



Permit with introductory note

Pollution Prevention and Control (England & Wales) Regulations 2000

SPARTAN UK Ltd
Ropery Road
Teams
Gateshead
Tyne and Wear
NE8 2RD

Permit number

WP3339PY

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Introductory note

This introductory note does not form a part of the Permit

The following Permit is issued under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations 2000 (S.I.2000 No.1973), as amended, ("the PPC Regulations") to operate an installation carrying out activities covered by the description in Section 2.1 A(1)(c) in Part 1 to Schedule 1 of the PPC Regulations, to the extent authorised by the Permit:

Section 2.1 A(1)(c) - "Processing ferrous metals and their alloys by using hot-rolling mills with a production capacity of more than 20 tonnes of crude steel per day. "

Aspects of the operation of the installation which are not regulated by conditions of the Permit are subject to the condition implied by Regulation 12(10) of the PPC Regulations, i.e. the Operator shall use the best available techniques for preventing or, where that is not practicable, reducing emissions from the installation.

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

In some sections of the Permit conditions require the Operator to use Best Available Techniques (BAT), in each of the aspects of the management of the installation, to prevent and where that is not practicable to reduce emissions. The conditions do not explain what is BAT. In determining BAT, the Operator should pay particular attention to relevant sections of the IPPC Sector guidance, appropriate Horizontal guidance and other relevant guidance.

A non-technical description of the installation is given in the Application, but the main features of the installation are as follows.

The installation has existed in its current location since around 1895, it being formerly known as the Redheugh Iron and Steel Works. Currently the permitted installation occupies a 7-acre site located approximately 1.9 Km West South West of Gateshead town centre (civic hall) and approximately 425-m due South of the southern banks of the River Tyne at Dunston coal staithes.

The installation is located upon land which slopes gently from North to South down to the river Tyne and is directly adjacent to the river team to the West, it being within the flood plain of the river Team. The site is located on porous made ground above the middle coal measures. Below the site there exists a perched water table the groundwater within which flowing from East to West carrying with it groundwater from land to the South and east of the site. The groundwater appears to be under the tidal action of the river Team. Due to the long industrial history of the site and its environs there is likely to be significant historical ground contamination.

The prescribed activity at the installation involves the hot rolling of purchased slab steel into plate of various widths and thicknesses to suit customer specific requirements. The installation currently processes around 100 kte/annum of steel though it has plans to expand this capacity by a further 50% through investment in new equipment and through higher utilisation of existing equipment.

Steel slab is received exclusively by articulated truck. Though slab of up to 27 tonnes can be processed significant effort is made at the purchasing stage to ensure slabs of the correct dimensions are sourced to suit the particular order to minimise waste generation and the need to cut.

Despite these efforts it is often necessary to cut slab prior to rolling. This is affected using either of two proprietary automated slab-cutting tables, which utilise a high temperature oxy-propane jet to provide a fast and accurate cut. Further slab preparation (welding or grinding) is also often required to remove surface imperfections such as cracks and folds, which might otherwise compromise the rolled plate quality.

Following initial cutting and preparation, in order to soften the steel prior to rolling, slab is preheated to a temperature of around 1200 degrees C in one of four natural gas-fired static furnaces, the largest of which being the Gibbons pusher furnace. The combustion products from these furnaces, which contain significant levels of NO_x and some particulate matter, are vented to atmosphere unabated.

During the preheating process an oxidised scale layer forms on the slab surface, which must be removed prior to rolling. This is affected by passing the hot slab through a series of high pressure cold fresh water quench sprays, which induce rapid scale cooling causing it to shatter away from the slab surface. Scale and water are collected in a pit located directly below the rolling mill. Though larger scale particles settle out into a skip contained within the pit the water retains a significant suspended solids content. This scale/water slurry is pumped to an on site effluent treatment plant (ETP) for further treatment prior to being discharged into the river Team previously under a consent to discharge from the EA.

