



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

Permit Number: 2.1/052063/ET

**Installation Address:
The Alloy Steel Melting Company Limited
Unit 2 Cross Turner Street
Sheffield
S2 4AB**

In accordance with Regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016, The Alloy Steel Melting Company Limited is hereby permitted to operate a scheduled activity , namely the melting of ferrous metal as described in Schedule 1, Part 1, Chapter 2, Section 2.1 Part B, subsection (b) (ii), at the address detailed above and subject to the following Permit.

Signed

A handwritten signature in black ink, appearing to be 'A. M. H.', written over a light blue dotted grid background.

Dated this day: 01/03/18

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

The Secretary of States Guidance Process Guidance Note 2/04(13) statutory guidance for iron, steel and non ferrous foundry processes (revised July 2013) has provided the framework for the conditions in this permit.

Name & Address of Operator:

The Alloy Steel Melting Company Limited
Unit 2 Cross Turner Street
Sheffield
S2 4AB

Mr Parramore: Tel: 0114 2700 727
 Mob: 07900 865 840
 E-mail: alex@asmelt.plus.com

Registered Office:

The Alloy Steel Melting Company Limited
Unit 2 Cross Turner Street
Sheffield
S2 4AB

Address of Permitted Installation:

The Alloy Steel Melting Company Limited
Unit 2 Cross Turner Street
Sheffield
S2 4AB

Talking to Us

Any communication with Sheffield City Council should be made to the following address quoting the Permit Number:

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**ENVIRONMENTAL PROTECTION SERVICE
SHEFFIELD CITY COUNCIL
5th Floor (North)
Howden House
1 Union Street
Sheffield
S1 2SH**

Tel: 0114 273 4651

Alternatively Email: epsadmin@sheffield.gov.uk

Contents

	Page
Explanatory Note	4
Description of Activities	10
Section 1 Plant and Equipment	12
Section 2 Upgrading	12
Section 3 Production Capacity	12
Section 4 Emission Limits and Controls	12
Section 5 Monitoring, Sampling and Measurement of Emissions	13
Section 6 Materials Handling	14
Section 7 General Conditions	14
Schedule 1 Installation Location	15
Schedule 2 Installation Layout	16

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 of the Environmental Permitting (England and Wales) Regulations 2016, (“the EP Regulations”) to operate an installation carrying out activities covered by the description in Schedule 1, Part 2, Chapter 2, Section 2.1, Part B subsection (b) ii) of those Regulations.

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 (Monday to Friday 9.00 am to 5.00 pm) at the following address:

Environmental Protection Service
Sheffield City Council
5th Floor (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. Schedule 6 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 2016 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 process carried out at the premises is the melting of iron, cobalt and nickel alloys and casting into ingots, pig moulds and sand moulds for further processing off the premises. The melting is mainly hire work melting of customer materials delivered to and collected from site.

Process equipment is as follows:

- 2 steel bodied, water cooled 1.2 tonne capacity induction melting furnaces powered by a single 1000hz., 500KW VIP Powertrack Inductotherm unit (the unit can power only one furnace at a time);
- Water cooling plant: wells, tower, furnace coils, pipework and pumps;
- Hilger Watts OES Polyvac analytical machine;
- Overhead crane rated at 10 tonnes;
- OMega 21 sand mixer and sand hopper;
- Fork lift truck rated at 2 tonnes.

Material is delivered by customers to premises packed in 45 gallon drums covered by plastic wrapping banded onto pallets, unloaded by fork lift truck and stored in the warehouse until required for melting.

Prior to melting the material is unbundled and inspected; at that point material unsuitable for melting either due to dimensional constraints, physical appearance or potential pollutants is rejected. It is either replaced with more suitable material or omitted from the melt. It is not always possible to identify potential problems at this stage and some material may be rejected at the melting stage if excessive fuming occurs.

Material melted consists of clean turnings (no turnings are melted that have not been suitably prepared), or solids of a suitable size which are visually and olfactorily clean and grease free.

