

Notice of transfer in part with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Teesside Integrated Iron And
Steelworks

Redcar Bulk Terminal Ltd
Redcar
Cleveland
TS10 5QW

Transfer notice number
EPR/QP3338HU/T001

Permit number
EPR/QP3338HU

Teesside Integrated Iron And Steelworks

Permit number EPR/QP3338HU

Introductory note

This introductory note does not form a part of the permit

The following notice gives notice of the transfer in part of an environmental permit to a new operator Redcar Bulk Terminal Ltd (the transferee).

This is a transfer of part of the operations of the Teesside Integrated Iron And Steelworks installation, currently operated by Tata Steel UK Ltd to Redcar Bulk Terminal Ltd. The operations transferred are the wharf and stockyard at the Redcar Works. The primary purpose of these operations is to serve the integrated steel works. Redcar Bulk Terminal Ltd is a joint venture between Sahaviriya Steel Industries UK Ltd (SSI UK Ltd) and Tata Steel UK Ltd.

At the same time of this part transfer; a further transfer is being made to transfer the bulk of the integrated steel works (namely coke making, the sintering plant, blast furnace operation and Basic Oxygen Steelmaking (BOS) plant, from Tata Steel UK Ltd to SSI UK Ltd. The original permit is then being varied to take account of the two partial transfers. The permit to Harsco Metals Group who also operate at the Redcar Works is unaffected by these transfers and variation.

This partial transfer to which this notice refers includes: changes to the emission and monitoring points to air, land and water to reflect that there are no point emissions to air, land or water; a revised improvement programme specific to the wharf operations; management responsibilities for different activities between operators and an amended plan with colour coded boundaries and zones of all multi-operators at the installation.

At an integrated steel works there are several identifiable processes which are carried out sequentially across the installation in order to convert the raw iron ores and coal to semi - finished slabs for export off site and finished products such as sections for sale in the world market place. The Teesside Integrated Iron And Steelworks, referred to is a single installation operated by four separate operators each of which will hold separate permits, namely:

- SSI UK Ltd permit EPR/JP3638HM;
- Tata Steel UK Ltd permit EPR/BK4093IP;
- Redcar Bulk Terminal Ltd permit EPR/QP3338HU; and
- Harsco Metals Group Ltd permit EPR/PP3338MT.

The operator of most of the activities within the integrated iron and steelworks is SSI UK Ltd.

Brief description of the installation

For clarity a brief description of the activities performed by all the respective operators of the Teesside Integrated Iron and Steelworks is given below.

Teesside Integrated Iron and Steelworks is an integrated steelworks on the banks of the River Tees in the North East of England. The site is situated on the South bank of the river from South Bank to the mouth of the estuary at Redcar and comprises historically three main areas, Cleveland, Lackenby and Redcar Works.

Bulk raw materials arrive by large bulk carrier at the deep water port at Redcar and are discharged by unloader cranes to be stocked out in discrete stockpiles in the ore and coal stocking areas at Redcar Works. This operation is controlled by Redcar Bulk Terminal Ltd.

Lump ore is fed direct to the blast furnace and BOS plants. The finer material stockpiled are then blended together into a sinter plant feed along with reverts and other fine recyclable material. This blend is laid down in "beds" to allow good mixing of material. Sinter feed is then recovered from the beds by barrel reclaimers and a blend of sinter bed material, fluxes, coke breeze and limestone is

fed onto a travelling grate at the Sinter Plant where it is heated to a high temperature in the region of 1300 °C. Air is drawn through the bed of heated material and the flame front fuses the fine material into a clinker -"sinter". This sinter is cooled and screened prior to being transferred to the blast furnace stockhouse. The products of combustion pass through an electro static precipitator and are discharged through a 105m high stack. This operation is controlled by SSI UK Ltd.

Coal is also carefully blended to form a coal mix and layered in coal beds prior to being recovered by a barrel reclaimer and taken by conveyor belt or road to one of the two coke ovens on site (Redcar Coke Ovens and Southbank Coke Ovens). Here the coal is charged to air tight ovens where it is heated at a temperature of between 1200 -1300 °C for a period of around 18 hours to produce coke before being pushed out of the oven and quenched by water. After quenching the coke is transferred to the blast furnace stockhouse. Gas driven off in the ovens is cooled and cleaned and by-products removed from it prior to their sale or re-use. Clean gas is recycled within the site as fuel and excess gas may be vented through a flarestack and ignited. Cooling and cleansing water from the by-products plant is treated in either an on site biological effluent treatment plant, at Redcar Coke Ovens prior to its consented discharge into the River Tees, or in the case of South Bank Coke Ovens it is transferred to Northumbrian Water biological effluent treatment plant. This operation is controlled by SSI UK Ltd.

At the Blast Furnace stockhouse coke, iron ore and sinter, along with fluxes, are carefully weighed and batched to be charged to the blast furnace. The Blast Furnace operates on a continuous basis and the furnace is maintained at a full stockline level, by charging alternate layers of coke and ore. Air produced at a high pressure in the Power Station is passed through the furnace stoves where it is heated to temperatures in the range generally 1000 - 1200 °C. The air at high temperature and pressure is then injected together with heavy fuel oil into the furnace at "tuyere" level just above the hearth and flows upwards to the top of the furnace. This air reacts with carbon from the heavy fuel oil and the coke at the tuyeres to form carbon monoxide which reduces the iron ore to iron as it travels up the furnace. Further reduction of the iron ore is undertaken directly by the coke in the bosh and stack areas of the furnace. Gangue material in the ores and coke agglomerate together to form a slag material which is at high temperatures produced from the exothermic reduction reactions. The iron produced in the furnace is also molten and both iron and slag fall to the hearth of the furnace where they are periodically "tapped" through a taphole. This operation is controlled by SSI UK Ltd.

The blast furnace gas leaves the furnace top at a high pressure usually in excess of 2.0 bar pressure and is cooled and cleaned in the gas cleaning system. The gas undergoes a further pressure reduction in the ERT (Energy Reduction Turbine) which converts the pressure loss into electrical energy for sale or use within the Site. Clean gas is then recycled back through the blast furnace process by reheating the air prior to its injection at the tuyeres and by feeding the boilers at the Power Station. Excess gas can be vented through a triple leg flarestack. The iron and slag flowing from the taphole are separated in the iron runner with the slag being skimmed off the top of the iron into the slag runner to be further processed in the slag pit, pelletiser or granulator, as necessary. The iron flows underneath a skimmer arrangement to ensure slag free iron can then pass into torpedo ladles to allow transportation to the Steel plant. Excess iron may be granulated in the Iron Granulator or ponded in the iron ponds. Both these routes lead to high energy losses as they produce cold iron for use as scrap. This operation is controlled by SSI UK Ltd.

The liquid iron is transported 7 km by rail to the BOS plant in refractory lined torpedo ladles with a capacity of approx. 320 tonne. The ladles are lidded prior to leaving the Blast Furnace whilst travelling to the BOS plant and vice versa, primarily to reduce energy loss from the ladle but it also has a secondary effect of reducing the emissions from the ladle mouth. On arrival at the BOS plant the ladle is poured into a transfer ladle and desulphurised, if necessary, prior to transfer to the steelmaking vessel. The sulphur is transferred to a slag which is cooled and sent for further processing and the fume is collected in a bag filter prior to discharge to the atmosphere. This operation is controlled by SSI UK Ltd.

Desulphurised iron is then charged in typically 220 tonnes batches to one of three BOS vessels where scrap and fluxes are added to the melt and oxygen is used to refine the iron to steel. The oxygen is blown on to the surface of the steel at supersonic velocity and the process is controlled by a complex software system that automatically adjusts the lance height during the blow period. After sampling for quality the melt, now steel, may be re-blown for a final trim or tapped into a ladle for further processing. Fume from the process is cleaned in a gas cleaning plant and vented to atmosphere through flarestacks. Slurry from the gas cleaning plant goes for further treatment prior to sale, internal use or landfill. Slag from the vessel is demetallised by Harsco Metals Group Ltd on site and then either forwarded to a Slag Company for further treatment, used for

roadway/dockside/storage area maintenance on the site or disposed of at the internal landfill site. This operation is controlled by SSI UK Ltd.