Immediately after descaling the slab is repeatedly passed through a pair of parallel high-pressure hydraulically driven rollers to progressively compress the steel to the required width and thickness. Up to 10 passes through the mill can be required to produce thinner-gauge plates, the slab being subjected to multiple passes through the descaling sprays whilst it does so to minimise scale build up and hence roll wear during the rolling stage.

Roll wear is further reduced by the application of high temperature lubricating grease to roll surfaces. Rolls are also cooled by the direct application of cooling water. Consequently both the roll cooling water and the slab surfaces become contaminated with grease. This in turn contaminates descaling water with grease during successive passes through the descaling sprays. The ETP is therefore also required to remove oil and grease contamination as well as residual scale solids.

On completion of rolling the plate is trimmed and edged whilst still hot, before being left to cool naturally, though the installation does have the facility to cold shear. For specialist steel applications it is often necessary to further heat treat (temper) the cold rolled plate in either of two further gas-fired furnaces to achieve the desired plate harness properties. For high quality applications it can also be necessary to further cold-roll finished steel in order to level and to remove deviations within the plate. Further surface grinding and shotblasting can also be affected to provide a high quality surface finish where required by the customer.

The most significant environmental impact from the installation arises from NO_x and particulate releases to air and the liquid effluent discharged to the river Team. There are currently two prescribed air release points (Gibbons furnace and shotblast machine) and one prescribed water release point from the effluent treatment plant to the river Team. Though the process also generates a significant global warming impact from the significant natural gas combustion rate, overall energy usage within the process is seen as being comparable with BAT. Fugitive emissions of dust, noise and vibration appear to have the potential for nuisance impact, however to date there are no records of public complaints from the installation.

Though historically sensitive receptors such as domestic housing have been located remote from the installation, recent planning activities have permitted the construction of new houses within the impact range of the installation both to the North and East. There are also some 11 sites of special scientific interest located within 10Km of the installation. The impact of NO_x releases from the installation upon these sensitive receptors was however assessed and found to be insignificant.

Note that the Permit requires the submission of certain information to the Agency (see Sections 4 and 5). In addition, the Agency has the power to seek further information at any time under regulation 28 to the PPC Regulations provided that it acts reasonably.

Other PPC Permits relating to this installation		
Permit holder	Permit Number	Date of Issue
None		

Superseded Licences/Authorisations/Consents relating to this installation		
Holder	Reference Number	Date of Issue
Spartan UK (consent to discharge to controlled waters)	235/1163	22 November 2001

Other activities may take place on the site of this installation which are not regulated under this Permit or any other PPC Permit referred to in the Table above.

Other existing Licences/Authorisations/Registrations relating to this site		
Holder	Reference Number	Date of issue
None		

Public Registers

Considerable information relating to Permits including the Application is available on public registers in accordance with the requirements of the PPC Regulations. Certain information may be withheld from public registers where it is commercially confidential or contrary to national security.

Variations to the Permit

This Permit may be varied in the future (by the Agency serving a Variation Notice on the Operator). If the Operator itself wants any of the Conditions of the Permit to be changed, it must submit a formal Application. The Status Log within the Introductory Note to any such Variation Notice will include summary details of this Permit, variations issued up to that point in time and state whether a consolidated version of the Permit has been issued.

Surrender of the Permit

Before this Permit can be wholly or partially surrendered, an Application to surrender the Permit has to be made by the Operator. For the application to be successful, the Operator must be able to demonstrate to the Agency that there is no pollution risk and that no further steps are required to return the site to a satisfactory state.

Transfer of the Permit or part of the Permit

Before the Permit can be wholly or partially transferred to another person, an Application to transfer the Permit has to be made jointly by the existing and proposed holders. A transfer will be allowed unless the Agency considers that the proposed holder will not be the person who will have control over the operation of the installation or will not comply with the conditions of the transferred Permit. If, however, the Permit authorises the carrying out of a specified waste management activity, the transfer will only be allowed if the proposed holder is also considered to be "a fit and proper person" as required by the PPC Regulations.

