The fume is contained within the enclosed galvanizing bath by extraction. During dipping, the extractor fans are switched on and any emissions of fume are captured by the enclosure and surrounding ducting.

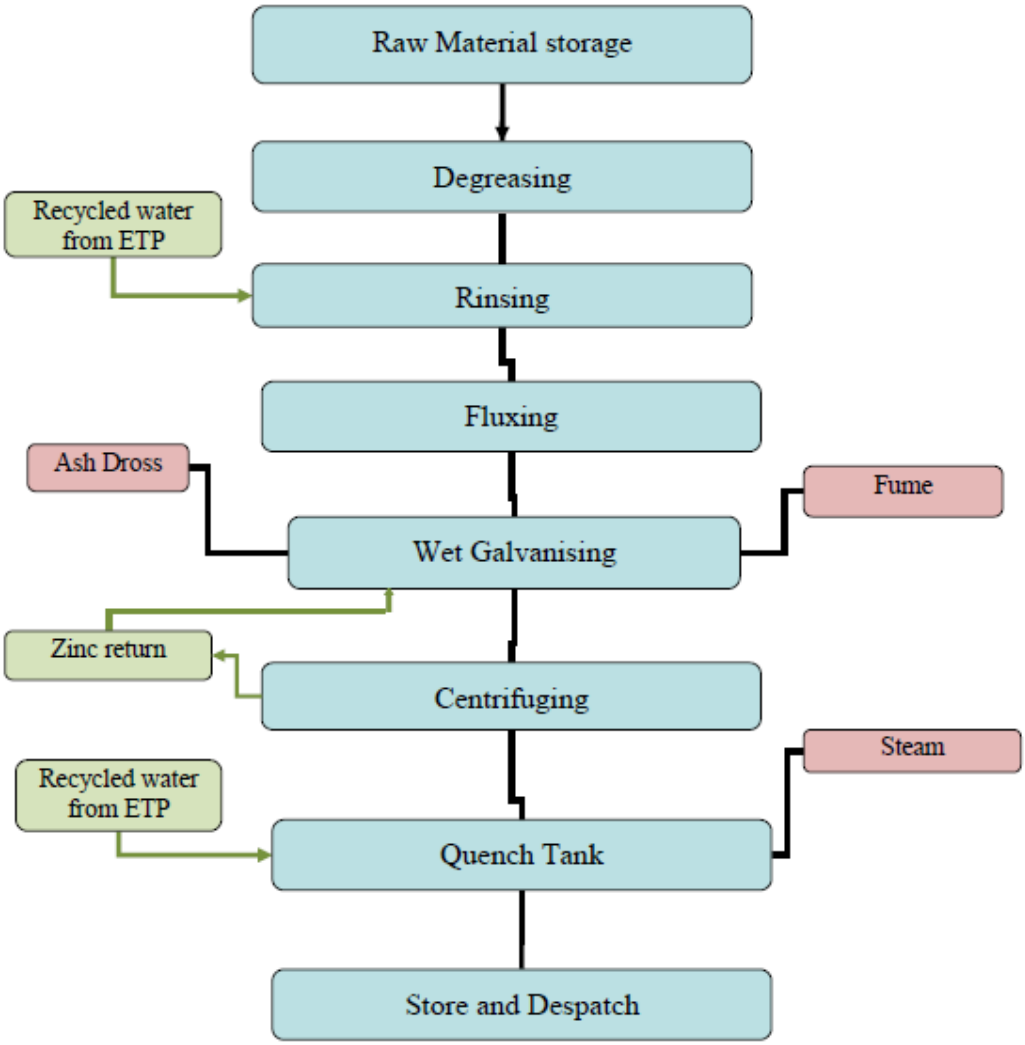
The galvanizing process gives rise to residues, notably in the form of zinc dross. This is a ferro zinc compound that contains significant levels of impurities that collect at the bottom of the galvanizing bath. Additionally, zinc ash is generated on the surface of the galvanizing bath as a result of oxidation. The ash is removed by the operator so that contamination is not caused per dip. The dross is removed for further zinc recovery by external contractors.