Following the Primary Steelmaking process the steel can go through a number of Secondary Steelmaking processes before being converted into a solid form. To homogenise the steel chemistry and temperature the steel may be bottom stirred or top lance flushed at the flushing station. This area is covered by the dust extraction system. Following flushing the steel may be refined to customer requirements in the Ladle Metallurgy Facility (LMF) plant, Tank Degasser, Scandinavian Lance Injection and/or RH Degasser -all of which have fume collection facilities. This operation is controlled by SSI UK Ltd.

Following treatment to the customer requirements the steel is transported to the Continuous Casting plant (Concast) to form slabs. At Concast the steel is vertically teemed into reciprocating cooled copper moulds and drawn from the mould in a semi finished partially solid state, cooling whilst it is drawn horizontal and cut to length. The plant currently consists of two slab casters and provision for tundish changing and sequential casting of different steel grades allow long production sequences. Cooling water from the plant is recycled and any scale formed is usually recycled back to the sinter process. This operation is controlled by SSI UK Ltd.

The slabs may then further undergo surface treatment in a scarfing plant (operated by Harsco Metals Group Ltd) before passing on for sale to other Steelmaking sites, external sale or for use in the Beam Mill which is operated by Tata Steel UK Ltd. In the Beam Mill the slabs are rolled into sections by heating the slab in the reheat furnace and then passing it through a number of rolls to form it into a H section shape before this hot section is cut to length. The section is then allowed to cool and may then be sold in the market place. Prior to discharge from the Site the sections are stored on open 'made' ground.

Waste from the installation may be disposed of at the internal landfill site (not part of the integrated works) and in one area the dusts and slurries from the processes are refined prior to sale or being disposed of to a landfill site. The primary recycling streams, by products and wastes are identified and quantified in the permit application. The landfill site is not within the installation but is controlled by SSI UK Ltd. Tata Steel UK Ltd and other installation operators wastes are permitted to be landfilled on the site. All permitted operators carry out waste activities.

The main energy input into Teesside Site is in the form of coal which accounts for the majority of all delivered energy. This coal is converted to coke in two coke oven plants operated by SSI UK Ltd and the arising by product gas (Coke Oven Gas) is distributed throughout the site for use as a fuel. The coke is charged into the blast furnace where it acts as a reductant on the iron ore to produce iron. As a consequence of the ironmaking process vast quantities of low calorific value gas (Blast Furnace Gas) are produced. This gas is fired on the blast furnace stoves and also the power station. The above integration of energy producers and consumers enables the maximum use of the Sites arising gases and minimises the use of purchased premium fuels.

The partial transfer of a permit results in the granting of a new permit. Schedule 1 of the notice sets out the conditions that have not been carried across from the original permit as they are not relevant to the part transferred. Schedule 2 sets out conditions that have been amended from those in the original permit in consequence of the partial transfer. Schedule 3 contains additional permit conditions included in consequence of the partial transfer and Schedule 4 contains the new Permit.

Status Log

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

Status Log of the permit

Detail	Date	Response Date
Application EPR/BK0493IP/A001	Duly made 31/08/01	
Schedule 4 notice issued	29/11/01	30/01/02
Schedule 4 notice issued	22/03/02	24/03/02
Schedule 4 notice issued	24/05/02	29/08/02
Permit EPR/BK0493IP issued	19/08/04	
Variation EPR/BK0493IP/V002 (ZP3730BP) issued	27/10/04	
Variation EPR/BK0493IP/V003, (TP3939BV) Section 17(1) issued	05/11/04	
Variation EPR/BK0493IP/V004, UP3135SH Section 17(1) issued	30/11/04	
Variation EPR/BK0493IP/V005 (XP3231SG) issued	20/07/05	
Variation EPR/BK0493IP/V006, (UP3739XF) issued	18/12/07	
Variation EPR/BK0493IP/V007 (FP3634XK) issued	25/07/08	
Name change	27/09/10	
Application EPR/QP3338HU/T001 (partial transfer of permit EPR/ BK0493IP)	20/10/10	
Transfer determined EPR/QP3338HU	24/03/11	

Other Part A installation permits relating to this installation

Operator	Permit Number	Date of Issue
Tata Steel UK Limited	EPR/BK0493IP	24/03/11
Sahaviriya Steel Industries UK Limited	EPR/JP3638HM	24/03/11
Harsco Metals Group Limited	EPR/PP3338MT	14/12/06

End of Introductory Note

Transfer in part

Environmental Permitting (England and Wales) Regulations 2010

Transfer notice

Permit number

EPR/QP3338HU

Transfer notice number

EPR/QP3338HU/T001

Operator name

Redcar Bulk Terminal Limited

whose registered office is

Millennium Bridge House

2 Lambeth Hill

London

United Kingdom

EC4V 4AJ

Company registration number/Limited liability partnership number **07402297**

Regulated facility

Teesside Integrated Iron and Steelworks

Redcar

Cleveland

TS10 5QW

The Environment Agency in exercise of its powers under Regulation 21 and Part 1 of Schedule 5 of the Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No 675) transfers permit number EPR/BK0493IP in part to the extent set out in schedule 4 of this notice.

This notice shall take effect from 24 March 2011

Name	Date
A.J. Nixon	24 March 2011

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

The following conditions from Permit EPR/BK0493IP are not included as they are not relevant to the part transferred:

Table 2.2.1 in condition 2.2.1.2

2.2.1.3 and Table 2.2.2

2.2.1.4 and Table 2.2.3

2.2.1.5

2.2.1.5.1 to 2.2.1.5.5 inclusive

Table 2.2.4 in condition 2.2.2.3

Table 2.2.5 in condition 2.2.2.5

Table 2.2.7 in condition 2.2.2.7

2.2.2.12

2.2.2.13

Table 2.2.8 in condition 2.2.3.4

Table 2.2.9 in condition 2.2.3.5

Table 2.2.11 in condition 2.2.8.1

Both conditions 2.5.3

2.6.6 to 2.6.9 inclusive

Table 2.10.1 in condition 2.10.2

2.11.5

3.8 to 3.21 inclusive

5.1.8

5.1.9

Schedule 2 – conditions to be amended

The following conditions from Permit EPR/BK0493IP are amended as detailed, as a consequence of the application made by the operator.

Table 1.1.1 of condition 1.1.1 is amended to reflect the partial transfer of the Redcar Works, wharf and raw material storage and handling operations. This table shall read as follows:

Table 1.1.1		
Activity listed in Schedule 1 of the PPC Regulations / Associated Activity	Description of specified activity	Limits of specified activity
2.1 A(1) (d)	Iron ore storage and handling	From receipt of materials to their dispatch to process.
3.5 B (b) (iii)	Loading/unloading coal and coke	From receipt of materials to their dispatch to process.
3.5 B (b) (ii)	Unloading, transport, storage and treatment of raw materials	From receipt of materials to their dispatch to process.

Condition 1.2.1 within condition 1.2 shall be amended to:

- 1.2.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in light blue and shaded with purple on the Site Plan in Schedule 5 of the permit.

Table 1.4.1 of condition 1.4.1 is amended to reflect the partial transfer of the Redcar Work operations. This table shall read as follows:

Table 1.4.1: Improvement programme		
Reference	Requirement	Date
1.4.1	The Operator shall, within 48 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	19/10/11 Update report to be submitted every 36 months from thereafter.
1.4.2	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.	05/10/11 Report to be submitted every 24 months thereafter.
1.4.27	With regard to particulate emissions from the installation, the operator shall carry out an assessment of the effect of this emission on South Gare and Cotham Sands. The scope and methodology of the assessment is to be agreed with the Agency by 31 st December 2004 with a report being submitted by 31 st December 2005 and every 24 months thereafter.	23/05/11 Review report to be submitted every 24months thereafter.

