



Permit with introductory note

Pollution Prevention and Control Regulations 2000

Celsa Manufacturing (UK) Ltd
Rod and Bar Mill
Castle Works
East Moors Rd
Cardiff CF24 5NN

Permit number

BV 0759

Contents

| | |
|---|-----------|
| Introductory note | ii |
| Permit | 1 |
| Conditions | 2 |
| 1 General | 2 |
| 2 Operating conditions | 5 |
| 3 Records | 16 |
| 4 Reporting | 17 |
| 5 Notifications | 18 |
| 6 Interpretation | 20 |
| Schedule 1 - Notification of abnormal emissions | 22 |
| Schedule 2 - Reporting of monitoring data | 23 |
| Schedule 3 - Forms to be used | 24 |
| Schedule 4 - Reporting of performance data | 25 |
| Schedule 5 - Site Plan | 26 |

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 hour.]

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 (H1 to H4) 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 activities subject to this Permit are a 150 tonne / hour hot-rolling mill and associated activities, namely the operation of a re-heating furnace, water cooling systems, water treatment, raw material handling and storage, and product handling and storage.

The installation is involved with the hot-rolling of steel billet to produce various sized steel rods and bars. The hot billet passes through the mills single heating stage, and is then processed on rolling lines. The heating is supplied from a 54MWth furnace, firing on gas with a back-up fuel of light fuel oil. Combustion gases pass from the furnace through a two-stage exchanger which preheats the combustion air. A portion of the combustion gases is directed through a waste heat boiler. These gases are then released from two 51 metre stacks.

Scale forms on the billet surface that detaches within the furnace, with any remaining after the heating stage being removed by spraying water from high-pressure water jets, which also serve to cool the billet as it is being rolled. The hot billet is first passed through a primary rolling stage, before being directed to either the Rod or the Bar finishing lines, where they undergo further rolling to the desired product dimensions.

To support these activities, there is an onsite effluent treatment plant and scale weathering process. A single release is made to water [into the Bute East Dock] – prior to this discharge, the water passes through a multi-stage interceptor.

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 |
| Not applicable | | |

| Superseded Licences/Authorisations/Consents relating to this installation | | |
|---|------------------|---|
| Holder | Reference Number | Date of Issue |
| Allied Steel and Wire Ltd | AF7932 | 28/10/1992 |
| CELSA Manufacturing UK Ltd | AF7932 | Transferred by correspondence on 13/06/03 |

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. These activities include site administration.

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 | Comment |
|-------------------------------------|---------------------------|--------------------------------------|
| Application BV0759 | 2 nd June 2003 | Duly Made 11 th June 2003 |
| Response to request for information | Request dated 2/10/2003 | Response dated 24/10/2003 |
| Permit determined | 28/11/2003 | |
| Permit Issued | 28/11/2003 | |

End of Introductory Note.

Permit
Pollution Prevention and Control
Regulations 2000



**ENVIRONMENT
AGENCY**

Permit

Permit number
BV0759

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 **CELSA Manufacturing (UK) Limited** ("the Operator"),

Whose Registered Office (or principal place of business) is

Building 58

Castle Works

East Moors Rd

Cardiff CF24 5NN

Company registration number 04577881


to operate an Installation(s) at

Castle Works

East Moors Rd

Cardiff CF24 5NN

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

| Signed | Date |
|---|--------------------------------|
|  | 28 th November 2003 |

P Burgess – Team Leader, Ely and the Vale Environment Management Team

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 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 hour. | <u>Specified Activity</u> Operation of a 150 tonne/hr continuous walking beam furnace | Receipt of crude steel billets from furnace to dispatch of final rolled product. |
| | <u>Directly-associated activities</u> Operation of a 54MWth natural gas/light fuel oil re-heating furnace Descaling, roughing and cooling of rolled product Raw material handling and storage Effluent treatment All handling and storage of wastes pending final removal from the installation All handling and storage of product pending final removal from the installation Operation of engineering workshops associated with the above specified and directly-associated activities. | |