Spinning / Finishing

After the dipping process, the parts are immediately removed and transferred to the centrifuge to be spun. This process is carried out so that any deposits of excess zinc can be removed from the components. The spinning process lasts 30 seconds. The surplus zinc that is spun off instantly solidifies and builds up at the bottom of the centrifuge. This is cleaned on a daily basis and any residual zinc is placed back in the bath to be re used.
After the spinning process, the basket is placed and submerged in a quench tank.

A quench is used to cool down the components. The tank is run at ambient temperature. This tank is filled and maintained by recycled water which has been treated and distributed by the sites Effluent Treatment Plant. Steam is emitted from the tank when the hot steel components react with the cool water.

Once the components have been quenched, they are unloaded from the spinning baskets, inspected and return to the customers.



CONDITIONS OF PERMIT

The following conditions shall be complied with immediately unless otherwise stated.

Section 1 – Upgrading

1.1 Within 4 weeks from the date of issue of this permit the Operator shall ensure that the emissions from the galvanising bath are tested for total particulate matter in accordance with BS EN 13284-1.

1.2 In the event that the stack emissions testing results demonstrate that the total particulate matter concentration exceeds the emission limit of 15mg/m^3, abatement plant is required to be installed in order to reduce the emissions of total particulate matter to <15mg/m^3.

1.3 Prior to installation, the abatement plant details referred to in condition 1.2 shall be submitted to the Regulator for approval in writing within 10 weeks of the receipt of the stack emissions testing results.

1.4 Further to condition 1.3, once approval in writing from the Regulator is provided, the abatement plant shall be installed within 16 weeks.

1.5 If arrestment plant is required to ensure the emissions of total particulate matter are less than or equal to 15mg/m^3, a continuous indicative monitor with datalogger shall be installed to the galvanising stack and calibrated to monitor the emissions of total particulate matter.

1.6 Prior to installation, the technical specification details of the continuous indicative emissions monitor for total particulate matter referred to in condition 1.5 shall be submitted to the Regulator for approval in writing.

1.7 Upon installation, the continuous indicative emissions monitor for total particulate matter shall be calibrated using the most recent isokinetic testing results. A calibration certificate shall be submitted to the Regulator within 5 working days of the calibration.

1.8 Within 6 weeks of the date of receipt of the stack testing results, the results of a D1 calculation, using HMIP Technical Guidance Note (Dispersion) D1, shall be submitted to the Regulator detailing the required chimney height from the galvanising bath. An alternative dispersion model may be used following agreement in writing from the Regulator.

1.9 Where the D1 calculation or dispersion modelling demonstrates that the stack height is not sufficient, works to extend the stack shall be completed within 16 weeks of the D1 calculation or dispersion modelling.

Section 2 – Plant and Equipment

2.1 The activities at the installation shall be carried out within the installation boundary outlined in red as indicated on the Installation Location and Boundary plan shown in Schedule 1 of this Permit.

2.2 Permitted activities shall only be carried on using the plant and equipment as detailed in the Description of Activities and on the Installation Layout reproduced in Schedule 2 of this Permit.

2.3 The Operator shall notify the Regulator of any proposed operational changes. This includes, but is not exclusive to, any alterations to the process involving the change in fuel or materials, provision or removal of plant or equipment which may affect emissions or have consequences for the environment. The information shall be submitted at least 14 days before the changes take place.

2.4 No plant or equipment used for any activity shall be operated with an extraction point to air unless specifically noted within this Permit or specifically agreed in writing with the Regulator.

Section 3 – Production Capacity

3.1 The installation shall have a production capacity of less than twenty tonnes per day.

3.2 The Operator shall keep a record of production to demonstrate compliance with condition 3.1. The record shall be kept in a log book or other recording system on site and be available for inspection by the Regulator. Details of the record shall be submitted to the Regulator at least once in every twelve month period. The first record shall be submitted by 14th January 2018 and every year thereafter.