Table 1.4.1: Improvement programme

Reference	Requirement	Date
1.4.36	The operator shall formulate an air quality management plan for the installation aimed at reducing the impact of pollutants emitted from the installation and ensuring it does not significantly contribute to breaches of the National Air Quality Strategy standards/objectives or EU Directive limits. Initially, the plan should be based on current emissions and impact assessment knowledge and developed further from the conclusions drawn from responses made to relevant improvement programme requirements contained within this Permit. The plan should take account of any Local Authority air quality management plans. The Operator shall review the air quality management plan annually and include actions to ensure the aim of the plan is delivered. The initial plan and annual reviews shall be submitted to the Environment Agency.	01/10/2011 and annual updates on the anniversary
1.4.38	The operator shall formulate an air quality management plan for the installation aimed at reducing the impact of PM10 particles emitted from the installation. Ensuring it does not significantly contribute to breaches of the proposed National Air Quality Strategy standards/objectives or EU directive limits for PM10 (future proposals are for the halving of current limits.)	01/10/2011 and annual updates on the anniversary

Conditions 2.2.1.2, 2.2.2.3, 2.2.2.4, 2.2.2.5, 2.2.2.7, 2.2.3.4, 2.2.3.5, 2.2.8.1, 2.9.2 and 2.10.1 to 2.10.3 inclusive shall be amended and shall read as follows:

- 2.2.1.2 There shall be no point source emissions to air.
- 2.2.2.3 There are no point source emissions to water.
- 2.2.2.4 No condition applies.
- 2.2.2.5 No condition applies.
- 2.2.2.7 There shall be no point source emissions to sewer.
- 2.2.3.4 There shall be no point source emissions into or onto land.
- 2.2.3.5 No condition applies.
- 2.2.8.1 No condition applies.
- 2.9.2 No condition applies.
- 2.10.1 No condition applies.
- 2.10.2 No condition applies.
- 2.10.3 No condition applies.

Table 2.12.1 of condition 2.12.1 is amended to reflect the partial transfer of the Redcar Work operations. This table shall read as follows:

Table 2.12.1: Multi-operator Installations		
Description	Parts	Date Received
Application	The response to question 2.12 given in Section 2.12 of the application	28/08/01
Partial Transfer Application (EPR/QP3338HU/T001)	The response to question 4.3 – Statement of Intent regarding shared services	20/10/10

In condition 6.1.1 the following definitions are amended and shall read as follows:

“Application” means the application for Permit EPR/BK0493IP or this permit EPR/QP3338HU, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

“Fugitive emission” means an emission to air or water (including sewer) from the Permitted Installation which is not controlled by an emission or background concentration limit.

“SLEMS” Refers to the Solids and Liquids Environmental Management System.

Schedule 1 of the permit is amended such that at the end of Table Part B “Redcar Bulk Terminal Limited” is inserted after the words “ authorised to sign on behalf of”*

Schedule 2 of the permit is amended such that table S2 is amended as follows;

Table S2: Reporting of monitoring data					
Parameter	Emission point	Reporting period		Period begins	
Potable Water usage		Every months	12	Date permit transfer	of
Non Potable water usage		Every months	12	Date permit transfer	of

Schedule 5 of the permit is amended the site plan is replaced with a new site plan.

Schedule 3 – additional conditions to be included as a consequence of the application

- 2.5.5 In the event of any potentially polluting leak or spillages occurring on site, documented control and remediation procedures shall be implemented immediately and recorded, and shall meet the standards specified in Table 2.5.2 below.

TABLE 2.5.2: Waste stored on site			
Description of Waste	Location of Storage	Manner of Storage	Storage Conditions
Liquid wastes including Waste Oil	Segregated and labelled locations clearly defined and identified in the Site Environmental Management System	Stored in liquid-retaining, covered containers of sufficient strength and structural integrity to ensure that they are unlikely to burst or leak in ordinary use.	All liquid storage containers to be clearly marked and must be situated within an impermeable secondary containment system that would contain at least 110% of the contents of the largest single container located therein.
Solid wastes which are likely to produce contaminated or polluting run-off i.e. non-inert wastes.	Segregated and labelled locations clearly defined and identified in the Site Environmental Management System	• Stored in sealed containers; or • Stored in covered shelters or roofed areas; or • Stored in bays	• Stored in areas with impermeable hard standing which shall be constructed and maintained so as to prevent fluids running off the hard standing and the transmission of fluids through the hard standing or joints.

- 2.5.6 Each skip, drum or other mobile container used to hold wastes which consist of or contain potentially polluting liquids, sludges or powders, shall be, while on the site:
- loaded and unloaded;
 - filled and emptied;
 - clearly and unambiguously labelled regarding its contents, unless the contents are clearly identifiable by visual inspection;
 - inspected and maintained according to documented and recorded maintenance schedules and procedures;
 - in the event of damage or deterioration to a container that is, or is likely to cause, a leak, that container shall be repaired or replaced immediately;

In accordance with the standards specified in Table 2.5.4 above.

In condition 6.1.1 – the following definition is added

“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.

Schedule 4

The new Permit granted

Conditions

1 General

1.1 Permitted Activities

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

Table 1.1.1		
Activity listed in Schedule 1 of the PPC Regulations / Associated Activity	Description of specified activity	Limits of specified activity
2.1 A(1) (d)	Iron ore storage and handling	From receipt of materials to their dispatch to process.
3.5 B (b) (iii)	Loading/unloading coal and coke	From receipt of materials to their dispatch to process.
3.5 B (b) (ii)	Unloading, transport, storage and treatment of raw materials	From receipt of materials to their dispatch to process.

- 1.1.2. Where waste on site is subjected to activities that are exempt from control under the Waste Management Licensing Regulations 1994 then the wastes controlled under condition 1.1.1, above, shall be clearly identified and kept separate from such exempt waste activities and a record shall be kept of where such exempt activities are conducted.

1.2 Site

- 1.2.1 The activities authorised under condition 1.1.1 shall not extend beyond the Site, being the land shown edged in light blue and shaded with purple on the Site Plan in Schedule 5 of this permit.

1.3 Overarching Management Condition

- 1.3.1 Without prejudice to the other conditions of this Permit, the Operator shall implement and maintain a management system, organisational structure and allocate resources that are sufficient to achieve compliance with the limits and conditions of this Permit.

1.4 Improvement Programme

- 1.4.1 The Operator shall complete the improvements specified in Table 1.4.1 by the date specified in that table, and shall send written notification of the date of completion of each requirement to the Agency within 14 days of the completion of each such requirement.

Table 1.4.1: Improvement programme

Reference	Requirement	Date
1.4.1	The Operator shall, within 48 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	19/10/11 Update report to be submitted every 36 months thereafter.
1.4.2	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.	05/10/11 Report to be submitted every 24 months thereafter.
1.4.27	With regard to particulate emissions from the installation, the operator shall carry out an assessment of the effect of this emission on South Gare and Cotham Sands. The scope and methodology of the assessment is to be agreed with the Agency by 31 st December 2004 with a report being submitted by 31 st December 2005 and every 24 months thereafter.	23/05/11 Review report every 24months thereafter.
1.4.36	The operator shall formulate an air quality management plan for the installation aimed at reducing the impact of pollutants emitted from the installation and ensuring it does not significantly contribute to breaches of the National Air Quality Strategy standards/objectives or EU Directive limits. Initially, the plan should be based on current emissions and impact assessment knowledge and developed further from the conclusions drawn from responses made to relevant improvement programme requirements contained within this Permit. The plan should take account of any Local Authority air quality management plans. The Operator shall review the air quality management plan annually and include actions to ensure the aim of the plan is delivered. The initial plan and annual reviews shall be submitted to the Environment Agency.	01/10/11 and annual updates on the anniversary
1.4.38	The operator shall formulate an air quality management plan for the installation aimed at reducing the impact of PM10 particles emitted from the installation. Ensuring it does not significantly contribute to breaches of the proposed National Air Quality Strategy standards/objectives or EU directive limits for PM10 (future proposals are for the halving of current limits.)	01/10/11 and annual updates on the anniversary

- 1.4.2 Where the operator fails to comply with any requirement by the date specified in Table 1.4.1 the operator shall send written notification of such failure to the Agency within 14 days of such date.

