

Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Tata Steel UK Limited

Stocksbridge Works Stocksbridge Sheffield S36 2JA

Variation application number EPR/UP3130FF/V007

Permit number EPR/UP3130FF

Stocksbridge Works Permit number EPR/UP3130FF

Introductory note

This introductory note does not form a part of the notice.

The following notice gives notice of the variation and consolidation of an environmental permit.

Purpose of this variation

This variation is to permit the addition of a Vacuum Induction Melting (VIM) Furnace in the Melting Shop building. It will discharge to air during evacuation through a new emission point SA23. There are also fugitive emissions within the melting shop building from gas burners associated with the VIM furnace. The only new discharges to water will be emergency or maintenance draining of the cooling water system (via a new transfer point E28) to the existing effluent treatment plant.

Brief description of the installation regulated by this permit

The activities covered by this permit relate to the hot rolling of finished and semifinished steel products from ingots imported from another steel making site. The Installation comprises a hot mill together will various heat treatment facilities. Annual steel production is about 280,000 tonnes. The site operates an Environmental Management System externally certified to ISO14001.

Reheating Process

There are 2 continuous preheating furnaces and 18 soaking pits.

The continuous furnaces are rated at 14 MWth each and emit to air through 2 chimneys (No.s A1, A2) to give a total thermal input of 28 MWth. These furnaces preheat steel ingots prior to transfer to the soaking pits. Of the 18 soaking pits 16 are rated at 4.25 MWth each. Two waste heat boilers can be utilised which improve overall thermal efficiency of the works by raising steam. One of these waste heat boilers has a supplementary firing capacity of 9.6 MWth. The remaining 2 soaking pits (18 and 19) are of 2.93 MWth capacity each and are fitted with regenerative burners to improve thermal efficiency. The soaking pits discharge through 3 chimneys (No.s A3, A4 & A5 A&B twin-flue) and have a total thermal input of 73.9 MWth.

The fuel used is natural gas with oil used as a standby fuel.

Heat Treatment Process

This process consists of a number of furnaces as follows.

Ingot and Billet treatment comprises 5 bogie hearth furnaces rated at 17.6 MWth in total and two lift off furnaces rated at 3.5 MWth and 2.3 MWth. These discharge through 7 chimneys (No.s A6 to A11 and A24) to give a total thermal input of 23.4 MWth. Billet annealing comprises 4 bogie hearth furnaces discharging through 1 chimney (No. A12 multi-flue) and a vent with a total thermal input of 14 MWth.

The lift off furnaces are fitted with recuperators for heat recovery and all of the old furnaces have been retrofitted with natural gas burners.

Hardening and tempering comprises 10 furnaces of aggregate rating 23.2 MWth through 8 chimneys (No.s A13 to A17, A20, A21 and A25). These furnaces are all natural gas fired and are fitted with energy recuperation.

There is a vacuum induction melting furnace discharging during evacuation through emission point SA23. There are also fugitive emissions within the melting shop building from gas burners associated with the VIM furnace.

Additionally, there is a 0.6 MWth single ingot annealing furnace installed alongside the vacuum induction melting furnace and discharging through emission point A26. It employs cold air fired low NOx burners, automated burner controls and data loggers to optimise energy conservation.

Direct Steam Raising

This process comprises a package boiler rated at approx 10.0 MWth. The boiler discharges through chimney A3 associated with Soaking Pit No's 1 to 7. The boiler is normally gas fired but can burn gas oil as an alternative fuel.

Boiler blow down water and condensate are released to the Little Don River via release point W9 (outlet 21).

Effluent Treatment Plant (ETP)

The majority of process waste water and some surface water is collected by the site drainage system and processed in an on-site effluent treatment plant before discharge to the Little Don river via outlet W3. Other process water and surface water is discharged via an oil interceptor to river via outlet W9 (to be relocated to allow for the cessation of use of the Low Yard).

There is also a discharge to sewer (S1) from submersion ultrasonic test tanks on the separated East Bank part of the site.

Emissions to water and air after abatement measures are subject to periodic monitoring against emission limits as specified in the permit.

The Stocksbridge site is situated on the North side of Stocksbridge, Sheffield. There are residential buildings close to the site. There is a Special Area of Conservation, Special Protection Area and Site of Special Scientific Interest within the relevant distance criteria as well as several Local Nature Reserves, Local Wildlife Sites and Ancient Woodlands.

The schedules specify the changes made to the permit.

The status log of a permit sets out the permitting history, including any changes to the permit reference number.

Status log of the pern	nit	
Description	Date	Comments
Application BK6670	Received 28/08/01	Response dated 20/01/02
Response to request for information	Request dated 29/11/01	
Request to extend determination	Request dated 11/02/02 Request dated 19/06/02	Request accepted 14/02/02 Request accepted 24/06/02
Permit BK6670	Issued 11/10/02	Request accepted 24/00/02
Standard variation TP3635PV	Received 01/03/04 Issued 23/06/04	 Change of emission limits to air for heat treatment furnaces Introduction of a vacuum press at the Effluent Treatment Plant Amendments to improvement programme.
Standard variation YP3133BW	Effective 01/03/05	 Correction of contents page Amendment to Introductory Note Amendment to Site Plan Amendment to condition 2.4.2 Amendment to condition 2.5.2 Amendment to Conditions 6.1.1 & 6.1.3 – emissions to air Amendment to Improvement Programme Amendments to Schedules 2 & 3
Simple standard variation FP3637LS	Effective 21/11/06	Deletion of condition 2.1.6 to allow fuel switching from natural gas to gas oil
Standard variation TP3235MU	Effective 19/02/07	 Amendments to monitoring methods Amendment to Tables 6.1.1 & 6.1.3 Amendment to Schedules 2 & 3
Partial surrender notice JP3932UF (Administrative variation for PAS TP3231UU)	Effective 01/12/07	Partial surrender on cessation of steel making
Transfer application EPR/UP3130FF/T001	Duly made 31/03/11 Determined 07/04/11	Transfer from Corus Stocksbridge Works
Variation application EPR/UP3130FF/V002	Duly made 13/04/2011	Addition of sewer point and effluent transfer point
Additional information request	13/04/11	Copy of Yorkshire Water Services trade effluent consent and detailed site plans
Additional information request	01/06/11 and 03/06/11	Confirmation of ultrasonic tank locations and associated details
Variation determined EPR/UP3130FF/V002	27/07/11	
Variation application EPR/UP3130FF/V003	Duly made 20/10/11	Application withdrawn
Variation application EPR/UP3130FF/V004	Duly made 12/04/12	

Status log of the pern	nit	
Description	Date	Comments
Additional information request	Requested 11/05/12 Received 15/05/12	Risk assessment for transfer of liquid wastes from mill scale pad to effluent treatment plant, site protection measures for storage of work in progress at RMSY
Additional information request	Requested 29/05/12 Received 30/05/12	Pollution control measures for mill scale pad
Additional information request	Requested 13/07/12 Received 26/07/12	Details of HGV vehicle movements and additional preventive noise measures for the New Warehouse
Variation determined EPR/UP3130FF/V004	30/08/12	
Variation and update consolidation EPR/UP3130FF/V005	Duly made 22/10/13	 Relocation of Outlet 21(W9) Relocation of millscale dewatering pad Ending of requirement for double diffusion tubes in background NOx monitoring
Variation and update consolidation EPR/UP3130FF/V005	Determined 16/12/2013	
Variation and update consolidation EPR/UP3130FF/V006	Duly Made 28/03/14	 Addition of 3rd CHT furnace Increase in NO_x limits for BHT furnaces and soaking pits 18 &19. Addition of single ingot annealing furnace
Variation and update consolidation EPR/UP3130FF/V006 (CP3434VQ)	Determined 24/06/14	
Variation and update consolidation EPR/UP3130FF/V007	Duly Made 30/6/14	Addition of VIM furnace as A2 process
Schedule 5 request for further information Dated 28/08/14	Response received 02/10/14	Issues include Raw materials and Wastes; Stack SA23; Modelling of emissions to air; Noise
Schedule 5 request for further information Dated 20/11/14	Response received 05/12/14	Further information about noise
Variation and update consolidation EPR/UP3130FF/V007	Determined 15/12/14	

End of introductory note

Notice of variation and consolidation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

permit number EPR/UP3130FF

issued to
Tata Steel UK Limited ("the operator")

whose registered office is

30 Millbank London SW1P 4WY

company registration number 2280000

to operate a regulated facility at

Stocksbridge Works Stocksbridge Sheffield S36 2JA

to the extent set out in the schedules.