Section 4 – Emissions Limits and Controls

4.1 No visible dust, fume, smoke or particulate matter shall be emitted from the installation.

4.2 There shall be no burning of materials, including waste, in the open air, inside buildings or in any form of incinerator in connection with the activities within the installation boundary, without permission in writing from Sheffield City Council's Environmental Protection Service.

4.3 Emissions from combustion processes shall be free from visible smoke and in any case shall not exceed the equivalent of Ringelmann Shade 1 as described in British Standard BS 2742:2009 except during start up and shut down.

4.4 All reasonably practicable steps shall be taken to minimise the duration and visibility of emissions during start up and shut down.

4.5 The best available techniques shall be used to prevent or, where that is not practicable, reduce emissions from the installation in relation to any aspect of the operation of the installation which is not regulated by any other condition of this Permit.

4.6 Emissions to air shall be free of offensive odour beyond the installation boundary as perceived by an Authorised Officer from Sheffield City Council's Environmental Protection Service.

4.7 Except for condensed water vapour, all releases to air shall be free from persistent visible emissions.

4.8 Emissions of total particulate matter from the galvanising bath shall not exceed 15mg/m^3.

4.9 Galvanising fumes shall be arrested as far as is reasonably practicable by the fume capture hood over the galvanising bath

4.10 The fume capture hood over the galvanising bath shall be kept in good condition and repaired promptly should any damage occur such as tears or holes.

4.11 Emissions from the galvanising process shall be adequately contained and extracted to prevent fugitive emissions from the building.

4.12 All doors to fume enclosures shall be closed during the emersion of articles into the galvanising bath.

4.14 Appropriate fume containment measures shall be provided to collect the fume produced when working the ash, such as ensuring the extraction is running and the hood is in place.

5.0 Monitoring, Sampling and Measurement of Emissions

5.1 At least 7 days prior to any non-continuous monitoring being carried out, the Operator shall ensure that site specific monitoring protocols are submitted to the Environmental Protection Service for approval. The monitoring protocols shall include the proposed date and time of the testing, the method to be used and the pollutants to be monitored.

5.2 The results of annual non-continuous monitoring tests shall be forwarded to Sheffield City Council's Environmental Protection Service, within 8 weeks of completion of the testing.

5.3 The Operator shall ensure that adequate facilities for sampling are provided on vents or ducts. Sampling points on new plant shall be designed to comply with the British or equivalent standards.

5.4 Monitoring shall be carried out in accordance with methods described in M1 "Sampling requirements for monitoring stack emissions to air from industrial installations"[1] and M2 "Monitoring of stack emissions to air"[2], published by the Environment Agency, or by another method agreed in writing by Sheffield City Council's Environmental Protection Service.

5.5 In the reporting of monitoring results, all pollutant concentrations shall be expressed at reference conditions 273.1K, 101.3kPa, without correction for water vapour content.

5.6 The introduction of dilution air into duct systems in order to comply with emission limits shall not be permitted.

5.7 Emissions shall be tested at least once in every twelve month period unless otherwise agreed in writing with the Regulator.

5.8 Within 4 weeks of the date of issue of this Permit, the Operator shall submit a stack emissions monitoring programme to the Regulator for approval in writing. The programme shall provide a complete list of emissions points from the installation, the proposed pollutants to be tested and the proposed frequency of testing.

5.9 Emissions of total particulate matter shall be tested in accordance with BS EN 13284-1. Any deviations from this method shall be detailed in the results report.

[1] Environment Agency, January 2016, or any re-issue or update
[2] Environment Agency, January 2014, or any re-issue or update

5.10 Where the results of any non-continuous monitoring are adverse, the Operator shall investigate the matter immediately. The investigation shall include the following steps:

- Identify the cause of the adverse result;
- Carry out any necessary works or repairs to ensure compliance with the emission concentration limit or BAT;
- Notify the Regulator prior to the re-test date;
- Re-test the plant to check compliance with the emission concentration limit specified as soon as possible;
- Submit the re-test emissions monitoring report to the Regulator within 7 days of receipt of the results;
- Record the details of the investigation and outcomes in the log book or recording system.