Talking to us

Please quote the Permit Number if you contact the Agency about this Permit.

To give a Notification under Condition 5.1.1, the Operator should use the Incident Hotline telephone number (0800 80 70 60) or any other number notified in writing to the Operator by the Agency for that purpose.

Status Log

Detail	Date	Response Date
Application WP3339PY	Received 30 September 2004	
Response to request for information	Request dated 15 December 2004	Response dated 26 January 2005
Permit determined	16 March 2005	

End of Introductory Note.



Permit

Permit number

WP3339PY

The Environment Agency (the Agency) in exercise of its powers under Regulation 10 of the Pollution Prevention and Control (England and Wales) Regulations (SI 2000 No 1973), hereby authorises **Spartan UK** ("the Operator"),

Of/ whose Registered Office (or principal place of business) is

Ropery Road

Teams

Gateshead

Tyne and Wear

NE8 2RD

Company registration number 4140355

to operate an Installation(s) at

Spartan UK Ltd

Ropery Road

Teams

Gateshead

Tyne and Wear

NE8 2RD

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

Signed	Date
	16 March 2005

G.Donachie.

Authorised to sign on behalf of the Agency

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
Section 2.1 A1 (c): Processing ferrous metals and their alloys by using hot-rolling mills with a production capacity of more than 20 tonnes of crude steel per hour.	Preparation, heating and hot- rolling of steel slabs into plate of various widths and thicknesses.	Receipt of crude steel slab to despatch of rolled plate.
Associated Activity	Raw materials handling and storage	Receipt and storage of steel slab feedstock for used within the listed activity.
Associated Activity	Surface rectification and initial cutting of slab feedstock.	Preparation and cutting of slab feedstock in either of two designated areas within the installation.
Associated Activity	Preheating of slab in gas-fired furnaces.	Preheating of slab feedstock in either of 4 furnaces (Gibbons, New Hot work, Risco and Salem)
Associated Activity	Descaling of hot plate	Scale removal prior to rolling using a single descaling unit located adjacent to rolling mill.
Associated Activity	Edging and trimming of rolled plate.	Using hot or cold shears or hand held burning or grinding equipment.
Associated Activity	Cooling of rolled plate	Various locations within installation.
Associated Activity	Cold finishing operations	Includes cold levelling, shotblasting and grinding of cold rolled plate.

Table 1.1.1

Activity listed in Schedule 1 of the PPC Regulations / Associated Activity	Description of specified activity	Limits of specified activity
Associated Activity	Secondary heat treatment operations	Heating and controlled cooling of plate in one of two heat treatment furnaces (Old hotwork furnace and SAS furnace)
Associated Activity	Product handling	Storage of cold rolled plate prior to dispatch.
Associated Activity	Waste storage and handling	Production of waste to dispatch from installation.
Associated Activity	Effluent Treatment Plant	Treatment of oil and scale contaminated water from rolling mill operations to point of recycle back to process or discharge into river team
Associated Activity	Services.	Air compressors and cooling towers
Associated Activity	Storage and handling of secondary raw materials	Receipt of materials to use within the installation
Associated Activity	Engineering Activities	Cleaning and overhaul of engineering equipment to reuse within the process