The notice shall take effect from 15/12/2014

Name	Date
Anne Nightingale	15/12/2014

Authorised on behalf of the Environment Agency

Only Table 1.1.1, condition 1.1.3 (plan 2), Table 2.2.1, Table 2.3.1, Table 2.9.1, Table 6.1.1, Table 7.1.1 and Table 9.11 have been varied by the consolidated permit EPR/UP3130FF as a result of the application made by the operator.

Schedule 2 - consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2010

Permit number EPR/UP3130FF

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/UP3130FF/V007 authorising,

Tata Steel UK Limited ("the operator"),

whose registered office is

30 Millbank London SW1P 4WY

company registration number 2280000

to operate a regulated facility at

Stocksbridge Site Stocksbridge Sheffield S36 2JA

to the extent authorised by and subject to the conditions of this permit.

Name	Date	
Anne Nightingale	15/12/2014	

Authorised on behalf of the Environment Agency

Conditions

1. The permitted installation

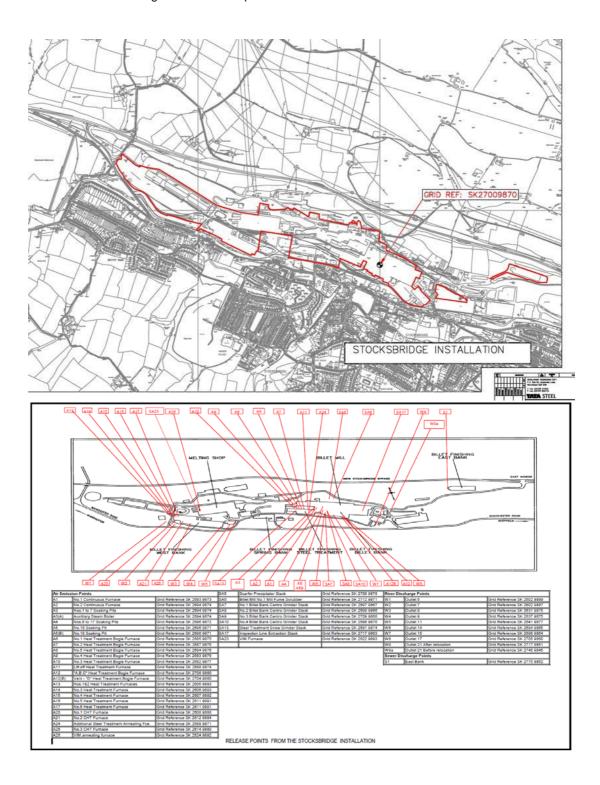
1.1.1 The Operator is authorised to carry out the activities and/or the associated activities specified in Table 1.1.1.

Table 1.1.1				
Activity under Schedule 1 of the Regulations/ Associated Activity		Description of specified activity	Limits of specified activity	
Act1- Act3	1.1 Part A (1) (a)	Combustion of fuel in appliances with a rated thermal input > 50 MWth.	(1)	
Act4	2.1 Part A (1) (c)	Processing ferrous metals and their alloys by hot-rolling with a capacity >20 tonnes per hour.	(1)	
Act5	5.4 Part A (1) (a) (ii)	Disposal of non-hazardous waste with a capacity of >50 tonnes per day using physico-chemical treatment (Effluent treatment plant).	(1)	
Act6	2.1 Part A(2) (d)	Casting ferrous metals at a foundry with a production capacity of >20 tonnes per day.	(1)	
Act7	Associated activity	Raw material receipt and storage.	(1)	
Act8	Associated activity	Surface rectification.	(1)	
Act9	Associated activity	Heat treatment.	(1)	
Act10	Associated activity	Product machining finishing, handling and storage.	(1)	
Act11	Associated activity	Plant services including steam raising, compressed air and cooling.	(1)	

Note

- (1) The limits of specified and associated activities collectively comprise all activities carried out in the installation between the receipt of raw materials to the supply of finished products.
- 1.1.2 The Permitted Installation shall, subject to the conditions of this Permit, be managed and controlled as described in the application dated 28 August 2001 and in the response to a Schedule 4 Notice dated 20 January 2002 and as subsequently varied or otherwise agreed in writing by the Agency.

1.1.3 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in red on the plans below.



1.1.4 There are no pre-operation conditions.

2. Operational Matters

2.1 Management techniques and control

2.1.1 The Permitted Installation shall, subject to the conditions of this Permit, be managed and controlled as described in the documentation specified in Table 2.1.1, or as otherwise agreed in writing by the Agency.

Table 2.1.1 : Management and control			
Description	Parts	Date Received	
Application BK6670	The response to question 2.1 given in section 2.1 of the application.	28/08/01	

- 2.1.2 All plant, equipment and technical means used in operating the Permitted Installation shall be maintained in good operating condition.
- 2.1.3 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.
- 2.1.4 A copy of this Permit and those parts of the application referred to in this Permit shall be available, at all times, for reference by all staff carrying out work subject to the requirements of the Permit.
- 2.1.5 All staff shall be fully conversant with those aspects of the Permit conditions, which are relevant to their duties and shall be provided with appropriate training and written operating instructions to enable them to carry out their duties.
- 2.1.6 Combustion appliances shall normally burn natural gas. Heavy fuel oil (HFO) shall only be burned on Soaking Pits 1 to 19 (excluding Pit 14) and No's 1 & 2 Continuous Furnaces as a standby fuel in the event that natural gas is unavailable or ceases to be economically viable. Gas oil shall only be burned on the auxiliary boiler as a standby fuel.

2.2 Raw materials (including water)

2.2.1 The Operator shall, subject to the conditions of this Permit, use raw materials (including water) as described in the documentation specified in Table 2.2.1, or as otherwise agreed in writing by the Agency.

Table 2.2.1 : Raw materials (including water)			
Description	Parts	Date Received	
Application BK6670	The response to question 2.2 given in section 2.2 of the application.	28/08/01	
Application EPR/UP3130FF/V007	Waste Streamsv1.xls	30/06/14	

2.2.2 The Operator shall maintain an inventory of raw materials used on-site. This inventory shall record:-

Maximum quantity stored at any time.

The quantity used over time.

Fate of the material used if it can be directly or indirectly released into the environment.

Any relevant environmental data on the raw material (degradability, bioaccumulation, toxicity, etc).

The Inventory of Raw Materials shall include all materials consumed within the Installation in excess of 1 tonne per annum and in particular:

- Lubricating oils and greases
- Water treatment chemicals; additives (including biocides); glycol, etc.
- Hydraulic oils and emulsions.

2.3 Operating Techniques

2.3.1 The Permitted Installation shall, subject to the conditions of this Permit, be operated using the techniques and in the manner described in the documentation specified in Table 2.3.1, or as otherwise agreed in writing by the Agency.