1.5 Minor Operational Changes

- 1.5.1 The Operator shall seek the Agency's written agreement to any minor operational changes under condition 2.1.1 of this Permit by sending to the Agency: written notice of the details of the proposed change including an assessment of its possible effects (including waste production) on risks to the environment from the Permitted Installation; any relevant supporting assessments and drawings; and the proposed implementation date.
- 1.5.2 Any such change shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation in accordance with that change, and relevant provisions in the Application shall be deemed to be amended.
- 1.5.3 When the qualification "unless otherwise agreed in writing" is used elsewhere in this Permit, the Operator shall seek such agreement by sending to the Agency written notice of the details of the proposed method(s) or techniques.
- 1.5.4 Any such method(s) or techniques shall not be implemented until agreed in writing by the Agency. As from the agreed implementation date, the Operator shall operate the Permitted Installation using that method or technique, and relevant provisions in the Application and the Site Protection and Monitoring Programme shall be deemed to be amended.

1.6 Pre-Operational Conditions

- 1.6.1 There are no pre-operational conditions.

1.7 Off-site Conditions

- 1.7.1 There are no off-site conditions

2 Operating Conditions

2.1 In-Process Controls

- 2.1.1 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 2.1.1, or as otherwise agreed in writing by the Agency in accordance with conditions 1.5.1 and 1.5.2 of this Permit.

Table 2.1.1: Operating techniques

Description	Parts	Date Received
Application	The response to questions 2.1, 2.2 and 2.3 given in section B2.1. B2.2 and B2.3 of the application	31 August 2001
Responses to 1 st Schedule 4 notice issued dated 29 November 2001	Response to all questions	30/01/02
Responses to 2 nd Schedule 4 notice issued dated 22 March 2002	Response to all questions	30/05/02
Responses to 3 rd Schedule 4 notice issued dated 24 May 2002	Response to all questions	30/09/02 and 25/10/02
Application for variation ZP3730BP		

- 2.1.2 The Permitted Installation shall, subject to the other conditions of this Permit, be operated using the techniques and in the manner described in the Site Protection and Monitoring Programme submitted under condition 4.1.7 of this Permit (as amended from time to time under condition 4.1.7), or as otherwise agreed in writing by the Agency.

2.2 Emissions

2.2.1 Emissions to Air, (including heat, but excluding Odour, Noise or Vibration) from Specified Points

- 2.2.1.1 This Part 2.2.1 of this Permit shall not apply to releases of odour, noise or vibration.
- 2.2.1.2 There shall be no point source emissions to air.

2.2.2 Emissions to water (other than groundwater), including heat, from specified points

- 2.2.2.1 This Part 2.2.2 of this Permit shall not apply to releases of odour, noise or vibration or to releases to groundwater.
- 2.2.2.2 Conditions 2.2.2.3 - 2.2.2.6 shall not apply to emissions to sewer.
- 2.2.2.3 There shall be no point source emissions to water.
- 2.2.2.4 No condition applies
- 2.2.2.5 No condition applies
- 2.2.2.5.1 No condition applies
- 2.2.2.5.2 The Operator shall notify the Agency in writing if any known introduction or material change in respect of operations on site, occurs that may increase or introduce in to the emissions to water any "dangerous substance" included in List I and List II, or any other substance considered by the Operator as having or likely to have a significant effect on the receiving waters.
- 2.2.2.5.3 As far as is reasonably practicable, the site and treatment plants shall be operated so as to prevent:-
- Any matter being present in the emissions to water, other than matter specifically covered by numerical conditions in this Permit, to such an extent as to cause the receiving waters, or any waters of which the receiving waters are a tributary, to be poisonous or injurious to fish in those waters, or to the spawning grounds, spawn or food of fish in those waters, or otherwise cause damage to the ecology of those waters; And the emission from having other adverse environmental impact.
- 2.2.2.5.4 There shall be no significant increase in the volume discharge to water [other than emissions to sewer] above that stated in the application, without prior permission of the Agency.

Emissions to sewer

- 2.2.2.7 There shall be no point source emissions to sewer.

2.2.3 Emissions to groundwater

- 2.2.3.1 No emission from the Permitted Installation shall give rise to the introduction into groundwater of any substance in List I (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).
- 2.2.3.2 No emission from within the Permitted Installation shall give rise to the introduction into groundwater of any substance in List II (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)) so as to cause pollution (as defined in the Groundwater Regulations 1998 (S.I. 1998 No. 2746)).

- 2.2.3.3 For substances other than those in List I or II (as defined in the Groundwater Regulations 1998 (SI 1998 No.2746)), the Operator shall use BAT to prevent or where that is not practicable to reduce emissions to groundwater from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, .
- 2.2.3.4 There shall be no point source emissions into or onto land.
- 2.2.3.5 No condition applies
- 2.2.3.6 There shall be no emission into groundwaters from the Permitted Installation of any substance prescribed for water for which no limit is specified except in a concentration which is no greater than the background concentration.

2.2.4 Fugitive emissions of substances to air

- 2.2.4.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to air from the Permitted Installation in particular from:
- storage areas
 - buildings
 - pipes, valves and other transfer systems
 - open surfaces
- provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.5 Fugitive emissions of substances to water and sewer

- 2.2.5.1 Subject to condition 2.2.5.2 below, the Operator shall use BAT so as to prevent or where that is not practicable to reduce fugitive emissions of substances to water (other than Groundwater) and sewer from the Permitted Installation in particular from:
- all structures under or over ground
 - surfacing
 - bunding
 - storage areas
- provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.
- 2.2.5.2 There shall be no release to water that would cause a breach of an EQS established by the UK Government to implement the Dangerous Substances Directive 76/464/EEC.

2.2.6 Odour

- 2.2.6.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce odorous emissions from the Permitted Installation, in particular by:
- limiting the use of odorous materials
 - restricting odorous activities
 - controlling the storage conditions of odorous materials
 - controlling processing parameters to minimise the generation of odour
 - optimising the performance of abatement systems
 - timely monitoring, inspection and maintenance

- employing, where appropriate, an approved odour management plan

provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.2.7 Emissions to Land

2.2.7.1 This Part 2.2.7 of this Permit shall not apply to emissions to groundwater.

2.2.7.2 No emission from the Permitted installation shall be made to land.

2.2.8 Equivalent parameters or technical measures

2.2.8.1 No condition applies.

2.3 Management

2.3.1 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.

Training

2.3.2 The Permitted Installation shall be supervised by staff who are suitably trained and fully conversant with the requirements of this Permit.

2.3.3 All staff shall be fully conversant with those aspects of the Permit conditions which are relevant to their duties and shall be provided with adequate professional technical development and training and written operating instructions to enable them to carry out their duties.

2.3.4 The Operator shall maintain a record of the skills and training requirements for all staff whose tasks in relation to the Permitted Installation may have an impact on the environment and shall keep records of all relevant training.

Maintenance

2.3.5 All plant and equipment used in operating the Permitted Installation, the failure of which could lead to an adverse impact on the environment, shall be maintained in good operating condition.