5.11 Where the results of any non-continuous monitoring are adverse, in breach or an approach to the limit, the Operator shall inform Sheffield City Council's Environmental Protection Service no later than 10:00 hours the following working day after receipt of the results of the emissions testing.

5.12 The Operator shall ensure that a visual assessment of fugitive fume and dust emissions from the building housing the galvanising process and the stack serving the galvanising bath is carried out at least once a day when galvanising is occurring. The duration of the assessment shall be for a minimum of five minutes. All results of observations shall be recorded in the log book or recording system kept in accordance with condition 5.15.

5.13 The Operator shall ensure that odour assessments are conducted to determine whether emissions from activities result in offensive odours. The duration of the assessment shall be for a minimum of five minutes. The assessments shall be carried out at least once per day, or as otherwise agreed in writing with the Regulator, and all results shall be recorded in the log book or recording system kept in accordance with condition 5.15.

5.14 The Operator shall ensure that adverse results from monitoring and assessments carried out in accordance with conditions of the Permit, and alarm events, are investigated immediately to identify the cause of the emission and allow the appropriate corrective action to be taken. The corrective action taken shall be recorded in the log book or recording system kept in accordance with condition 5.15.

5.15 The Operator shall ensure that a log book or suitable recording system containing the details and results of all visual and olfactory assessments, records of all inspections, checks and assessments made in accordance with Permit conditions is kept. These records shall include the time and date of inspection, the nature, colour, persistency and intensity of any emission and the name of the person carrying out the assessment. The log book or recording system shall be kept on the premises and made available for inspection by authorised officers of Sheffield City Council's Environmental Protection Service. Such records shall be kept for a minimum of two years and shall be furnished in writing to Sheffield City Council on demand.

5.16 The Operator shall inform Sheffield City Council's Environmental Protection Service within one day in cases where:

- An emission is likely to have an effect on neighbouring premises; or
- There is a failure of any arrestment plant.

The report to Sheffield City Council's Environmental Protection Service shall include:

- The date and time of the incident;
- The cause and nature of the incident;
- Details of any abnormal emissions;
- Remedial action taken.

5.17 For a batch process, the extractive sampling shall take place over at least one complete cycle of the batch activity.

6.0 Maintenance

6.1 The Operator shall ensure that a visual inspection of all arrestment plant and ductwork is carried out at least once in every three months period under normal operating conditions, for any signs of wear, tear or damage. Any defects shall be repaired as soon as possible to ensure sound operation and prevent leaks or emissions to atmosphere. Details of the checks and any repair work shall be recorded in the log book or recording system required by condition 5.15 of this Permit.

6.2 The Operator shall ensure that any arrestment plant serving emission points is serviced at least once in every 12 months period to ensure sound operation. Details of the servicing or maintenance shall be recorded in the log book or recording system kept in accordance with condition 5.15.

6.3 Effective preventative maintenance shall be employed on all plant and equipment concerned with the control of emissions to air. Essential spares and consumables such as replacement filters shall be stored on site or be readily available in 24 hours from guaranteed suppliers, in order to rectify break downs rapidly.

6.4 The Operator shall implement and maintain a written planned preventative maintenance programme in relation to permitted pollution control equipment. The programme shall be made available to the Regulator upon request.

6.5 All malfunctions or breakdowns leading to visible or odorous emissions shall be investigated and rectified immediately. Process operations shall be adjusted until normal operations are restored. Details of the malfunction shall be recorded in the log book or recording system. If an effect on the local community is likely, the Operator shall inform the Regulator within 1 working day.

6.6 Filtration plant shall be inspected at the frequency specified in the Table below;

Table- Filter Plant Inspection Frequency

Filter Cleaning Method	Frequency of Visual Inspection
Fitted with reverse jets	At least once a month
Fitted with mechanical shakers	At least once a week
Requiring manual shaking	Daily inspection or prior to any delivery being made if deliveries are not daily

7.0 Materials Handling

7.1 Ash, dust, or potentially dusty materials including waste, shall be stored in containers, enclosed areas of the site, under cover or shall be treated with water in order to prevent emissions of particulate matter to the air. Ash from the zinc bath shall be kept dry.