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 red on the Site Plan at Schedule 5 to 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	The operator shall propose the installation of a justified technique or combination of techniques to reduce NOx emissions from furnace vents at source and/or to provide a means of achieving sufficient dispersion of these NOx releases to ensure that ground level concentrations of NOx are reduced to a level acceptable to the Environment Agency. The proposal shall be in writing and shall also include a timescale for its implementation.	31/8/05
2	The operator shall propose improvements to upgrade the performance of both the shotblasting machine and its abatement equipment to ensure that releases of particulate matter, noise and vibration from the unit meet the BAT standards described in the guidance note S2.04. These improvements must be implemented to the satisfaction of the Environment Agency prior to the commencement of its ongoing operation.	31/12/05
3	The operator shall install a suitable means of measuring and recording cumulative total daily effluent flow to the river Team in accordance with accuracy, tolerance, percentage data capture and reliability parameters stated within the Environment Agency's M2 guidance.	30/8/05
4	The operator shall review the available techniques and propose a means of reducing liquid effluent suspended solids content to 20mg/litre or better. Following the implementation of this proposal the operator shall initiate the reuse of clarified effluent at the descaling stage to achieve a recycle rate comparable with BAT as defined by the Environment Agency's Hot Rolling guidance Note IPPC S2.04. The above proposal shall be in writing and shall also include a timescale for its implementation.	31/8/05
5	The operator shall review available techniques and propose a timetable for the installation of appropriate facilities to: (1) Manage the handling and storage of road sweepings prior to off site disposal. (2) Ensure that there is no potential for ground water contamination arising from the degreasing of engineering equipment. The above proposal shall be in writing and shall also include a short timescale for its implementation.	30/6/05
6	The operator shall undertake a noise and vibration assessment in accordance with BS4142 and then develop a noise and vibration management plan in accordance with the Environment Agency's H3 guidance. The plan shall take account of but not be limited to factors such as creeping background. The operator shall provide a written copy of both the assessment and the plan arising from the above to the Environment Agency.	31/12/05
7	The operator shall propose measures to reduce noise impact upon potentially sensitive receptors to ensure that there is no "reasonable cause for annoyance" as defined by BS4142 arising from site activities. The above proposal shall be in writing and shall also include a timescale for its implementation.	31/12/05
8	The operator shall implement the proposed improvements regarding the development of environmental management procedures as described within section 2.3 of the application. These procedures shall be factored into the EMS required by improvement condition 13.	31/3/06

Table 1.4.1: Improvement programme

Reference	Requirement	Date
9	The operator shall develop and implement a planned preventative maintenance system covering all equipment the failure of which could have an environmental impact. The system should take account of the guidance within section 2.3 of the Environment Agency's guidance document S2.04.	30/6/06
10	The operator shall establish an inventory of raw materials and a system to review their ongoing suitability to ensure, wherever possible, that potentially environmentally harmful materials are substituted for less harmful ones. This system shall be factored into the EMS required by improvement condition 13.	31/3/06
11	The operator shall implement the improvements proposed within section 2.5 of the application regarding the management of waste. These improvements shall be factored into the EMS required by improvement condition 13.	31/3/06
12	The operator shall implement the proposed improvements to the site accident management plan as declared within section 2.8 of the application. These improvements shall be factored into the EMS required by improvement condition 13.	31/3/06
13	The operator shall implement an Environmental Management System (EMS), which takes account of all the significant environmental aspects of the site as detailed in Environment Agency guidance document S2.04.	30/9/06

- 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, as the case may be) 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 and 2.2 given in sections 2.1 and 2.2 of the application.	30 th September 2004.
Additional Information	Additional Information supplied by the operator (item 2).	26 th January 2005.

- 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 4.1.8), 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 Emissions to air from the emission points in Table 2.2.1 shall only arise from the source(s) specified in that Table.

Table 2.2.1 : Emission points to air		
Emission point reference or description	Source	Location of emission point
A1	Gibbons furnace vent	Point 12 on site plan
A2	Shotblasting unit vent	Point 23 on site plan

- 2.2.1.3 The limits for emissions to air for the parameter(s) and emission point(s) set out in Table 2.2.2 shall not be exceeded.