2.3.6 The Operator shall maintain a record of relevant plant and equipment covered by condition 2.3.5 and for such plant and equipment:

2.3.6.1 a written or electronic maintenance programme; and

2.3.6.2 records of its maintenance.

Incidents and Complaints

2.3.7 The Operator shall maintain and implement written procedures for:

2.3.7.1 taking prompt remedial action, investigating and reporting actual or potential non-compliance with operating procedures or emission limits and if such event occur;

2.3.7.2 investigating incidents, (including any malfunction, breakdown or failure of plant, equipment or techniques, down time, any short term and long term remedial measures and near misses) and prompt implementation of appropriate actions; and

2.3.7.3 ensuring that detailed records are made of all such actions and investigations.

2.3.8 The Operator shall record and investigate complaints concerning the Permitted Installation's effects or alleged effects on the environment. The record shall give the date and nature of complaint, time of complaint, name of complainant (if given), a summary of any investigation and the results of such investigation and any actions taken.

2.4 Efficient use of raw materials

2.4.1 The Operator shall -

2.4.1.1 maintain the raw materials table or description submitted in response to Section 2.2 of the Application and in particular consider on a periodic basis whether there are suitable alternative materials to reduce environmental impact;

2.4.1.2 carry out periodic waste minimisation audits and water use efficiency audits. If such an audit has not been carried out in the 2 years prior to the issue of this Permit, then the first such audit shall take place within 2 years of its issue. The methodology used and an action plan for increasing the efficiency of the use of raw materials or water shall be submitted to the Agency within 2 months of completion of each such audit and a review of the audit and a description of progress made against the action plan shall be submitted to the Agency at least every 4 years thereafter; and

2.4.1.3 ensure that incoming water use is directly measured and recorded.

2.5 Waste Storage and Handling

2.5.1 The Operator shall design, maintain and operate all facilities for the storage and handling of waste on the Permitted installation such that there are no releases to water or land during normal operation and that emissions to air and the risk of accidental release to water or land are minimised.

2.5.2 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of litter from the Permitted Installation provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.

2.5.3 Deleted

2.5.4 In the event of any potentially polluting leak or spillages occurring on site, documented control and remediation procedures shall be implemented immediately and recorded, and shall meet the standards specified in Table 2.5.4 below.

Table 2.5.4: Standards for prevention and control of leaks and spillages

Action	Specified standards
a) Loading and unloading skips, drums and other mobile containers	i. Lids/caps/bungs or other closures shall be in place during loading/unloading. ii. Loading/unloading shall be carried out in an area provided with engineered containment of the type required for that waste under condition 2.5.2, and of the standard of containment specified under condition 2.5.2
b) Filling and emptying drums and other mobile containers	i. Lids/caps/bungs or other closures shall be in place at the end of filling. ii. Containers shall not be filled beyond their operational capacity. iii. Loading/unloading shall be carried out in an area provided with engineered containment of the type required for that waste under condition 2.5.2 and of the standard of containment specified under condition 2.5.2. iv. Measurement of level/void space shall be by physical dipping prior to loading.
c) Inspection, maintenance and repair of drums and other mobile containers	i. Procedures shall be in place to regularly inspect containers for leaks. ii. Containers found to be leaking either shall be immediately transferred to a larger over-container or shall have their contents immediately transferred to an alternative container.
d) Control and remediation of leaks and spillages	i. Minor spillages shall be cleaned up immediately, using sand or proprietary absorbent to clean up liquids. ii. Major spillages, which are causing or are likely to cause polluting emissions to the environment. • Immediate action shall be taken to contain the spillage and prevent liquid from entering site drains, water courses and un surfaced ground; • The spillage shall be cleared immediately and placed in alternative sealed containers; • The Agency shall be informed without delay.

2.5.5 Waste materials specified in Table 2.5.2 shall only be stored on the site in the location and manner specified in that Table, subject to Improvement Condition 1.4.18.

TABLE 2.5.2: Waste stored on site

Description of Waste	Location of Storage	Manner of Storage	Storage Conditions
Liquid wastes including Waste Oil	Segregated and labelled locations clearly defined and identified in the Site Environmental Management System	Stored in liquid-retaining, covered containers of sufficient strength and structural integrity to ensure that they are unlikely to burst or leak in ordinary use.	All liquid storage containers to be clearly marked and must be situated within an impermeable secondary containment system that would contain at least 110% of the contents of the largest single container located therein.
Solid wastes which are likely to produce contaminated or polluting run-off i.e. non-inert wastes.	Segregated and labelled locations clearly defined and identified in the Site Environmental Management System	• Stored in sealed containers; or • Stored in covered shelters or roofed areas; or • Stored in bays	• Stored in areas with impermeable hard standing which shall be constructed and maintained so as to prevent fluids running off the hard standing and the transmission of fluids through the hard standing or joints.

2.5.6 Each skip, drum or other mobile container used to hold wastes which consist of or contain potentially polluting liquids, sludges or powders, shall be, while on the site:

- a loaded and unloaded;
- b filled and emptied;
- c clearly and unambiguously labelled regarding its contents, unless the contents are clearly identifiable by visual inspection;
- d inspected and maintained according to documented and recorded maintenance schedules and procedures;
- e in the event of damage or deterioration to a container that is, or is likely to cause, a leak, that container shall be repaired or replaced immediately;

In accordance with the standards specified in Table 2.5.4 above.

2.6 Waste recovery or disposal

2.6.1 Waste produced at the Permitted Installation shall be:

2.6.1.1 recovered to no lesser extent than described in the Application; and

2.6.1.2 where not recovered, disposed of while avoiding or reducing any impacts on the environment provided always that this is not done in any way that would have a greater effect on the environment than that described in the Application.

2.6.2 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin, destination (including whether this is a recovery or disposal operation) and where relevant removal date of any waste that is produced at the Permitted Installation.

2.6.3 The Operator shall maintain the waste recovery or disposal table or description submitted in response to Section B2.6 of the Permit Application (EPR/BK0493IP) and in particular review the available options for waste recovery and disposal for the purposes of complying with condition 2.6.1 above.

2.6.4 The Operator shall maintain and implement a system which ensures that a record is made of the quantity, composition, origin and delivery date of any waste that is received for disposal or recovery at the Permitted Installation.

2.6.5 During storage and collection, the Operator shall not mix waste oils with PCBs within the meaning of Directive 96/59/EC.

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	The response to question 2.7 given in section B2.7 of the application, EPR/BK0493IP.	31/08/01

2.7.2 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 agreement) together with target setting and monitoring details.

2.7.3 The Operator shall notify the Environment Agency in the case of the permitted installation leaving a Climate Change agreement or a trading agreement.

2.7.4 Following a notification under condition 2.7.3 the operator shall forward without delay to the Agency an Energy Efficiency Plan and respective targets collated in the agreement.

2.8 Accident prevention and control

2.8.1 The Operator shall maintain and implement when necessary the accident management plan submitted or described in response to Section B2.8 of the Application. The plan shall be reviewed at least every 2 years or as soon as practicable after an accident, whichever is the earlier, and the Agency notified of the results of the review within 2 months of its completion.

2.9 Noise and Vibration

- 2.9.1 The Operator shall use BAT so as to prevent or where that is not practicable to reduce emissions of noise and vibration from the Permitted Installation, in particular by:
- equipment maintenance, e.g. of fans, pumps, motors, conveyors and mobile plant;
 - use and maintenance of appropriate attenuation, e.g. silencers, barriers, enclosures;
 - timing and location of noisy activities and vehicle movements;
 - periodic checking of noise emissions, either qualitatively or quantitatively; and
 - maintenance of building fabric,
- provided always that the techniques used by the Operator shall be no less effective than those described in the Application, where relevant.
- 2.9.2 No condition applies.
- 2.9.3 The operator shall maintain a noise and vibration management plan with the objective of reducing to a minimum noise and vibration emissions so as to avoid harm or annoyance to people in the community. The plan shall include an inspection and corrective maintenance regime for the noise abatement measure adopted in the installation. The plan shall include a procedure for recording, investigating and resolving noise complaints. The plan shall be in writing and be available for inspection on-site by officers of the Agency.