7.2 Waste collection skips or containers shall be covered with tarpaulin or other suitable material or their contents shall be treated with water in order to prevent emissions of particulate matter to the air.

7.3 The Operator shall ensure that any accumulation or spillage of particulate materials outside any building is cleaned up immediately by a wet method or vacuum cleaning. Dry sweeping is not permitted.

7.4 Arrested particulate matter from the filters serving any abatement plant shall be collected into heavy duty bags or containers which shall be sealed before being deposited in the waste skip in order to minimise emissions of particulate matter.

7.5 Accumulations of materials likely to generate dust are not permitted outside any building.

8.0 Continuous Monitors

8.1 Where arrestment plant is installed, the stack serving the galvanising bath shall be fitted with a continuous indicative particulate emissions monitor which monitors emissions whenever the extraction system it serves is operating.

8.2 The particulate monitor serving the galvanising bath shall continuously monitor and record the particulate emissions data. The dataloggers shall continuously monitor particulate emissions whenever the extraction system it serves is operating.

8.3 The continuous indicative particulate emissions monitors shall be fitted with a visual display and visual and audible alarms.

8.4 The alarms serving the continuous particulate monitors shall be set to trigger at a reference level equivalent to 75% of the emission limit value for the emission point they serve, that is 11mg/m^3.

8.5 Alarm events from all continuous indicative particulate monitoring systems shall be automatically recorded.

8.6 Any continuous monitor used shall provide reliable data >95% of the operating time, (i.e. availability >95%). A manual or automatic procedure shall be in place to detect instrument malfunction and to monitor instrument availability.

8.7 The Operator shall ensure that a visual check of the continuous indicative monitor and associated alarm is carried out at least once in every three month period for any signs of damage. Any defects shall be repaired as soon as possible. Details of the checks and any repair work shall be recorded in the log book or recording system required by condition 5.15 of this Permit.

8.8 The Operator shall ensure that the continuous indicative monitors are serviced and calibrated or referenced at least once in every 12 month period by a competent person. Details of the servicing or maintenance shall be recorded in the log book or recording system kept in accordance with condition 5.15 of this Permit.

8.9 A six monthly summary of automatically recorded data and alarm events from the continuous indicative monitors shall be forwarded to the Regulator twice per year. The first summary is required to be submitted by 14th January 2018.

8.10 New or replacement continuous indicative monitors shall be designed for less than 5% down time over any 3 month period. Details of any proposed replacement equipment shall be submitted to the Regulator for written approval prior to installation.

8.11 No 15-minute mean emission concentration should exceed twice the specified emission concentration limits during normal operation (excluding start-up and shut-down).

8.12 The probes to the continuous emissions monitors shall be cleaned at least once in every 6 months period. A record of the cleaning shall be noted in the log book or recording system kept in accordance with condition 5.15 of this Permit.

8.13 The continuous emissions monitor shall be installed and operated in accordance with the manufacturer's instructions, which shall be made available to the Regulator on request.

8.14 Emissions concentrations shall be reported as zero when the plant is off and there is no flow from the stack.

9.0 Chimneys and Process Vents

9.1 Stacks or process vents shall not be fitted with any restriction at the final opening such as a plate, cap or cowl, with the exception of a cone which has been fitted to increase the efflux velocity with prior written approval of the Regulator.

9.2 Exhaust gases discharged through a stack or vent shall achieve an exit velocity of 15m/sec or more during normal operating conditions, in order to achieve adequate dispersion. The discharge shall be vertically upwards.

9.3 Stack flues and duct work shall be checked and cleaned at least once every six month period in order to prevent an accumulation of materials. This shall be written into the site Maintenance Programme and a record of the check and clean made in the logbook or recording system required by condition 5.15.