Table 2.3.1: Operating techniques			
Description	Parts	Date Received	
Application BK6670	The response to questions 2.3 and given in section 2.3 of the application.	28/08/01	
Application EPR/UP3130FF/V002	The response to question 3 in part C3 of the application	31/03/11	
Variation application EPR/UP3130FF/V004	The response to question 3 in part C3 of the application	12/04/12	
Schedule 5 response for application EPR/UP3130FF/V004	Response to question 1,3 & 4	15/05/12	
Additional information of application EPR/UP3130FF/V004	All	30/05/12	
Variation application EPR/UP3130FF/V005	2013 variation changes	20/09/13 Duly made 22/10/13	
Variation application EPR/UP3130FF/V006	Supporting Documents JBBHT01, JBBM 01 and JBCHT01	28/03/14	
Addition of VIM annealing furnace to EPR/UP3130FF/VO006	e-mails from J Brownlow	02/05/14 and 03/06/14	
Variation application EPR/UP3130FF/V007	Supporting document JB01 (all sections under Environmental Considerations)	30/06/14	
Schedule 5 response for information dated 28/08/14 EPR/UP3130FF/V007	Response to questions 7, 8, 12 and 15	02/10/14	
Schedule 5 response for information dated 20/11/14 EPR/UP3130FF/V007	All	05/12/14	

2.4 Groundwater protection

2.4.1 The Permitted Installation shall, subject to the conditions of this Permit, be controlled as described in the documentation specified in Table 2.4.1, or as otherwise agreed in writing by the Agency.

Table 2.4.1: Groundwater protection			
Description	Parts	Date Received	
Application BK6670	The response to questions 2.4 given in section 2.4 of the application.	28/08/01	

2.4.2 All oil and chemicals shall be stored in designated containment areas which shall be bunded or kerbed to contain any spillage. The capacity of the bunds shall be calculated to give containment for 110% of the total volume for single tanks and hydraulically linked tanks. Where two or more tanks are installed within the same bund, 110% of the largest tank or 25% of the total capacity of all tanks, whichever is the greater shall be used. The bunds shall be inspected on a regular basis (minimum weekly) to ensure they are substantially clear of material loss or rainwater ingress and a record of the inspection maintained in the plant operational records.

2.5 Waste handling and storage

2.5.1 The Operator shall, subject to the conditions of this Permit, handle and store waste as described in the documentation specified in Table 2.5.1, or as otherwise agreed in writing by the Agency.

Table 2.5.1: Waste handling and storage			
Description	Parts	Date Received	
Application BK6670	The response to question 2.5 given in section 2.5 of the application.	28/08/01	
Variation application EPR/UP3130FF/V004	Document ref JB01 – version 1 – changes to waste management	24/02/12	

2.5.2 Waste materials specified in Table 2.5.2 shall only be stored on the site in the location and manner specified in that Table.

Table 2.5.2: Waste and revert material stored on site			
Description of Waste	Location of Storage on Site	Manner of Storage	Storage Conditions
Ferrous scrap	Scrap segregation area in ex Melting Shop	Bays	Concrete floor with sealed drainage
Ferrous turnings and swarf arising on site	Scrap segregation area in ex-melting Shop	Bays	Concrete floor with sealed drainage
Waste solvents	Waste Management area in ex-melting shop	Drums inside flam store	Locked store with bunded base and free air flow
Waste greases	Barrel pad in ex- melting shop	Barrels	Secure compound with concrete floor and sealed drainage
Waste Oils	Designated tanks at various locations and barrel pad in ex-Melting Shop	Barrels and tanks	Bunded and labelled tanks and waste barrel pad with concrete floor and sealed drainage
Refractory Waste	Designated locations	Bays or skips	Bays with concrete floor and sealed drainage to water treatment plant, or sealed skips in production department
Filter Dust (metallic)	Scrap segregation area in ex-Melting Shop	Pads & Pens	Concrete pads and pens with sealed drainage to Outlet 8 ETP

Table 2.5.2: Waste and revert material stored on site				
Description of Waste	Location of Storage on Site	Manner of Storage	Storage Conditions	
Mill Clarifier Sludge	Adjacent to Mill Clarifier	Silo and sealed skip	Dedicated storage silo, then emptied into sealed skip. Area drains back into the clarifier	
Effluent Treatment Plant Filter Cake	Adjacent to ETP and ex-Melting Shop	Skip under drum press and then bulked up in a bay in ex-Melting Shop	Sealed skip on concrete floor, then bay with Concrete floor and sealed drainage	
Effluent Treatment Plant Sludge	Adjacent to ETP	Tank	Purpose built tank with drainage back into the ETP	
Scarfer ESP sludge	Adjacent to Scarfer settling tank	Skip	Sealed skip on concrete floor with sealed drainage	
General Industrial Waste	Designated Locations	Skips, FELs and Wheeled bins	Sealed containers with lids	
Pallets	Waste Management area in ex-Melting Shop	Stacked	Concrete floor inside building	
Wood	Designated locations	Skips	Skips	
Mill Scale	Pad on Ex-RMSY and Pens inside ex-Melting Shop	Pads & Pens	Concrete pads and pens with sealed drainage to Outlet 8 ETP	
WEEE	Waste Management area in ex-Melting Shop	Skips, IBC's, wheeled bins and bays	Sealed skips or containers, bays on concrete floor with sealed drainage	
Plaster Board	Waste Management area in ex-Melting Shop	Para-bags, sealed containers, skip or bays	Sealed skips or containers or bays on concrete floor with sealed drainage	
Glass	Waste Management area in ex-Melting Shop	Sealed containers, skip or bays	Sealed skips or containers or bays on concrete floor with sealed drainage	
Aerosols	Waste Management area in ex-Melting Shop	Sealed containers	Containers, or wheeled bins on concrete floor with sealed drainage	
Grinding Wheels	Designated Locations	Skip	Sealed, enclosed and lockable skip	
Abrasive saw discs	Designated Locations	Skip	Sealed, enclosed and lockable skip	
Dry recyclables	Designated Locations	Wheeled bins	Sealed containers with lids	
Dust Filters	Waste Management area in ex-Melting Shop	Stacked	Skip, containers or bays on concrete floor with sealed drainage	
Grinding swarf	Scrap segregation area in ex-Melting Shop	Bays	Concrete floor with sealed drainage	
Batteries	Designated locations	Sealed containers	Sealed bins, IBC's and battery boxes	
Lab smalls	Waste Management area in ex-Melting Shop	Bunded area	Secure bunded store on concrete floor with sealed drainage	

Table 2.5.2: Waste and revert material stored on site				
Description of Waste	Location of Storage on Site	Manner of Storage	Storage Conditions	
Ceramic Fibre Wool Blanket	Designated locations	Bagged in skip	Sealed, enclosed and lockable skip	
Asbestos	Designated locations	Double bagged in skip 1x fibrous skip 1x bonded skip	Sealed, enclosed and lockable skip	

2.5.3 Waste storage areas shall be designated and segregated with clear signage as to the type of waste which is permitted to be stored.

2.6 Waste recovery and disposal

2.6.1 The Operator shall, subject to the conditions of this Permit, recover and dispose of waste as described in the documentation specified in Table 2.6.1, or as otherwise agreed in writing by the Agency.