2.10 On-site Monitoring

- 2.10.1 No condition applies.
- 2.10.2 No condition applies.
- 2.10.3 No condition applies.
- 2.10.4 No condition applies.
- 2.10.5 The Operator shall notify the Agency at least 14 days in advance of undertaking monitoring and/ or spot sampling, where such notification has been requested in writing by the Agency.
- 2.10.5 The Operator shall maintain records of all monitoring taken or carried out (this includes records of the taking and analysis of samples instrument measurements (periodic and continual), calibrations, examinations, tests and surveys) and any assessment or evaluation made on the basis of such data.
- 2.10.6 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme in condition 2.10.1 of this Permit and the environmental or other monitoring specified in condition 2.10.2 shall have either MCERTS certification or MCERTS accreditation (as appropriate) unless otherwise agreed in writing.
- 2.10.8 There shall be provided:
- 2.10.8.1 safe and permanent means of access to enable sampling/monitoring to be carried out in relation to the emission points specified in Schedule 2 to this Permit, unless otherwise specified in that Schedule; and
- 2.10.8.2 safe means of access to other sampling/monitoring points when required by the Agency.
- 2.10.9 The Operator shall carry out the on-going monitoring identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, unless otherwise agreed in writing by the Agency.

2.10.10 The Operator shall, within 6 months of the issue of this Permit, in accordance with and using the format given in the Land Protection Guidance:

2.10.6.1 collect the site reference data identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, and

2.10.6.2 report that site reference data to the Agency,

- unless otherwise agreed in writing by the Agency.

2.10.7 The installed continuous smoke obscuration monitors shall be calibrated to manufacturers instructions for each instrument.

2.11 Closure and Decommissioning

2.11.1 The Operator shall maintain and operate the Permitted Installation so as to prevent or minimise any pollution risk, including the generation of waste, on closure and decommissioning in particular by:-

2.11.1.1 attention to the design of new plant or equipment;

2.11.1.2 the maintenance of a record of any events which have, or might have, impacted on the condition of the site along with any further investigation or remediation work carried out; and

2.11.1.3 the maintenance of a site closure plan to demonstrate that the installation can be decommissioned avoiding any pollution risk and returning the site of operation to a satisfactory state.

2.11.2 Notwithstanding condition 2.11.1 of this Permit, the Operator shall carry out a full review of the Site Closure Plan at least every 4 years.

2.11.3 The site closure plan shall be implemented on final cessation or decommissioning of the Permitted activities or part thereof.

2.11.4 The Operator shall give at least 30 days written notice to the Agency before implementing the site closure plan.

2.12 Multiple Operator installations

2.12.1 The following conditions apply as a result of interactions between the Permits covering this installation :-

The Operator shall, subject to the conditions of this Permit, use the techniques and measures described in the documentation specified in Table 2.12.1, or as otherwise agreed in writing by the Agency.

Table 2.12.1: Multi-operator Installations		
Parts	Date Received	
Application	The response to question 2.12 given in Section 2.12 of the application	28/08/01
Partial Transfer Application (EPR/QP3338HU/T001)	The response to question 4.3 – Statement of Intent regarding shared services	20/10/10

2.13 Transfer to effluent treatment plant

2.13.1 No transfers to effluent treatment plant are controlled under this part of this Permit.

3. Records

3.1 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 and any assessment or evaluation made on the basis of such data;

3.2 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")

3.3 A copy of any Specified or Other Records shall be supplied to the Agency on demand and without charge

3.4 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

3.5 Specified Records and Other Records:

3.5.1 shall be retained for a minimum period of 4 years from the date when the records were made at the permitted installation.

3.5.2 where they concern the condition of the site of the Installation or are related to the implementation of the Site Protection and Monitoring Programme, shall be kept at the Permitted Installation, or other location agreed by the Agency in writing, until all parts of the Permit have been surrendered.

- 3.6 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.
- 3.7 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 written and or oral notifications required by this Permit and notifications required by Regulation 16 of the PPC Regulations shall be made or sent to the Agency using the contact details notified in writing to the Operator by the Agency.
- 4.1.2 The Operator shall, unless otherwise agreed in writing, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:-
 - 4.1.2.1 in respect of the parameters and emission points specified in Table S2 to Schedule 2;
 - 4.1.2.2 for the reporting periods specified in Table S2 to Schedule 2 and using the forms specified in Table S3 to Schedule 3;
 - 4.1.2.3 giving the information from such results and assessments as may be required by the forms specified in those Tables; and
 - 4.1.2.4 to the Agency within 28 days of the end of the reporting period.
- 4.1.3 The Operator shall submit to the Agency a report on the performance of the Permitted Installation over the previous year, by 31 January each year, providing the information listed in Tables S4.1 and S4.2 of Schedule 4, assessed at any frequency specified therein, and using the form specified in Table S3 to Schedule 3.
- 4.1.4 The Operator shall review fugitive emissions, having regard to the application of Best Available Techniques, on an annual basis, or such other period as shall be agreed in writing by the Agency, and a summary report on this review shall be sent to the Agency detailing such releases and the measures taken to reduce them within 3 months of the end of such period.
- 4.1.5 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 year's progress against such targets.
- 4.1.6 The Operator shall, within 6 months of receipt of written notice from the Agency, submit to the Agency a report assessing whether all appropriate preventive measures continue to be taken against pollution, in particular through the application of the best available techniques, at the installation. The report shall consider any relevant published technical guidance current at the time of the notice which is either supplied with or referred to in the notice, and shall assess the costs and benefits of applying techniques described in that guidance, or otherwise identified by the Operator, that may provide environmental improvement.
- 4.1.7 The Operator shall, within two months of the date of this permit, submit a detailed Site Protection and Monitoring Programme, in accordance with and using the appropriate template format given in the Land Protection Guidance. The Operator shall implement and maintain the Site Protection and Monitoring Programme (SPMP) submitted under condition 4.1.7, and shall carry out regular reviews of it at a minimum frequency of every 2 years. The results of such reviews and any changes made to the SPMP shall be reported to the Agency within 1 month of the review or change.
- 4.1.8 No condition applies.

5. Notifications

5.1.1 The Operator shall notify the Agency **without delay** of:-

- 5.1.1.1 the detection of an emission of any substance which exceeds any limit or criterion in this Permit specified in relation to the substance;
- 5.1.1.2 the detection of any fugitive emission which has caused, is causing or may cause significant pollution;
- 5.1.1.3 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; and
- 5.1.1.4 any accident which has caused, is causing or has the potential to cause significant pollution.

5.1.2 The Operator shall submit written confirmation to the Agency of any notification under condition 5.1.1, by sending:-

- 5.1.2.1 the information listed in Part A of Schedule 1 to this Permit within 24 hours of such notification; and
- 5.1.2.2 the more detailed information listed in Part B of that Schedule as soon as practicable thereafter;

and such information shall be in accordance with that Schedule.

5.1.3 The Operator shall give written notification as soon as practicable prior to any of the following:-

- 5.1.3.1 permanent cessation of the operation of part or all of the Permitted Installation;
- 5.1.3.2 cessation of operation of part or all of the Permitted Installation for a period likely to exceed 1 year; and
- 5.1.3.3 resumption of the operation of part or all of the Permitted Installation after a cessation notified under condition 5.1.3.2.

5.1.4 The Operator shall notify the Agency, as soon as reasonably practicable, of any information concerning the state of the Site which adds to that provided to the Agency as part of the Application or to that in the Site Protection and Monitoring Programme submitted under condition 4.1.7 of this Permit.