Table 2.2.2 : Emission limits to air and monitoring

Emission point reference	Parameter	Limit (including Reference Period) ¹	Monitoring frequency	Monitoring method
A1	Oxides of Nitrogen	400 mg/m ³ hourly average	6-monthly	Periodic technique- manual isokinetic sampling and impingement. Analysis by BS ISO11564:1998
A2	Particulate matter	10 mg/m ³ hourly average	6-monthly	Periodic technique- manual isokinetic sampling impingement and analysis to BS EN13211

Note 1: See Section 6 for reference conditions

2.2.1.4 No condition applies.

Table 2.2.3 Annual limits

Substance	Limit – kg
None	

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 No emission from the Permitted Installation shall be made to water except via the Operator's on-site effluent treatment plant as specified in this Permit

Table 2.2.4: Emission point to water

Emission Point Reference or description	Source	Receiving Water
W1 on (point 7 on site plan)	Effluent Treatment Plant discharge	River Team

- 2.2.2.4 The limits for the emissions to water for the parameter(s) and emission point(s) set out in Table 2.2.5 shall not be exceeded.
- 2.2.2.5 Where a substance is specified in Table 2.2.5 but no limit is set for it, the concentration of such substance in emissions to water from the relevant emission point shall be no greater than the background concentration.

Table 2.2.5 : Emission limits to water and monitoring

Emission point reference	Parameter	Limit (including Reference Period)	Monitoring frequency	Monitoring method
W1	Suspended solids	100 mg/litre	Monthly**	Filtration through glass fibre filters to ISO 11929:1997
	Total Hydrocarbon Oil	5 mg/litre	Monthly**	IR Absorption
	Dissolved Iron	10 mg/litre	Monthly**	ICP or AA spectroscopy to BS6068
	Zinc	2mg/m3	6-monthly	ICP or AA spectroscopy to BS6068
	pH	5-9	Monthly	
	Temperature	45 Celsius	Monthly	
	Flow *	300 m3/day	Daily	Electronic flowmeter.

* The daily measurement of daily effluent flow shall commence once the installation and commissioning of the flowmeter required by improvement condition 3 is complete.

** Sampling shall be undertaken whilst slab descaling activities are in progress.

- 2.2.2.6 No condition applies.

Table 2.2.6 Annual emission limits

Substance	Limit – kg
None	

Emissions to sewer

2.2.2.7 No emissions for the permitted installation shall be made to sewer.

Table 2.2.7 Emission points to sewer

Emission point reference or description	Source	Sewer
None		

2.2.2.8 No condition applies.

Table 2.2.8 : Emission limits and monitoring frequency to sewer

Emission point reference	Substance	Limit (including Reference Period)	Monitoring frequency	Monitoring method
None.				

2.2.2.9 No condition applies.

2.2.2.10 No condition applies.

Table 2.2.9 Annual emission limit

Substance	Annual limit – kg
None.	

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, .

2.2.4 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.

2.2.6.2 No condition applies.

2.2.6.3 No condition applies.

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.

Table 2.2.10 Emission points into land

Emission point reference/description	Source	Soakaway
None.		

2.2.7.3 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
- 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 2.4 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.

2.6 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 the waste recovery or disposal table or description submitted in response to Section 2.6 of the Application and in particular review the available options for waste recovery and disposal for the purposes of complying with condition 2.6.1 above.

2.6.3 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.

2.7 Energy Efficiency

2.7.1 The Operator shall produce a report on the energy consumed at the Permitted Installation over the previous calendar year, by 31 January each year, providing the information required by condition 4.1.2.

2.7.2 The Operator shall maintain and update annually an energy management system which shall include, in particular, the monitoring of energy flows and targeting of areas for improving energy efficiency.

2.7.3 The Operator shall design, maintain and operate the Permitted Installation so as to secure energy efficiency, taking into account relevant guidance including the Agency's Energy Efficiency Horizontal Guidance Note as from time to time amended. Energy efficiency shall be secured in particular by:

- ensuring that the appropriate operating and maintenance systems are in place;
- ensuring that all plant is adequately insulated to minimise energy loss or gain;
- ensuring that all appropriate containment methods, (e.g. seals and self-closing doors) are employed and maintained to minimise energy loss;
- employing appropriate basic controls, such as simple sensors and timers, to avoid unnecessary discharge of heated water or air;
- where building services constitute more than 5% of the total energy consumption of the installation, identifying and employing the appropriate energy efficiency techniques for building services, having regard in particular to the Building services part of the Agency's Energy Efficiency Horizontal Guidance Note H2; and

maintaining and implementing an energy efficiency plan which identifies energy saving techniques that are applicable to the activities and their associated environmental benefit and prioritises them, having regard to the appraisal method in the Agency's Energy Efficiency Horizontal Guidance Note H2.