Table 2.6.1: Waste recovery and disposal			
Description	Parts	Date Received	
Application BK6670	The response to question 2.6 given in section 2.6 of the application.	28/08/01	

- 2.6.2 All wastes produced within the Installation shall be assessed and classified in accordance with relevant waste legislation and a record of the assessment maintained at the Installation.
- 2.6.3 The Operator shall ensure that where waste produced at the Permitted Installation is sent to a landfill site, it meets the waste acceptance criteria for that landfill.
- 2.6.4 The Operator shall ensure that where waste produced at the Permitted Installation is sent to an off-site waste disposal facility, the waste in question is provided with the following information, prior to receipt of the waste at the off-site facility:

The nature of the process producing the waste

The composition of the waste

The handling requirements of the waste

The hazard identification and hazard classification of the waste

The waste code of the waste

2.6.5 The Operator shall produce a waste sampling plan in accordance with the European Standard EN 14899 for <u>all</u> wastes destined for disposal in landfill. The sampling plan shall include the following key elements:

Define the overall objectives - identify and consult with interested parties, and consider health and safety issues.

Determine the level of testing required under the Landfill Regulations.

Identify parameters to be tested

Research background information e.g. production process, variability of process, waste characteristics

Define methodology - sample population, sample numbers, pattern, size and reliability of outcome.

Identify the most appropriate technique from the standard on sampling (prEN 14899).

Document and implement the plan.

2.7 Energy Efficiency

2.7.1 The Operator shall, subject to the conditions of this Permit, use energy as described in the documentation specified in Table 2.7.1, or as otherwise agreed in writing by the Agency.

Table 2.7 1: Energy efficiency			
Description	Parts	Date Received	
Application BK6670	The response to question 2.7 given in section 2.7 of the application.	28/08/01	

2.7.2 The Operator shall notify the Environment Agency without delay in the case of any failure to meet the obligations required by a Climate Change Agreement or Trading Agreement or if the permitted activities leave such an agreement. 2.7.3 The Operator shall have an energy management plan, which shall be updated annually. The plan shall include proposals for energy efficiency (including those proposed under any negotiated agreement or trading arrangement) together with target setting and monitoring details.

2.8 Accident prevention and control

2.8.1 The Operator shall, subject to the conditions of this Permit, prevent and limit the consequences of accidents as described in the documentation specified in Table 2.8.1, or as otherwise agreed in writing by the Agency.

Table 2.8.1 : Accident prevention and control		
Description	Parts	Date Received
Application BK6670	The response to question 2.8 given in section 2.8 of the application.	28/08/01

2.8.2 The Operator shall identify the hazards to the public and the environment posed by the installation. He shall assess the risk of a particular hazard arising and have contingency plans to mitigate any unavoidable consequences of an incident. The hazard and risk assessment shall be recorded and reviewed annually.

2.9 Noise and vibration

2.9.1 The Operator shall, subject to the conditions of this Permit, control noise and vibration as described in the documentation specified in Table 2.9.1, or as otherwise agreed in writing by the Agency.

Table 2.9.1 : Noise and vibration				
Description	Parts	Date Received		
Application BK6670	The response to question 2.9 given in section 2.9 of the application.	28/08/01		
Response to Schedule 4 Part1 Notice	Response to questions 5 and 6	20/01/02		
Application EPR/UP3130FF/V004	Response to Part C2 question 6	12/04/12		
Additional information to EPR/UP3130FF/V004 requested by email dated 22/06/12	AII	06/07/12		
Additional information to EPR/UP3130FF/V004 requested by email dated 13/07/12	All - noise management to minimise noise from HGV traffic	26/07/12		
Schedule 5 response for information dated 28/08/14 EPR/UP3130FF/V007	Response to questions 12-17	02/10/14		
Schedule 5 response for information dated 20/11/14 EPR/UP3130FF/V007	AII	05/12/14		

2.9.2 The Operator shall maintain a noise and vibration management plan with the objective of reducing to a minimum noise and vibration so as not to cause harm or annoyance within the local community. The plan shall include annual noise measurements, which shall be assessed in accordance with BS4142. Noise sources which individually, or in combination, exceed the noise ratings given in the British Standard shall be documented in the Noise Management Plan together with the measures necessary to reduce noise to a minimum.

2.10 Monitoring

2.10.1 The Operator shall, subject to the conditions of this Permit, carry out, evaluate and assess monitoring as described in the documentation specified in Table 2.10.1, or as otherwise agreed in writing by the Agency.

Table 2.10.1 : Monitoring			
Description	Parts	Date Received	
Application BK6670	The response to question 2.10 given in section 2.10 of the application.	28/08/01	

- 2.10.2 Where requested in writing by the Agency, the Operator shall provide at least 14 days advance notice of undertaking monitoring/spot sampling.
- 2.10.3 There shall be provided:
 - a safe and permanent means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2, unless otherwise specified in that Schedule and
 - **b** safe means of access to other sampling/monitoring points when required by the Agency.
- 2.10.4 Methods for non-continuous monitoring and to calibrate automated, continuous, measurement systems shall be carried out as specified by the appropriate CEN standards. If CEN standards are not available, ISO standards, national or international standards which will ensure the provision of data of an equivalent scientific quality, as approved in writing by the Environment Agency, shall apply. The reference measurements used shall be approved in writing by the Agency.
- 2.10.5 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme in condition 2.10.1 of this Permit shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing by the Environment Agency.
- 2.10.6 The Operator shall perform point source monitoring in accordance with the methods stated in Table 2.10.2 and where appropriate CEN standards are not available.

2.10.2 : Monitoring Methods for Releases into Air Table		
Parameter	Method	
Particulate	BS EN 13284-1: 2002	
Oxides of Nitrogen (as NO2)	BS EN 14792	
Metals	BS EN 14385	

Monitoring Methods for Releases into Water		
Parameter	Method	
Suspended solids	ISO 11929: 1997; BS EN 872 – Determination of suspended solids. Dried at 105°C	
Oil/Grease	Determination of hydrocarbon oils by solvent extraction and infrared spectroscopy at 2927, 2956 and 3027 cm-1	

Notes:

- 1. When reporting monitoring results the Operator shall state the limits of accuracy of the method.
- 2. If a monitoring result is below the limit of detection, then the limit of detection (LOD) should be reported.
- 3. Monitoring instruments shall be calibrated in accordance with manufacturer's instructions and an Operational Record made.
- 4. Alternative monitoring methods to those stated above may be agreed in writing by the Environment Agency.
- 2.10.7 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

2.11 Decommissioning

2.11.1 The Operator shall, subject to the conditions of this Permit, make provision for decommissioning the installation as described in the documentation specified in Table 2.11.1, or as otherwise agreed in writing by the Agency.

Table 2.11.1 : Decommissioning			
Description	Parts	Date Received	
Application BK6670	The response to question 2.11 given in section 2.11 of the application.	28/08/01	

2.11.2 Decommissioning associated with an application for either full or partial surrender of the permit shall not commence until a decommissioning plan has been prepared and submitted in writing to the Environment Agency.

2.12 Multi-operator installations

2.12.1 This is not a multi-operator installation.

3 Records

- 3.1.1 A record (a "Specified Record") shall be made of:
 - a any malfunction, breakdown or failure of plant, equipment or techniques (including down time and any short term and long term remedial measures) that may have, has had or might have had an effect on the environmental performance of the Permitted Installation. These records shall be kept in a log maintained for that purpose;
 - **b** all monitoring and sampling taken or carried out in accordance with the conditions of this permit and any assessment or evaluation made on the basis of such data;
 - c records of specified inspections or actions contained in this permit.
- 3.1.2 There shall be made available for inspection by the Agency at any reasonable time:
 - a Specified Records;
 - **b** any other records made by the Operator in relation to the operation of the Permitted Installation ("Other Records")
- 3.1.3 A copy of any Specified or Other Records shall be supplied to the Agency on demand and without charge
- 3.1.4 Specified Records and Other Records shall:
 - a be legible;
 - **b** be made as soon as reasonably practicable;
 - **c** indicate any amendments which have been made and shall include the original record wherever possible; and
- 3.1.5 Specified Records and Other Records shall be retained for a minimum period of 4 years from the date when the records were made.
- 3.1.6 For all waste received at or produced from the Permitted Installation, the Operator shall record (and shall retain such records for a minimum of 4 years):
 - a its composition, or as appropriate, description;
 - **b** the best estimate of the quantity produced;
 - c its disposal routes; and
 - d the best estimate of the quantity sent for recovery.
- 3.1.7 A record shall be made at the Permitted Installation of any complaints concerning the Installation's effect or alleged effect on the environment. The record shall give the date of complaint, time of complaint, a summary of any investigation and the results of such investigation. Such records shall be made in a log kept for this purpose.