Materials are charged into the furnace from drums, by hand or shovelled as appropriate. Solid material wherever possible is contained within the top level of the furnace and covered with a refractory blanket to contain heat, oxide fumes and particulate emissions. Turnings are usually tipped into the furnace from drums.

There are normally between 3 and 5 melts a day, 18 days per month is the production target. Molten metal is tapped from the furnace into sand filled moulds or refractory lined ladles, which are covered by a refractory blanket during casting. Samples are taken for analysis to customer specification and quality control. Casting from ladles is into one of:

- (a) 20 kg cast iron pig moulds coated with zircon paint,
- (b) 550Kg. Ingots in sand moulds,
- (c) 7Kg disposable refractory pig moulds, or
- (d) Cast iron ingot moulds.

After cooling for a suitable period the moulds are stripped, ingots and pigs are packed and banded onto pallets for collection by customer. Waste material, (refractories or sand), are disposed of in skips collected on a regular basis by a suitable contracting.

A summary of emissions and control techniques is shown in the following table:

Process	Emission Source	Control
Melting	Dirty scrap which has not been rejected at initial inspection, this is usually for only a short period as contamination quickly burns off solid scrap	Rejection at visual inspection / initial melting
	Steam from wet scrap, usually only during drying period which is short.	Not applicable
	Oxide fumes during and after melting and during tapping	Refractory blanket
	Particulates carried from the furnace by heat convection during and after melting and from coagulant material used to assist the removal of slag prior to tapping	
Casting	Oxide fumes and particulate from molten metal	Refractory blanket
	Dust from refractory moulds	Local containment and disposal
	Fume from fluxing, anti piping and exfoliant insulating powders used during ingot casting	Refractory blanket on ladle
	Fume from casting sand moulds made with ester/phenolic binder system	Refractory blanket on ladle
Stripping moulds	Dust from stripping refractory moulds	Local containment and disposal
	Sand dust from stripping sand moulds	
Cooling	Steam emitted from warm water within works and steam from cooling tower	Not applicable

CONDITIONS OF PERMIT

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

1 Plant and equipment

- 1.1 Permitted activities shall only be carried on using the plant and equipment as detailed in the installation description and on the Installation Layout reproduced in Schedule 2 of this Permit.

2 Upgrading

- 2.1 The resins stored within the installation area shall be bunded in order to ensure that any leakage from the resin containers is captured within the bunded area. All resins shall be bunded within 3 months of the date of this permit and thereafter all resins will remain within the bunded area.

3 Production Capacity

- 3.1 The installation shall produce less than twenty tonnes per day of finished product.
- 3.2 The Operator shall maintain a record of production to demonstrate compliance with condition 3.1 of the Permit. The record shall include the total weight of castings and the total weight of finished product in tonnes per day. The record shall be kept in a log book on site, or other recording system, in accordance with condition 5.3 and be available for inspection by officers of Sheffield City Council's Environmental Protection Service. Details of the records shall be submitted at least once in every six month period, with the next record due to be submitted by 30th June 2018.

4 Emission Limits and Controls

- 4.1 All emissions to air, shall be free from persistent visible emissions. Visible emissions shall not exceed Ringelmann Shade 1 as described in British Standard BS 2742:2009.
- 4.2 There shall be no burning of waste materials in connection with the activities within the installation boundary.
- 4.3 Prior to melting, raw materials shall be inspected for contamination using visual and olfactory assessments. Material with an oil content of greater than 1% by weight shall be rejected.
- 4.4 Crucibles and furnace openings shall be kept covered during melting and pouring except at times when material is being transferred.
- 4.5 Except for condensed water vapour, all releases to air shall be free from persistent visible emissions.

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- 4.6 All external emissions to air shall be free from droplets.
- 4.7 There shall be no persistent offensive odour detectable beyond the site boundary, as perceived by an authorised officer of Sheffield City Council's Environmental Protection Service.