5.1.5 The Operator shall notify the following matters to the Agency in writing within 14 days of their occurrence:-

5.1.5.1 where the Operator is a registered company:-

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

5.1.5.2 where the Operator is a corporate body other than a registered company:

- any change in the Operator's name or address;
- any steps taken with a view to the dissolution of the Operator.

- 5.1.5.3 In any other case: -
- the death of any of the named Operators (where the Operator consists of more than one named individual);
 - any change in the Operator's name(s) or address(es);
 - any steps taken with a view to the Operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case them being in a partnership, dissolving the partnership;
- 5.1.6 Where the Operator has entered into a Climate Change Agreement with the Government, the Operator shall notify the Agency within one month of:-
- 5.1.6.1 a decision by the Secretary of State not to re-certify that Agreement.
- 5.1.6.2 a decision by either the Operator or the Secretary of State to terminate that agreement.
- 5.1.6.3 any subsequent decision by the Secretary of State to re-certify such an Agreement.
- 5.1.7 Where the Operator has entered into a Direct Participant Agreement in the Emissions Trading Scheme which covers emissions relating to the energy consumption of the activities, the Operator shall notify the Agency within one month of:-
- 5.1.7.1 a decision by the Operator to withdraw from or the Secretary of State to terminate that agreement.
- 5.1.7.2 a failure to comply with an annual target under that Agreement at the end of the trading compliance period.

6. Interpretation

6.1.1 In this Permit, the following expressions shall have the following meanings:-

"Application" means the application for Permit EPR/BK0493IP or this permit EPR/QP3338HU, together with any response to a notice served under Schedule 5 to the EP Regulations and any operational change agreed under the conditions of the Permit.

"Background concentration" means such concentration of that substance as is present in:

- water supplied to the site; or
- where more than 50% of the water used at the site is directly abstracted from ground or surface water on site, the abstracted water; or
- where the Permitted Installation uses no significant amount of supplied or abstracted water, the precipitation on to the site.

"BAT" means best available techniques means the most effective and advanced stage of development of activities and their methods of operation which indicates the practical suitability of particular techniques to prevent and where that is not practicable to reduce emissions and the impact on the environment as a whole. For these 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" and "techniques" "includes both the technology used and the way in which the installation is designed, built, maintained, operated and decommissioned." . In addition, Schedule 2 of the PPC Regulations has effect in relation to the determination of BAT.

"BFG" means Blast Furnace Gas.

"BOS" means Basic Oxygen Steelmaking

"Carbonising time" means the time between coal being charged into an oven and the time when coke is then discharged from the same oven;

"CEMs" means Continuous Emission Monitors

"COG" means coke oven gas

"Controlled waters" has the same meaning as in Part III of the Water Resources Act 1991.

"Day" means any period of 24 consecutive hours commencing at 06:00hrs;

"Dioxins" means the family of compounds comprising polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs). Reporting of dioxins are expressed in terms of international toxic equivalents (I-TEQ) referenced to 2,3,7,8-TCDD.

"Dioxins in the integrated iron and steelmaking process" Refers to the publication dioxins in the integrated iron and steelmaking process by R Fisher and DR Anderson, Corus R, D & T, Environment Department, Swindon Technology Centre, Rotherham.

"Directive 96/59/EC" is a Council Directive of 16 September 1996 on the disposal of Polychlorinated Biphenyls and Polychlorinated Terphenyls (PCB/PCT).

"DLCF" means Door leakage Control factor which is a relative measure of the visible fugitive releases from around the seal on the coke oven doors and is used to assess fugitive releases from the coke oven doors. This assessment technique is described in the Agreed Uniform Technique, British Carbonisation Research Association (BCRA) Special Publication No.19 April 1977;

"EPAQS" means Expert Panel on Air Quality Standards.

"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 to air or water (including sewer) from the Permitted Installation which is not controlled by an emission or background concentration limit.

"GJ" means gigajoule

"Groundwater" means all water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

"Guidance Note S2 1.06" means the Chief Inspectors Guidance Note S2 1.06 Carbonisation Processes: coke Manufacture London: HMSO September 1995;

"Insignificance" The Technical Guidance Note H1, "Environmental Assessment and Appraisal of BAT" contains a definition of insignificance although other definitions may be acceptable to the Environment Agency.

"Land Protection Guidance" means the version of the Agency guidance note "H7 - *Guidance on the Protection of Land under the PPC Regime: Application Site Report and Site Protection and Monitoring Programme*", including its appended templates for data reporting, which is current at the time of issue of the Permit.

" $L_{Aeq,T}$ " means the equivalent continuous A-weighted sound pressure level in dB determined over time period, T.

" $L_{A90,T}$ " means the A-weighted sound pressure level in dB exceeded for 90% of the time period, T.

" L_{AFmax} " means the maximum A weighted sound level measurement in dB measured with a fast time weighting.

"LCP" has the same meaning as is given to "combustion plant" in the Directive.

"LCPD" means Large Combustion Plant Directive [Directive 2001/80/EC].

"Month" means a Redcar Bulk Terminal integrated iron and steelworks monthly reporting period

"MCERTS" means the Environment Agency's Monitoring Certification Scheme.

"MCR" means maximum continuous rating.

"MEF" means the Mass Emission Factor that is used to assess releases from charging coal into coke ovens and is a relative measure of the fugitive releases from this operation. This assessment technique is described in the Chief Inspectors Guidance Note S2 1.06 Carbonisation Processes: Coke Manufacture London: HMSO September 1995;

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

"NAQ" means the National Air Quality Regulations 1997, SI 3043 (as amended).

"NAQS" means the National Air Quality Strategy.

"NERP Register" means the register maintained by the Environment Agency in accordance with regulation 6(1) of the Large Combustion Plants (National Emission Reduction Plan) Regulations 2007.

"NO₂" means all oxides of, excluding dinitrogen oxide, expressed as NO₂

"NO_x" or "Oxides of Nitrogen" means nitric oxide (NO) and nitrogen dioxide (NO₂) (expressed as nitrogen dioxide).

"PAH" refers to the use of benzo[a]pyrene {B[a]P} which acts as a

representative marker substance for this wide range of polycyclic aromatic hydrocarbons;

"PAH's" means Anthracene, Fluorene, Napthalene, Phenanthrene, Benzo[ghi]perylene, Acenaphthylene, Acenaphthene, Fluoranthene, Pyrene, Chrysene, Benz[a]anthracene, Benzo[b]fluoranthene, Benzo[k]fluoranthene, Benzo[a]pyrene, Dibenz[ah]anthracene, Indeno [1,2,3-cd] pyrene in any combination or singly, expressed as Benzo[a]pyrene.

"PEF" means the Pushing Emission Factor that is used to assess releases to air from emptying (pushing) a coke oven and is a relative measure of the visible fugitive releases that may occur while coke is being pushed out of an oven into the coke car and taken to be quenched. This assessment technique is described in the Chief Inspectors Guidance Note S2 1.06 Carbonisation Processes: Coke Manufacture London: HMSO September 1995.

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

"PM₁₀S" means particles with a mean equivalent diameter of 10 microns or less.

"Potential dust source" shall mean a source within the Authorised Process that may cause the release to air of particulate matter which may subsequently be deposited, either directly or indirectly, on land outside the process boundary.

"PPC Regulations" means the Pollution, Prevention and Control (England and Wales) Regulations SI 2000 No.1973 (as amended) and words and expressions defined in the PPC Regulations shall have the same meanings when used in this Permit save to the extent they are specifically defined in this Permit.

"Prescribed substance" means any substance prescribed in Schedule 5 to the Environmental Protection (Prescribed Processes and Substances) regulations (SI 1991/472).

"Public sewer" has the same meaning as in the Water Industry Act 1991

"Quarter" means a period of three consecutive months (Quarter 1 means 1st January to 31st March, Quarter 2 means 1st April to 30th June, Quarter 3 means 1st July to 30th September, and Quarter 4 means 1st October to 31st December).