4 Reporting

- 4.1.1 All reports and notifications required by this Permit shall be sent to the Environment Agency at the address notified in writing to the Operator by the Agency.
- 4.1.2 The Operator shall report the parameters listed in Table S2 to Schedule 2 as follows:
 - a in respects of the emission points specified;
 - **b** for the reporting periods specified in Table S2 to Schedule 2 and using the forms specified in Table S3 to Schedule 3;
 - c giving the information from such results and assessments as may be required by the forms specified in those Tables; and
 - d sending the report to the Agency within 28 days of the end of the reporting period.
- 4.1.3 The Operator shall, within 36 months of the issue of this Permit, submit a report on potential environmental improvements to the Permitted Installation. For each of the subject areas identified in Section 2 of the appropriate technical guidance, the report shall assess the costs and benefits of alternative techniques that may provide environmental improvement. This shall include, but not be limited to, those techniques listed in guidance. The methodologies used should be based on those given in Agency guidance note H1 and should justify, against the BAT criteria, where potential improvements are not planned to be implemented. As part of their management system the Operator shall submit an updated report every 36 months.
- 4.1.4 Where the Operator has a formal environmental management system applying to the Permitted Installation which encompasses annual improvement targets the Operator shall, not later than 31 January in each year, provide a summary report of the previous full calendar year's progress against such targets.
- 4.1.5 Fugitive emissions shall be reviewed on an annual basis and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them. The report shall include any measurements taken to quantify the release of substances for which Air Quality Standards or Guidelines exist.
- 4.1.6 The Operator shall submit an annual report to include key performance indicators for the principal departments within the installation, which as a minimum shall include the following measures of performance. Alternative key performance indicators may be agreed in writing by the Environment Agency.

Key Performance Indicators

Billet Mill and Finishing Banks	Substances released into air per tonne of finished product. To include: CO ₂ ; NOx (as NO ₂); particulate and metals (1)	Substances released into water ⁽²⁾ per tonne of finished product. To include: suspended solids; oil/grease; COD and metals ⁽¹⁾	Total water ⁽³⁾ supplied per tonne of finished product	Waste disposal per tonne of finished product (excluding material sent for recovery)
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Notes:

- (1) Metals include As; Cd, Cr; Cu; Hg; Fe; Pb; Mn; Ni; Zn.
- (2) The waste water released from the Installation should equate to the respective releases from the rolling, heat treatment and other finishing operations.

(3) Total water supplied to the Installation shall include Towns Water and abstracted River Water.		

5 Notifications

- 5.1.1 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—
 - (i) inform the Environment Agency,
 - (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
 - (iii) take the measures necessary to prevent further possible incidents or accidents;
 - (b) In the event of a breach of any permit condition the operator must immediately—
 - (i) inform the Environment Agency, and
 - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
 - (c) In the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 5.1.2 Any information provided under condition 5.1.1 where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 1 to this permit within the time period specified in that schedule.
- 5.1.3 The Operator shall give written notification as soon as practicable, of any of the following
 - 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 1year; and
 - **c** resumption of the operation of any part of or all of the Permitted Installation after a cessation notified under 5.1.3(b).
- 5.1.4 The Operator shall notify the following matters to the Agency, in writing, within 14 days of their occurrence:
 - i any change in the Operator's trading name, registered name or registered office address;
 - **ii** a change to any particulars of the Operator's ultimate holding company (including details of an ultimate holding company where the Operator has become a subsidiary);
 - **iii** any steps taken with a view to the Operator going into administration, entering into a company voluntary arrangement or being wound up.
- 5.1.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:
 - (a) the Environment Agency shall be notified at least 14 days before making the change; and
 - (b) the notification shall contain a description of the proposed change in operation.

6 Emissions

6.1 Emissions into air

6.1.1 Emissions to air from the emission points specified in Table 6.1.1 shall only arise from the sources specified in that Table.

Table 6.1.1: Emission points into air			
Emission point ref	Source	Location	
A1	No. 1 Continuous Furnace	A1 on site plan	
A2	No. 2 Continuous Furnace	A2 on site plan	
A3(A) ⁽²⁾	Nos. 1 to 7 Soaking Pits via Waste Heat Boiler	A3 on site plan	
A3(B) ⁽¹⁾	Auxiliary Steam raising boiler	A3 on site plan	
A4 ⁽²⁾	Nos. 8 – 17 Soaking Pits via Waste Heat Boiler	A4 on site plan	
A5(A)	No. 18 Soaking Pit	A5 on site plan	
A5(B)	No. 19 Soaking Pit	A5b on site plan	
A6	No. 1 Heat Treatment Bogie Furnace	A6 on site plan	
A7	No. 2 Heat Treatment Bogie Furnace	A7 on site plan	
A8	No. 5 Heat Treatment Bogie Furnace and Beatty Heat Treatment Furnace	A8 on site plan	
A9	No. 4 Heat Treatment Bogie Furnace	A9 on site plan	
A10	No. 3 Heat Treatment Bogie Furnace	A10 on site plan	
A11	Lift off Heat Treatment Furnace	A11 on site plan	
A12 (A)	"A, B, C" Heat Treatment Bogie Furnace	A12 on site plan	
A12 (B)	Vent – "D" Heat Treatment Bogie Furnace	A12b on site plan	
A13	No. 1 and No. 2 Heat Treatment Furnaces	A13 on site plan	
A14	No. 3 Heat Treatment Furnace	A14 on site plan	
A15	No. 4 Heat Treatment Furnace	A15 on site plan	
A16	No. 5 Heat Treatment Furnace	A16 on site plan	
A17	No. 6 Heat Treatment Furnace	A17 on site plan	
A20	No.7 Continuous Hardening Furnace	A20 on site plan	
A21	Nos.8&9 Continuous Tempering Furnaces	A21 on site plan	
A24	Additional Steel Treatment Lift off Heat Treatment Furnace	A24 on site plan	
A25	No.10 Continuous Tempering Furnace	A25 on site plan	
A26	VIM Annealing Furnace	A26 on site plan	
SA5	Scarfer Precipitator Stack	SA5 on site plan	
SA6	Billet Mill No. 1 Mill Fume Scrubber Exhaust	SA6 on site plan	
SA7	Billet Bank Centro Grinder No. 1 Exhaust Stack	SA7 on site plan	
SA8	Billet Bank Centro Grinder No. 2 Exhaust Stack	SA8 on site plan	
SA9	Billet Bank Centro Grinder No. 3 Exhaust Stack	SA9 on site plan	
SA10	Billet Bank Centro Grinder No. 4 Exhaust Stack	SA10 on site plan	
SA13	Steel Treatment Snow Grinder Exhaust Stack	SA13 on site plan	
SA17	Inspection Line Extraction System Exhaust Stack	SA17 on site plan	
SA23	Vacuum Induction Melting (VIM) Furnace	SA23 on site plan	

Notes

- 1 The steam raising boiler A3(B) shall be sampled upstream of chimney A3(A).
- 2 Release points A3(A) and A4 shall be sampled with the Waste Heat Boilers in operation.