10.0 Records and Training

10.1 Staff at all levels shall receive training and instructions necessary for their duties and shall include the following:

- Responsibilities under the Permit;
- Minimisation of emissions, especially during start-up and shutdown;
- Actions to take during abnormal emissions, accidents, spillages which may lead to emissions.

10.2 The Operator shall keep and maintain a statement of training requirements for each operational post and keep a record of the training received by each employee whose actions may have an impact on emissions. These documents shall be made available to the Regulator upon request.

10.3 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the permitted process shall:-

a) be made available for inspection by the Regulator at any reasonable time;
b) be supplied to the Regulator on demand and without charge;
c) be legible;
d) be made as soon as reasonably practicable;
e) indicate any amendments which have been made and shall include the original record wherever possible, and;
f) be retained at the Permitted installation, or other location agreed by the Regulator in writing, for a minimum period of 2 years from the date when the records were made, unless otherwise agreed in writing.

11.0 Complaints

11.1 Within 2 weeks of the date of issue of this Permit, the Operator shall submit a written complaints procedure to the Regulator to be followed by the Operator in the event of any complaint from the general public, for approval in writing.

12.0 General Conditions.

12.1 External surfaces of the process buildings, ancillary plant, open yards and storage areas shall be inspected at least annually and cleaned if necessary to prevent the accumulation of dusty material. Particular attention shall be paid to roofs, guttering, roadways, external storage areas and yards. Cleaning operations shall be carried out by wet sweeping methods or vacuuming in order to minimise emissions of particulate matter to air.

12.2 The Operator shall notify the following to the Regulator in writing, within 14 days of their occurrence:-

- Any change in the trading name, registered name or registered office address;
- A change to any particulars of any ultimate holding company (including details of an ultimate holding company where the company has become a subsidiary);
- Any steps taken with a view to going into administration, entering into a company voluntary arrangement or being wound up.

12.3 The Operator shall notify the Regulator **without delay** of:-

a) The detection of an emission of any substance, which exceeds any limit or criterion in this Permit, specified in relation to the substance;
b) The detection of any fugitive emission that has caused, is causing or may cause significant pollution, unless the quantity emitted is so trivial that it would be incapable of causing significant pollution;
c) The detection of any malfunction, breakdown or failure of plant or techniques which has caused, is causing or has the potential to cause significant pollution;
d) Any accident, which has caused, is causing or has the potential to cause significant air pollution.

12.4 The Operator shall give written notification to the Regulator in the following instances;

a) Permanent cessation of the operation of any part of, or all of the Permitted Installation;
b) Cessation of the operation of any part of, or all of the Permitted Installation for a period, likely to exceed 1 year;
c) Resumption of the operation of any part of, or all of the permitted installation after a cessation notified under (b) above.

12.5 All reports and notifications required by this Permit, or under any Regulation under the Environmental Permitting Regulations 2010, as amended, shall be sent to Regulator. Unless notified in writing, all reports, notifications and communications in respect of this Permit shall be sent to:

epsadmin@sheffield.gov.uk or ippc@sheffield.gov.uk
or

Sheffield City Council,
Environmental Protection Service,
Floor 5 Howden House
1 Union Street
Sheffield
S1 2SH.

END OF CONDITIONS

Please Note

Where complaint is attributable to the operation of the installation and is, in the opinion of the Local Authority, justified, or if new knowledge develops on the potential for harmful effects from emissions, an immediate review of the Permit shall be undertaken. The Local Authority shall subsequently specify any new requirements and compliance time scales.