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 2.8 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, eg. of fans, pumps, motors, conveyors and mobile plant;
 - use and maintenance of appropriate attenuation, eg. 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 Alarms/ sirens/ shall only be tested between the hours of 10.00 and 17.00 Monday to Friday and not on any Public Holiday].
- 2.9.3 No condition applies.

2.10 On-site Monitoring

- 2.10.1 The Operator shall maintain and implement an emissions monitoring programme which ensures that emissions are monitored from the specified points, for the parameters listed in and to the frequencies and methods described in Tables 2.2.2, 2.2.5 and 2.13.2, unless otherwise agreed in writing, and that the results of such monitoring are assessed. The programme shall ensure that monitoring is carried out under an appropriate range of operating conditions.
- 2.10.2 No condition applies.

Table 2.10.1 : Other monitoring requirements

Emission point reference or source or description of point of measurement	Substance or parameter	Monitoring frequency	Monitoring method	Other specifications
None.				

- 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.
- 2.10.6 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.
- 2.10.7 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.
- 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:
 - 2.10.10.1 collect the site reference data identified in the Site Protection and Monitoring Programme submitted under condition 4.1.7, and
 - 2.10.10.2 report that site reference data to the Agency,
 - unless otherwise agreed in writing by the Agency.

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 This is not a multi-Operator installation

2.13 Transfer to effluent treatment plant

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

Table 2.13.1 Transfer point(s) to effluent treatment plant(s)

Transfer point description/ identifier	Source	Effluent Treatment Plant
None.		

- 2.13.2 No condition applies.

Table 2.13.2 Limits for transfers to effluent treatment plant(s)

Parameter	Transfer Point	Limit (incl reference period)	Monitoring frequency	Monitoring Method
None.				

3 Records

- 3.1 The Operator shall ensure that all records required to be made by this Permit and any other records made by it in relation to the operation of the Permitted Installation shall:-
- 3.1.1 be made available for inspection by the Agency at any reasonable time;
 - 3.1.2 be supplied to the Agency on demand and without charge;
 - 3.1.3 be legible;
 - 3.1.4 be made as soon as reasonably practicable;
 - 3.1.5 indicate any amendments which have been made and shall include the original record wherever possible;
 - 3.1.6 be retained at the Permitted Installation, or other location agreed by the Agency in writing, for a minimum period of 4 years from the date when the records were made, unless otherwise agreed in writing; and
 - 3.1.7 where they concern the condition of the site of the Installation or are related to the implementation of the Site Protection and Monitoring Programme, be kept at the Permitted Installation, or other location agreed by the Agency in writing, until all parts of the Permit have been surrendered.

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: -

Notifications

- 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 this Permit, together with any response to a notice served under Schedule 4 to the PPC Regulations and any operational change agreed under the conditions of this 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.

“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 under conditions 2.2.1.3, 2.2.2.4, 2.2.2.5, 2.2.2.8 or 2.2.2.9 of this Permit.

“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.

“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.

“MCERTS” means the Environment Agency’s Monitoring Certification Scheme.

“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.

Interpretation

"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.

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

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

"Year" means calendar year ending 31 December.