The limits for emissions into air for the parameters and emission points set out in Table 6.1.2

6.1.2

shall not be exceeded.

6.1.3 The Operator shall carry out monitoring of the parameters listed in Table 6.1.2, from the emission points and at least at the frequencies specified in that Table.

Table 6.1.2 Emiss	sion limits into air								
Parameters	Emission Point								
	A6, A7, A8, A9, A10, A12A, A12B, A24	A3(B), A20, A21, A25	A3(A), A4	A1, A2	A11, A13, A14, A15, A16, A17, A26	A5A, A5B	SA5	SA6	SA7, SA8, SA9, SA10, SA13, SA17
Particulate (concentration) mg m ⁻³	-	-	To be reported (2)	To be reported (2)	-	To be reported (2)	50 ⁽²⁾	50 ⁽²⁾	10 ⁽³⁾
Frequency of monitoring	-	-	6 months	6 months	-	6 months	6 months	annually	-
Oxides of Nitrogen (as NO ₂) mg m ⁻³	150 ⁽¹⁾	200 ⁽¹⁾	200 (1)	250 ⁽¹⁾	400 (1)	3000 (1)	-	-	-
Frequency of monitoring	3 months	3 months	3 months	3 months	3 months	3 months	-	-	
Metals ⁽⁴⁾ mg m ⁻³	-	-	To be reported (2)	To be reported (2)	-	To be reported (2)	To be reported ⁽²⁾	-	-
Frequency of monitoring	-	-	6 months	6 months	-	6 months	6 months	-	-

Notes:

- 1. Refers to any representative manual hourly average measurement.
- 2. Refers to any representative manual spot sample.
- 3. To be interpreted as "no visible emission".
- 4. Metals means elements and compounds expressed as the metal and includes As, Cd, Cr, Cu, Hg, Ni, Pb, Mn, Zn, Fe (monitoring to be carried out when leaded steels are being processed)
- 5. Alternative monitoring requirements may be agreed in writing by the Environment Agency.
- 6. The steam raising boiler shall be sampled A3(B) upstream of A3(A). Release points A3(A) and A4 shall be sampled with the Waste Heat Boiler in operation.

6.1.4 The maximum gas consumption by the Installation shall not exceed the maximum theoretical gas consumption or 17,470 m³/hour (or as may be otherwise agreed in writing by the Environment Agency), whichever is the lesser.

6.2 Emissions to land

- 6.2.1 There shall be no emission to land from the Permitted Installation.
- 6.2.2 The Operator shall notify the Agency, as soon as practicable, of any information concerning the state of the Site which affects or updates that provided to the Agency as part of the Site Report submitted with the application for this Permit.

6.3 Emissions to water [other than emissions to sewer]

6.3.1 Emissions to water from the emission points specified in Table 6.3.1 shall only arise from the sources specified in that Table

Table 6.3.1: Emi	ssion points into water	
Emission Point Reference.	Source	Receiving Water
W1 (Outlet 6)	a) Surface water.	
W2 (Outlet 7)	a) Surface water	
W3 (Outlet 8)	a) Surface water	
	b) On-site effluent treatment plant.	
W4 (Outlet 9)	a) Surface water	
W5 (Outlet 11)	a) Surface water	
	b) Effluent treatment plant storm water overflow	
W6 (Outlet 14)	a) Storm water overflow	
W7 (Outlet 15)	a) Surface water	
W8 (Outlet 17)	a) Storm water overflow	
W9 (Outlet 21)	a) Surface water	
(W9a) (1)	b) Ground water	
	c) Cooling water	Little Don River
	d) Deaerator overflow	
	e) Boiler blowdown	
	f) Scale pit overflow	
	g) Mill water treatment plant (Clarifier)	
	h) Scarfer precipitator settling tank overflow	
	i) Condensate from oil storage tank heating	
	j) Wet arrestor overflow	
	k) Mill shears jacket cooling water	
	I) Mill shears tilt table water	
	m) Scarfer head cooling water	
	n) Compressor cooling water	
	o) Effluent from Test House scrubber	

Notes:

- 1. During the relocation of Outlet 21 (W9) the sources, emissions limits and monitoring shall apply to the total of the relocated discharge point W9 and the original discharge point (W9a).
- 6.3.2 Limits for the emissions to water for the parameter(s) and emission point(s) set out in Table 6.3.3 shall not be exceeded.
- 6.3.3 The Operator shall carry out monitoring of the parameters listed in Table 6.3.3, from the emission points and at least at the frequencies specified in that Table.

Table 6.3.3: Emission limits into water							
Parameter		Release Point					
	W3	W1, W2, W4, W5, W7	W6	W8	W9/W9a	Monitoring Frequency	
pH ^{(1) (3)}	6- 10	6-10	6- 10	6- 10	6-10		
Temperature (C) (1) (3)	27	-	-	-	27		
Suspended solids (mg/l) ^{(1)(2) (3)}	40 ⁽⁵⁾	ı	-	-	40		
Oil/grease (material soluble in 1,1,2-trichloro-trifluoroethane) (mg/l) (1) (3)	5	5	5	5	5		
Lead (mg/l) (1) (3)	0.2	-	-	-	0.2		
Nickel (mg/l) (1) (3)	0.2	-	-	-	0.2	Weekly	
Arsenic (mg/l) (1) (3)	0.01	-	-	-	0.01		
Cadmium (mg/l) (1) (3)	0.05	-	-	-	0.05		
Mercury (mg/l) ⁽¹⁾⁽³⁾	0.02	-			0.02		
Chromium (mg/l) (1) (3)	0.2	-	-	-	0.2		
Copper (mg/l) (1) (3)	0.5	-	-	-	0.5		
Zinc (mg/l) (1) (3)	0.5	-	-	-	0.5		
Iron Compounds (mg/l) (1) (3)	5	-	-	-	5		

Notes:

- 1. Any representative (flow proportional) 24 hour spot sample preserved for 7 days.
- 2. The solids shall be separated and dried at 105°C.
- 3. Limit shall be complied with if 95% of all weekly representative spot samples during a rolling half-yearly period does not exceed the limit value given in Table 6.3.3 and the peak spot sample value does not exceed 1.5 times the limit value.
- 4. An operational record shall be made of the daily flow from release point W3 and W9.
- 5. Limit applies for measured flows up to 200 m³/hour.
- 6.3.4 There shall be no emission into water from the Permitted Installation of any substance prescribed for water for which no limit is specified in Table 6.3.3 except in a concentration which is no greater than the background concentration.

6.4 Emissions to sewer

6.4.1 Emissions to sewer from the emission points specified in Table 6.4.1 shall only arise from the sources specified in that table.

Table 6.4.1 : Emission points into sewer							
Description	Source	Parameter	Limit (incl Unit)	Reference Period	Monitoring Frequency	Monitoring standard or method	
S1 (East bank)	Ultrasonic test tank overflow	None set					

6.5 Emissions of heat

6.5.1 No specific conditions in relation to heat are considered necessary.

6.6 Emissions of noise and vibration

6.6.1 No conditions in relation to noise and vibration are considered necessary.

7 Transfer to effluent treatment plant

7.1.1 Transfers to effluent treatment plant shall occur only from the points specified in Table 7.1.1 and transfers from those points shall arise only from the sources and shall be released only to the treatment plant specified in that Table.