5 Monitoring, Sampling and Measurement of Emissions

- 5.1 The Operator shall ensure that a visual assessment of fugitive fume and dust emissions from the building housing the melting process is carried out at least once a day when molten metal is being cast. The duration of the assessment shall be for a minimum of one minute. All results of observations shall be recorded in the log book kept in accordance with condition 5.3.
- 5.2 The Operator shall ensure that adverse results from the assessments carried out in accordance with conditions 5.1 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 kept in accordance with Condition 5.3.
- 5.3 The Operator shall ensure that a log book containing the details and results of all visual assessments and records of all inspections and observations made in accordance with condition 3.1, 5.1, 5.2, 5.4 and 5.5 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 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.
- 5.4 In any case of abnormal emissions the operator shall:
- Identify the cause of the emissions and take corrective action immediately;
 - Adjust the process or activity to minimise the emissions; and
 - Record details of the incident describing the nature and extent of the problems and the remedial actions taken in the log book.
- 5.5 The Operator shall inform Sheffield City Council's Environmental Protection Service by 10.00 hours day in cases where an emission is likely to have an effect on neighbouring premises
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.

6 Materials Handling

- 6.1 Materials likely to generate particulate matter shall be unloaded, handled, transported and stored in such a manner that the emission of particulate matter to the air is prevented or, where not practicable, minimised and rendered harmless.
- 6.2 The Operator shall ensure that any spillage of particulate materials is cleaned up immediately by a wet method or vacuum cleaning in order to minimise particulate matter emissions to air. Dry sweeping is not permitted where it may result in the generation of airborne particulate matter to air outside any building.
- 6.3 All spillages shall be cleared immediately after they occur.

7 General Conditions

- 7.1 External surfaces of the process buildings and ancillary plant shall be inspected annually and cleaned if necessary to prevent the accumulation of dusty material in circumstances where dust may become wind entrained. Particular attention shall be paid to roofs, and guttering. Cleaning operations shall be carried out by wet sweeping methods or vacuuming in order to minimise emissions of particulate matter to air.
- 7.2 The activities shall be carried out within the areas indicated by shading on the plan in Schedule 1 to this Permit.
- 7.3 The Operator shall inform Sheffield City Council's Environmental Protection Service in writing of any proposed changes to the installation which may have an impact on the emissions to atmosphere.
- 7.4 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 at start up and shut down;
 - Actions during abnormal emissions including minimisation of emissions.

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- 7.5 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 to atmosphere. These documents shall be made available to Sheffield City Council's Environmental Protection Service upon request.
- 7.6 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.
- 7.7 The Operator shall notify the following to Sheffield City Council's Environmental Protection Service, in writing, within 14 days of their occurrence:-
- Any change in the trading name of Alloy Steel Melting Company Limited registered name or registered office address;
 - A change to any particulars of any ultimate holding company of Alloy Steel Melting Company Limited (including details of an ultimate holding company where Alloy Steel Melting Company Limited has become a subsidiary);
 - Any steps taken with a view to Alloy Steel Melting Company Limited going into administration, entering into a company voluntary arrangement or being wound up.
- 7.8 The Operator shall notify the Sheffield City Council Environmental Protection Service **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.

7.9 All reports and notifications required by this Permit, or under any Regulation under the Environmental Permitting Regulations 2016, shall be sent to Sheffield City Council's Environmental Protection Service. Unless notified in writing, all reports, notifications and communications in respect of this Permit shall be sent to email: epsadmin@sheffield.gov.uk or

Sheffield City Council

Environmental Protection Service

5th Floor (North)

Howden House

1 Union Street

Sheffield

S1 2SH

END OF PERMIT 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.