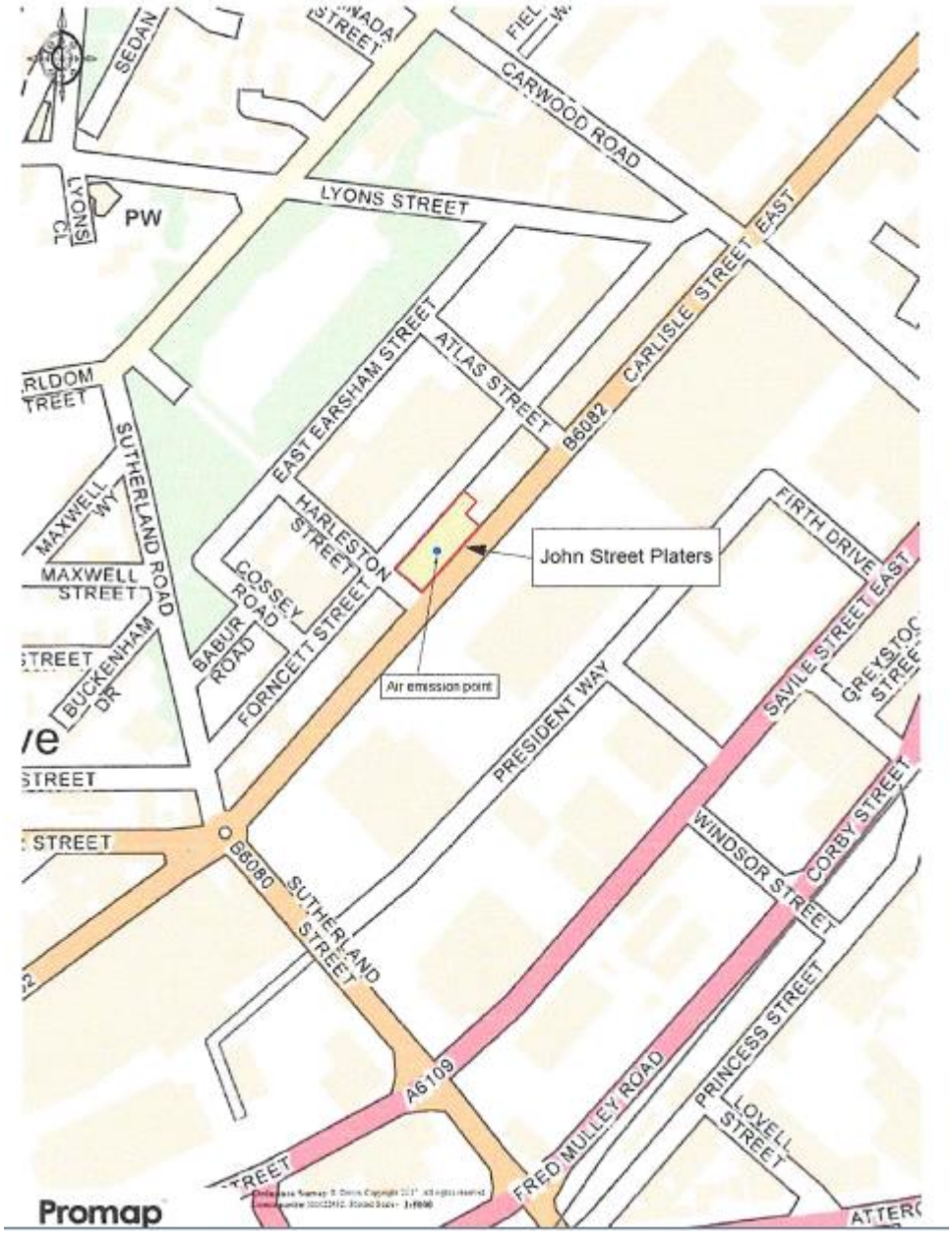
An annual subsistence fee as prescribed by the Secretary of State for the Environment shall be payable, for this Permit, by the process Operator, to this Authority within 2 weeks of the 1st April of each year.

In the event that the Permit has been issued after the 1st April in the initial year then the subsistence fee shall be pro rata for the complete months remaining and shall be due within 2 weeks of the Permit issue date.