Table 7.1.1 Transfer point(s) to effluent treatment plant(s)					
Transfer point description/identifier	Source	Effluent Treatment Plant			
E1	Surface Water				
E5	Compressor bleed-off				
E6	West Bank quench water				
E14	Compressor cooling water	Main Diant dia dang main n			
E15	Condensate – Main oil storage tank heating	Main Plant discharging to river via W3 (outlet			
E21	West Bank Scale Removal System	8)			
E22	Bronx Reeler				
E23	Spring Bank Ultrasonic Inspection Tanks				
E24	East Bank Ultrasonic inspection Tank				
E25	Mill scale pad – former melting shop				
E27	Mill scale pad – Eastern end of No2 melting shop				
E28	Discharge from cooling water systems in No.2 Melting Shop Building				

8. Off site conditions

8.1.1 There are no off-site conditions.

9 Improvement programme

9.1.1 The Operator shall complete the requirements specified in Table 9.1.1 by the date specified in that Table, and shall send written notification of the date of completion of each requirement to the Agency, at the Reporting Address, within 14 days of the completion of each such requirement.

	Improvement programme requirements	5.4
Reference	Requirement	Date
9.21	The operator shall conduct a noise survey to demonstrate by measurements at appropriate locations and using the methodology described in the variation documents - Tata Steel, Stocksbridge "Site 1": Warehouse Facility IPPC Noise Assessment Reference: 10389.01.v1 February 2012 of the Variation Application, EPR/UP3130FF/V004 and Schedule 5 submission no 4 received on 26/07/12 that the noise bund, acoustic fence and warehouse is performing as predicted. The Operator shall provide a report detailing noise survey results and where the results are not as predicted include a timetable for the implementation of any recommendations made as a result of the noise survey.	3 months from commissioning of noise bund & warehouse
9.22	The operator shall conduct an investigation involving whole cycle NOx emission concentration measurements and operational times for soaking pits 18 and 19 similar to that in supporting document JBBM01 submitted with application EPR/UP3130FF/V006. It should be of sufficient length and detail across several batches and each soaking pit to allow assessment of the variability of NOx emission concentration with main operational parameters. The operator shall provide a report of the investigation to the Environment Agency to allow assessment of whether a more targeted emission limit (for example: time averaged or a limited number of peak exceedances and/or separate limits for soaking pits 18 and 19) would be more appropriate for emission points A5 A and B.	31 December 2015
9.23	The operator shall conduct an investigation involving particulate emission measurements for emission point SA23 (Vacuum Induction Melting Furnace evacuation vent). It should be of sufficient length and detail across several batches to allow both assessment of the variability of emissions over a whole melt cycle and an estimation of the PM ₁₀ and PM _{2.5} fractions. The operator shall provide a report of the investigation to the Environment Agency to allow assessment of whether the particulate mass emissions from this point can be confirmed as having insignificant environmental impact.	31 December 2015

10 Interpretation

10.1.1 In this Permit, the following expressions shall have the following meanings:

"Authorised Officer"

means any person authorised by the Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, powers specified in Section 108(4) of that Act.

"Background concentration"

means the same as "background quantity" as defined in paragraph 11 to Part 2 to Schedule1 of the PPC Regulations.

"EP Regulations"

means The Environmental Permitting (England and Wales) Regulations SI 2010 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"Fugitive emission"

means an emission from any point other than those specified in the Tables in part 6 of this Permit.

"LAea"

means the A-weighted equivalent continuous equal energy level (dBA)

"Monitoring"

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

"Permitted Installation"

means the activities and the limits to those activities described in Table 1.1.1 of this Permit.

"PPC Regulations"

means the Pollution Prevention and Control Regulations 2000 (S.I. 2000 No. 1973) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit.

"Staff"

includes employees, directors or other officers of the Operator, and any other person under the Operator's direct or indirect control, including contractors.

"Substances prescribed for water"

means those substances mentioned in paragraph 13 of Part 2 of Schedule 1 to the PPC Regulations.

"Year"

means calendar year ending 31 December.

"quarter"

means a period of 3 successive calendar months commencing on 1 January.

- 10.1.2 Where a minimum limit is set for any emission parameter, references to exceeding the limit shall mean that the parameter shall not be less than that limit.
- 10.1.3 Unless otherwise stated, any references in this Permit to concentrations of substances in emissions into air means;

- a in relation to gases from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or
- b in relation to gases from non-combustion sources, the concentration at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for water vapour content.

11 Written agreement to changes

- 11.1.1 When the qualification "or as otherwise agreed in writing" is used in a condition of this Permit, the Operator shall seek such agreement in the following manner:
 - **a** the Operator shall give the Agency written notice of the details of the proposed change, indicating the relevant part(s) of this Permit; and
 - **b** such notice shall include an assessment of the possible effects of the proposed change (including waste production) on risks to the environment from the Permitted Installation.
- 11.1.2 Any change proposed according to condition 11.1.1 and agreed in writing by the Agency, shall not be implemented until the Operator has given the Agency prior written notice of the implementation date for the change. As from that date, the Operator shall operate the Permitted Installation in accordance with that change, and any relevant documentation referred to in this Permit shall be deemed to be amended.

This page outlines the information that the Operator must provide to satisfy conditions 5.1.1 and 5.1.2 of this Permit.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	EPR/UP3130FF
Name of operator	Tata Steel UK Limited
Location of Facility	Stocksbridge Works
	Stocksbridge
	Sheffield
	S36 2JA
Time and date of the detection	

(a) Notification requirements for any activity that gives rise to an incident or accident which				
significantly affects or may significantly affect the environment				
	To be notified Immediately			
Date and time of the event				
Reference or description of the				
location of the event				
Description of where any release				
into the environment took place				
Substances(s) potentially				
released				
Best estimate of the quantity or				
rate of release of substances				
Measures taken, or intended to				
be taken, to stop any emission				
Description of the failure or				
accident.				

(b) Notification requirements for the breach of a permit condition						
	To be notified immediately					
Emission point reference/ source						
Parameter(s)						
Limit						
Measured value and uncertainty						
Date and time of monitoring						

Measures taken, or intended to			
be taken, to stop the emission			
	<u> </u>		
Time periods for notification follo	wing detection	of a breach of a limit	
Parameter			Notification period
In the event of a breach of permit	condition which	n poses an immediate dan	ger to human health or
threatens to cause an immediate	significant adve	rse effect on the environn	nent:
Description of where the effect on			
the environment was detected			
Substances(s) detected			
Concentrations of substances			
detected			
Date of monitoring/sampling			
Part B - to be submitted	d as soon a	as practicable	
Any more accurate information on the			
notification under Part A.			
Measures taken, or intended to be t	aken, to		
prevent a recurrence of the incident			
Measures taken, or intended to be t	aken, to rectify,		
limit or prevent any pollution of the	environment		
which has been or may be caused be	by the emission		
The dates of any unauthorised emis	sions from the		
facility in the preceding 24 months.			
		T	
Name*			
Post			
Signature			
Date			

^{*} authorised to sign on behalf of Tata Steel UK Limited

Reporting of monitoring data

Parameters for which reports shall be made, in accordance with conditions 4.1.2 of this Permit, are listed below.

Table S2: Reporting of monitoring data						
Parameter	Emission point	Reporting period	Period begins			
Particulate	A1 – A5(B) incl,	Every 6 mths				
	SA5		<u> </u>			
Particulate	SA6	Every 12 mths				
Oxides of nitrogen	A1 – A26 incl	Every 3 mths				
Metals (1)	A1- A5(B) incl, SA5	Every 6 mths	01 October 2007			
Suspended solids	W3, W9	Every 3 mths				
Oil and grease	W1-W9 incl	Every 3 mths				
рН	W1-W9 incl	Every 3 mths				
Temperature (°C)	W3, W9	Every 3 mths				
Metals (1)	W3, W9	Every 3 mths				
Energy		Every 12 mths	01 January 2007			
Environmental monitoring		Every 12 mths	01 January 2007			
Waste		Every 12 mths	01 January 2007			

Notes:

- 1. Metals include elements and compounds of Pb, As, Cd, Hg, Cr, Ni, Cu, Mn, Zn and Fe expressed as the metal and shall be individually reported.
- 2. Reporting to approximate with calendar quarters.
- 3. Safe temporary access shall be erected for the purposes of monitoring the following emission points and when required in writing by the Environment Agency:
 - A1 No. 1 Continuous Furnace Stack
 - A2 No. 2 Continuous Furnace Stack
 - A3(A) No. 1 to No. 7 Soaking Pit Stack
 - A5(A) No. 18 Soaking Pit Stack
 - A5(B) No. 19 Soaking Pit Stack

Forms to be used

Unless otherwise agreed in writing between Agency and the Operator, the following Agency forms are to be used for reports submitted to Agency.