"Relevant environmental standards" includes NAQ standards or objectives, existing and proposed EU Air Quality Limit Values and EPAQS proposals or EPAQS published standards.

"Relevant wastes/release" means all wastes, other than releases into the air, controlled waters, any on-site effluent treatment system or any public sewer, arising from the Authorised Process.

"Reporting Address" means the address for reporting purposes from time to time notified in writing to the Operator by the Environment Agency.

"Ringlemann Shade Numbers" Ringlemann Shade numbers for visible smoke refer to an assessment made with either the Ringlemann Chart or miniature smoke chart, in accordance with BS 2742: 1969, as amended.

"Sewer" means sewer within the meaning of section 219(1) of the Water Industry Act 1991.

"Significant water use activity" means any activity carried out at a specific location as part of the Authorised Process that in any 12-month period uses more than 1000m³ of water.

"Significant source" shall mean a potential dust source where the direct or indirect deposition of particulate matter from that source causes harm as defined in section 1(4) of the 1990 Act.

"SLEMS" Refers to the Solids and Liquids Environmental Management System.

"SO₂" means sulphur dioxide.

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

“Sticker oven” means an oven that cannot be discharged with the ram beam without significant prior manual treatment of the coke batch.

“Substance prescribed for water” means a substance prescribed by regulation 6(2) of the Environmental Protection (Prescribed Processes and Substances) Regulations 1991 (S.I. 1991/472) and set out in Schedule 5 to those regulations.

“Substitute Fuel Oil” means Recovered fuel oil or a waste oil. The Substitute Fuel Oil shall meet the following minimum specification: a maximum of 1% Sulphur, max 10ppm PCB, max 0.3% Chlorine and a specific gravity in the range 0.885 to 0.95.

“TLCF” means the Top Leakage Control factor which is a relative measure of the visible fugitive releases from all potential release points on top of the coke oven battery and is used to assess fugitive releases from the coke oven battery charging lids. This assessment technique is described in the Agreed Uniform Technique, British Carbonisation Research association (BCRA) Special Publication No. 19 April 1977.

“VOCs” mean any volatile organic compound capable of being released to air as a gaseous release.

“waste oil” means any mineral-based lubrication or industrial oil that has become unfit for the use for which it was originally intended.

“week” means any period of 7 consecutive days commencing at 06.00 hours on Sunday morning.

“year” means calendar year.

The following definitions are for use with continuous measurement systems such as CEMs:

“Valid hourly average” means the measured hourly average value. To allow some discretion for zero and span gas checking, or cleaning (by flushing), an hourly average period will count as valid as long as data has been accumulated for at least two thirds of the period (40 minutes). Such discretionary periods are not to exceed more than 5 in any one 24-hour period unless agreed in writing. Where plant may be operating for less than the 24-hour period such discretionary periods not to exceed more than one quarter of the overall valid hourly average periods unless agreed in writing.

“Validated hourly average” means the valid hourly average after having subtracted the relevant 95% confidence interval specified in Annex VIII of the LCPD. (see condition 2.2.1.5.1)

“Validated daily average” means the daily average derived from the validated hourly averages in a defined 24 –hour period.

“Invalid hourly average” means an hourly average period invalidated due to malfunction of or maintenance work being carried out on the continuous measurement system.

“Invalidated daily average” means any day in which more than three hourly averages are invalid (due to malfunction of or maintenance work being carried out on the continuous measurement system).

6.1.2 Where a minimum limit is set for any emission parameter, for example pH, reference to exceeding the limit shall mean that the parameter shall not be less than that limit.

6.1.3 Unless otherwise stated, any references in this Permit to concentrations of substances in emissions into air means:-

- 6.1.3.1 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
- 6.1.3.2 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
- 6.1.4 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 wording of the document(s) with the most recent date shall prevail to the extent of such conflict.

Schedule 1 - Notification of abnormal emissions

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	
Name of Operator	
Location of Installation	
Location of the emission	
Time and date of the emission	

Substance(s) emitted	Media	Best estimate of the quantity or the rate of emission	Time during which the emission took place

Measures taken, or intended to be taken, to stop the emission	
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Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment or harm which has been or may be caused by the emission	
The dates of any unauthorised emissions from the installation in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of Redcar Bulk Terminal Ltd

Schedule 2 - Reporting of monitoring data

Parameters for which reports shall be made, in accordance with conditions 4.1.2 and 4.1.3 of this Permit, are listed below.

Table S2: Reporting of monitoring data

Parameter	Emission point	Reporting period	Period begins	Form Number
Potable Water usage		Every 12 months	01/01/04	
Non Potable water usage		Every 12 months	01/01/04	

Schedule 3 - Forms to be used

Table S3: Reporting Forms		
Media / parameter	Form Number	Date of Form
Air	FA1, FA2, FA3, FA4, FA5, FA6, FA7, FA8, FA9, FA10, FA11	01/08/04
Water	FW1, FW2, FW3, FW4	01/08/04

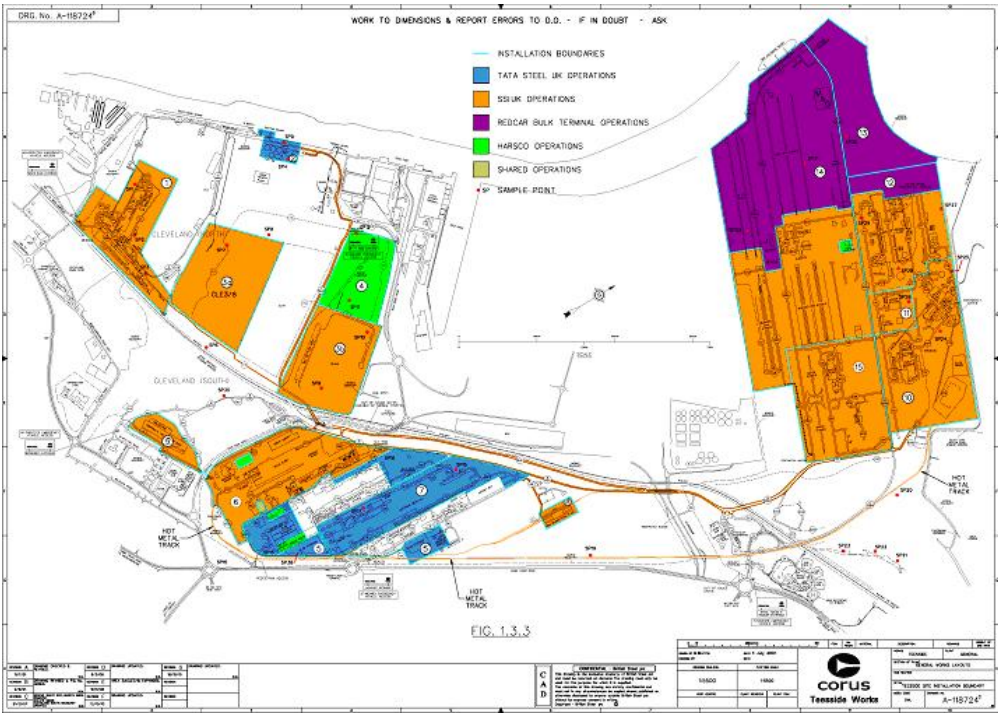
Schedule 4 - Reporting of performance data

Data required to be recorded and reported by Condition 4.1.3. The data should be assessed at the frequency given and reported annually to the Agency.

Table S4.1: Annual Production/Treatment	

Table S4.2: Performance parameters			
Parameter		Frequency of assessment	Performance indicator
<i>Potable water use</i>		<i>Quarterly</i>	<i>m³/t</i>
<i>Non potable water use</i>		<i>Quarterly</i>	<i>m³/t</i>

Schedule 5 – Site Plan



End of Permit