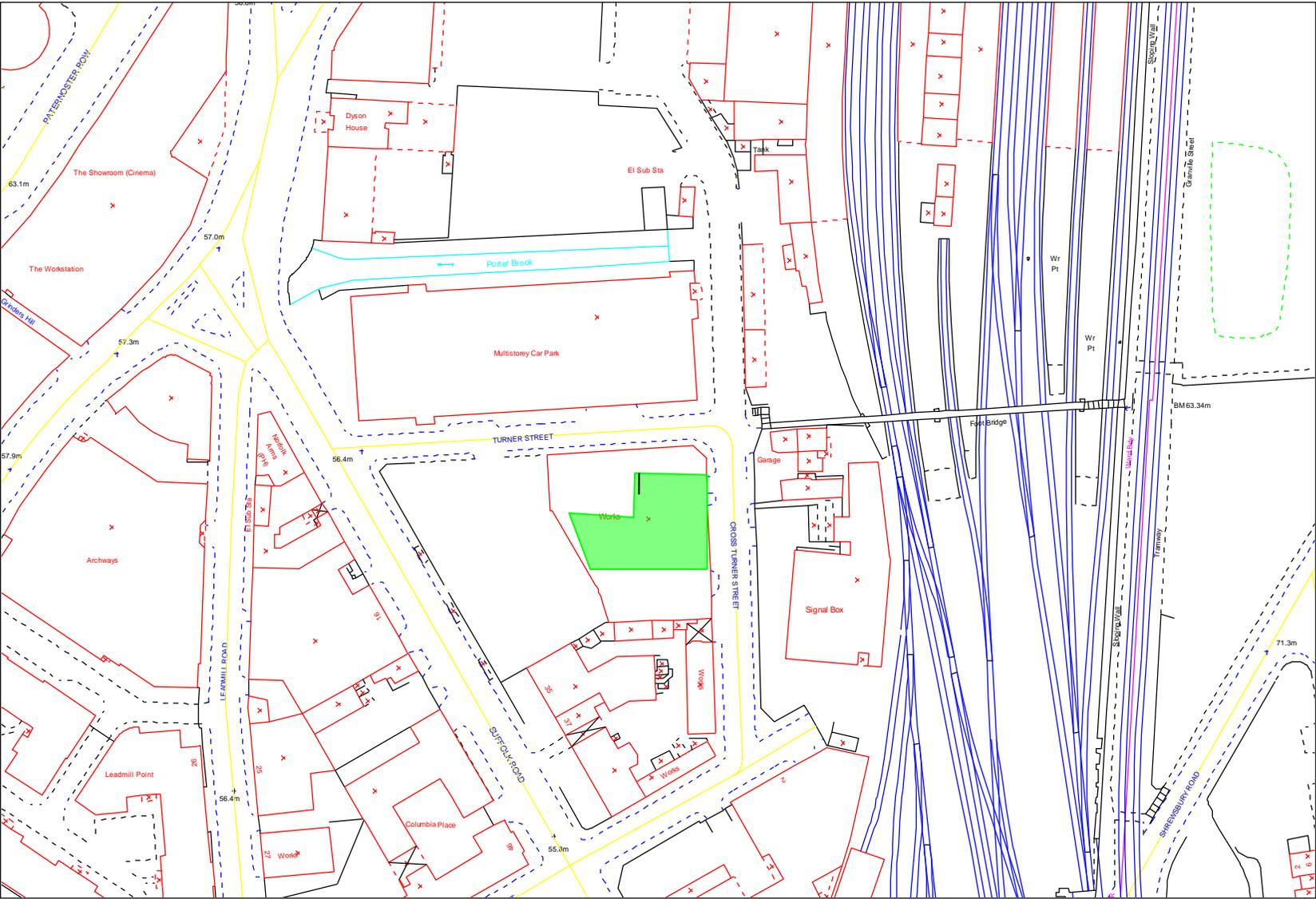
An annual subsistence fee as prescribed by the Secretary of State for the Environment shall be payable, for this Permit, by the process Operator, to this Authority within 2 weeks of the 1st April of each year.

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



Schedule 2 - Installation Layout