- 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 PPC 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	
---	--

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 Spartan UK 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
Oxides of nitrogen mg m ⁻³		A1	Every 6 months	01/04/05
Particulates mg m ⁻³		A2	Every 6 months	01/04/05
Suspended solids mg l ⁻¹		W1	Every 6 months	01/04/05
Total Hydrocarbon Oil		W1	Every 6 months	01/04/05
Dissolved iron mg l ⁻¹		W1	Every 6 months	01/04/05
Zinc mg l ⁻¹		W1	Every 6 months	01/04/05
Total flow m ³ /day		W1	Every 6 months	01/09/05
pH		W1	Every 6 months	01/04/05
Temperature		W1	Every 6 months	01/04/05
Waste		Permitted installation	Annually	01/04/05
Water usage		Permitted installation	Annually	01/04/05
Energy usage		Permitted installation	Annually	01/04/05
Wastes for recovery or disposal		Permitted installation	Annually	01/04/05
Performance Indicators		Permitted installation	Annually	01/04/05

Schedule 3 - Forms to be used

Table S3: Reporting Forms		
Media / parameter	Form Number	Date of Form
Air	A1	16 March 2005
Water	W1	16 March 2005
Waste Return	R1	16 March 2005
Water usage	WU1	16 March 2005
Energy	E1	16 March 2005
Performance indicators	PI1	16 March 2005

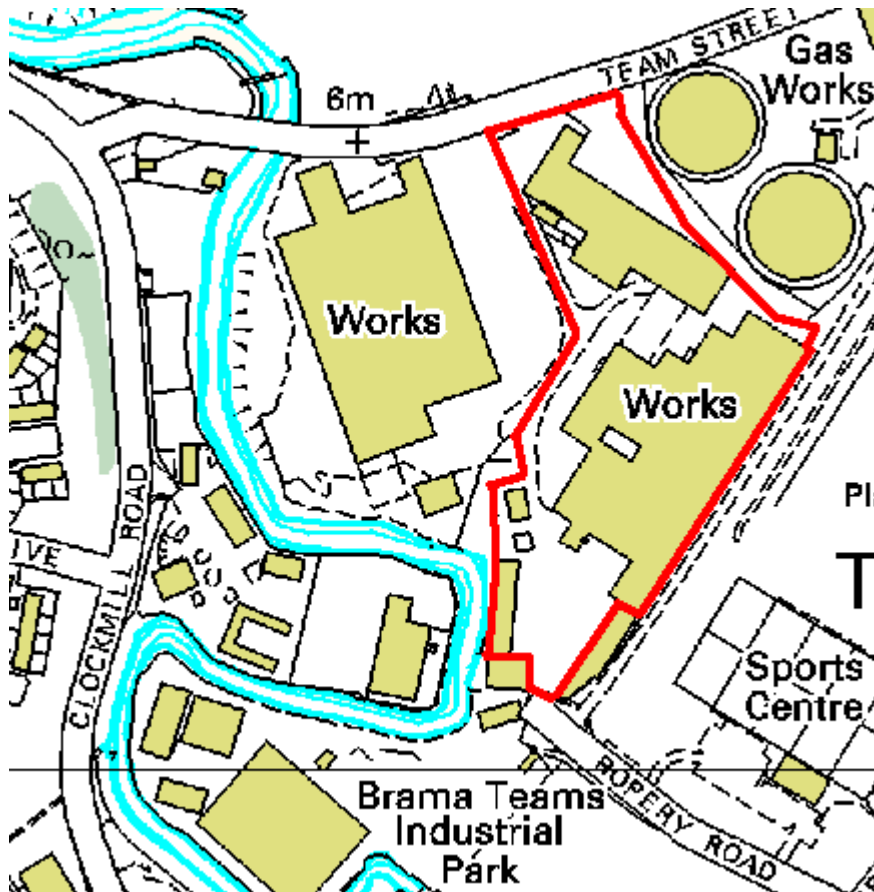
Schedule 4 - Reporting of performance data

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	
Production of rolled plate	tonnes

Table S4.2: Performance parameters			
Parameter		Frequency of assessment	Performance indicator
NOx emissions		Annually	Tonnes NOx/tonne rolled plate.
Energy		Annually	Gwhrs/tonne rolled steel
Potable water use		Annually	m ³ water/ tonne rolled plate
Waste (prime and no prime steel offcuts)		Annually	Tonnes waste/tonne rolled plate

Schedule 5 - Site Plan



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END OF PERMIT