Table S3:Reporting Forms						
Media/parameter	Form Number	Date of Form				
Air	A1	June 2014				
Air	A2	01/12/07				
Water	W1	01/12/07				
Water	W2	01/12/07				
Energy	E1	01/12/07				
Waste Return	R1	01/12/07				

Operators written reports to be submitted by 31 January each year

- 1. EMS (KPI) reports required by conditions 4.1.4 & 4.1.6 .
- 2. Fugitive emission report required by condition 4.1.5.
- 3. Ambient monitoring report required by condition 4.1.7

RELEASE INTO AIR

Release summary for 3 months to/..../20....

Operator:	Tata Steel UK Limited	Permit Number:	EPR/UP3130FF
Location:	Stocksbridge, Sheffield		

Location:	Stocksbridge,	Sheffield

TABLE 4.A.1A (NON-CONTINUOUS MONITORING)							
Release Point	Date of Test	Max. hourly NOx (as NO₂) mg/m³	Accuracy	Max hourly gas used during test m ³	NOx factor for test g/m³ of gas	Running average NOx factor g/m³ of gas	
A1							
A2							
A3(A)							
A3(B)							
A4							
A5(A)							
A5(B)							
A6							
A7							
A8							
A9							
A10							
A11							
A12(A)							
A12(B)							
A13							
A14							
A15							
A16							
A17							
A20							
A21							
A24							
A25							
A26							

TABLE 4.A.1B				
Installation actual max. hourly gas consumption during reporting period m ³ /hr				
Installation maximum hourly gas consumption in accordance with condition 6.1.4 m ³ /hr				

Signed:	 Form A1
Date:	

RELEASE INTO AIR

Release summary for 6/12 months to/..../20....

Operator: Tata Steel UK Limited Permit Number: EPR/UP3130FF

Operator: Tata Steel UK Limited Location: Stocksbridge, Sheffield

PARAMETER	A1	A2	A3(A)	A4	A5(A)	A5(B)	SA5	SA6
Particulate (1) mg m ⁻³								
As mg m ⁻³								
Cd mg m ⁻³								
Cr mg m ⁻³								
Cu mg m ⁻³								
Hg mg m ⁻³								
Fe mg m ⁻³								
Pb mg m ⁻³								
Mn mg m ⁻³								
Ni mg m ⁻³				·				
Zn mg m ⁻³				·				

Date:	
Signed:	 Form A2

RELEASE INTO WATER

Release summary for quarter ended/..../20....

Operator: Tata Steel UK Limited Permit Number: EPR/UP3130FF

Location: Stocksbridge, Sheffield

	TABLE 4.W.1		
Parameter ⁽³⁾		W3	W9
рН	95% ile ⁽³⁾		
	Max (4)		
Temperature (C)	95% ile (3)		
	Max (4)		
Suspended solids (mg/l) (1)	95% ile (3) (5)		
	Max (4) (5)		
Oil/grease (material soluble in 1,1,2-trichloro-trifluoroethane) (mg/l) (2)	95% ile ⁽³⁾		
trichloro-trifluoroethane) (mg/l) (-/	Max (4)		
Lead (mg/l)	95% ile ⁽³⁾		
	Max (4)		
Nickel (mg/l)	95% ile (3)		
	Max (4)		
Arsenic (mg/l)	95% ile ⁽³⁾		
	Max (4)		
Cadmium (mg/l)	95% ile (3)		
	Max (4)		
Mercury (mg/l)	95% ile ⁽³⁾		
	Max (4)		
Chromium (mg/l)	95% ile ⁽³⁾		
	Max (4)		
Copper (mg/l)	95% ile (3)		
	Max (4)		
Zinc (mg/l)	95% ile ⁽³⁾		
	Max (4)		
Iron compounds (mg/l)	95% ile ⁽³⁾		
	Max (4)		

Notes:

- 1. The solids shall be separated and dried at 105°C.
- Determined by measuring the aliphatic CH₂ absorption in the infra-red at 2961 cm⁻¹, 2926 cm⁻¹ and 2853 cm⁻¹
- 3. 95% ile of all weekly results over proceeding rolling 6 months.
- 4. Maximum weekly result obtained over the 3 month reporting period.
- 5. A record of the hourly flows from W3 and W9 at the time samples are taken shall be maintained in the plant records.

Date:	Cianad.	Form W1
Date.	 Signed.	 LOUIL AA I

RELEASE INTO WATER

Release summary for quarter ended/..../20....

Operator: Tata Steel UK Limited Permit Number: EPR/UP3130FF Location: Stocksbridge, Sheffield

TABLE 4.W.2								
Parameter ⁽²⁾ Release Point								
	W1	W2	W4	W5	W6	W7	W8	
pH ⁽³⁾	95% ile ⁽³⁾							
	Maximum (4)							
Oil/grease (material soluble in 1,1,2-trichloro-trifluoroethane) (mg/l) (2) (3)	95% ile ⁽³⁾							
trichloro-trifluoroethane) (mg/l) (27 (37	Maximum (4)							

Notes:

- 1. The solids shall be separated and dried at 105°C.
- 2. Determined by measuring the aliphatic CH₂, absorption in the infra-red at 2961 cm⁻¹, 2926 cm⁻¹ and 2853 cm⁻¹.
- 3. 95% ile of weekly results over preceding rolling 6 months.
- 4. Maximum weekly result obtained over the 3 months reporting period

Date:	 Signed:	Form W2

ENERGY USE

Annual summary for 20....

Operator: Tata Steel UK Limited Permit Number: EPR/UP3130FF

Location: Stocksbridge, Sheffield

TABLE E1				
Energy Source	Annual Energy	CO ₂ released tonnes		
	Primary energy on-site MWh	Primary energy imported ⁽²⁾ MWh		
Electricity				
Gas				
Other (Specify)				

Notes:

- 1. Reported energy use shall cover 95% of all energy used by the Installation. An operational record of the energy use calculation shall be maintained.
- 2. Units of imported electricity should be multiplied by a factor of 2.6 to account for the energy lost in generation and transmission.

Date:	
Signed:	

Form E1

WASTE AND BY-PRODUCTS GENERATION

Annual summary for 20....

Tata Steel UK Limited Stocksbridge, Sheffield Operator: Permit Number: EPR/UP3130FF

Location:

TABLE 4.R.1				
Parameter (tonnes)	EWC Code	Tonnes sent for off- site disposal as controlled waste	Tonnes sent for off- site disposal as hazardous waste	Tonnes sent for off- site recovery or recycling
Ferrous Scrap Metal				
Non-ferrous scrap metal				
Filter dusts including grinding and shot-blasting dusts				
General waste				
Waste oils				
Waste grease				
Waste solvents				
Metallic scale/iron oxide				
Refractory waste				
Sludge from waste water treatment				
Aqueous waste				
Other wastes				

Date:	
Signed:	

Form R1

END OF PERMIT