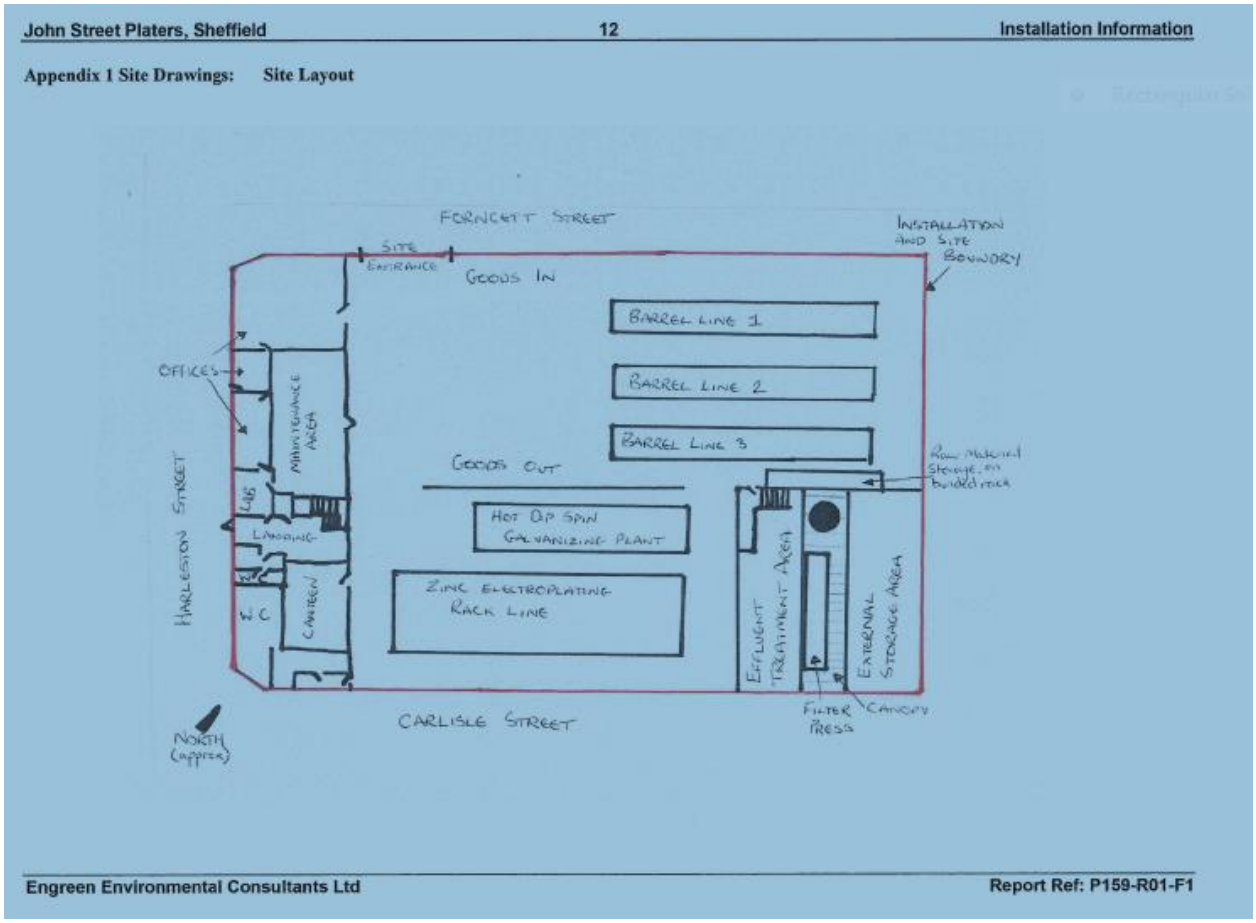
If the relevant payment is not received by Sheffield City Council's Environmental Protection Service then Permit revocation procedures shall be initiated in accordance with Section 22 of the Environmental Permitting (England & Wales) Regulations 2016 or any statutory re-enactment of the same.

The requirements of this Permit are not to be taken as planning permission. Where any structural alterations are necessary to ensure compliance with this Permit then the normal planning channels should be followed.

Schedule 1 – Installation Location and Boundary



Schedule 2 – Installation Layout



Schedule 3 – Process Layout.

Appendix 1 Site Drawings: Process Layout