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 black 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 | Undertake a study into the predicted atmospheric impact of the process on the proposed new residential development at the SE edge of Bute East Dock [Known as 'Queensgate North'], this study to refer to the previously undertaken modelling work, having regard to any effects that the proposed buildings will have upon local air dispersion. | Within 3 months following commencement of construction of the housing development. |
| 2(a) | Characterise releases from release points A3 to A18 inclusive. | 1 st July 2004 |
| 2(b) | Following 2(a) above, consider whether releases from discharge points A3 to A18 constitute BAT, and report the findings of the BAT assessment to the Agency. | 1 st October 2004 |
| 3(a) | Characterise the effluent being discharged into Bute East Dock in regard to the following parameters, based on a suitable number of monthly samples taken in accordance with Table 2.10 of Condition 2.10.2 of the Permit, in order that a statistically valid result may be obtained. Suspended Solids (as mg/l) Total Chromium (as mg/l) Oil and Grease (as mg/l) Dissolved Iron (as mg/l) Dissolved Nickel (as mg/l) Zinc (as mg/l) pH (as pH Units) | 1 st December 2004 |
| 3(b) | Using the results obtained from 3(a) above, compare the environmental impact and costs of the current method of discharge against the cost and environmental benefits of diverting this discharge to sewer. If diverting flows to a new sewer connection represent BAT, propose a scheme of works (including appropriate timescale) to undertake this improvement. Report the results of i) and ii) to the Agency in advance of undertaking any such works and by the deadline specified. | 1 st February 2005 |
| 4(a) | Undertake further groundwater monitoring at existing borehole locations [BH1, BH3, BH4, BH5 and BH6 or equivalent as agreed in writing with the Agency] on a 3 monthly basis for the following parameters :- Arsenic(As), Nickel(Ni), Zinc(Zn), Iron(Fe), Manganese(Mn), Ammonia(NH3), Chloride (Cl-), all expressed as ug/l; Total Petroleum Hydrocarbons (TPH), Poly Aromatic Hydrocarbons (PAH) and Volatile Organic Compounds, all expressed as ug/l; Conductivity, expressed as usv/cm; pH, expressed as Units. | Commencing from the date of issue of the Permit for four quarterly monitoring sets. |
| 4(b) | Report the findings of the survey to the Agency on the completion of sampling, this report to include an analysis of any trends or patterns in the groundwater quality across the site. | Within 3 months of the completion of the above monitoring exercise. |
| 5(a) | Review the outstanding actions identified in the response to Question 2.8 of the application [Accident Prevention and Control], and present the Agency with a plan detailing the Operators intentions in regard to completing these actions, this plan to include a timetable of prioritised works. | 1 st March 2004 |
| 5(b) | Undertake the work identified in 5(a) above in order to complete these outstanding actions. | As detailed in the timetable contained within the response to 5(a) above. |

- 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 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 | 1. Proposed Activities and Abatement | |
| | a.) Response to Questions B2.1 and B2.2 [Ref. B2.3 and B2.4 in Application Document.] | 02/06/2003 |
| | b.) Response to Questions B2.1 and B2.2 [Ref B2.3 and B2.4 in Updated Installation Report 63 – C6585 (B)] | |
| | 2. Management Techniques. | |
| | a.) Response to Question B2.3 [Ref. B2.1 in Application document.] | 02/06/2003 |
| | b.) Response to Question B2.3 [Ref. B2.1 in Updated Installation Report 63-C6585(B)] | |
| | 3. Raw Material Usage. | |
| | a.) Response to Question B2.4 [Ref. B2.2 in Application Document.] | 02/06/2003 |
| | b.) Response to Question B2.4 [Ref B2.2 in Updated Installation Report 63 – C6585 (B)] | |
| | 4. Waste Management. | |
| | Response to Questions B2.5 and B2.6 | 02/06/2003 |
| | 5. Energy Management. | |
| | Response to Question B2.7 [Ref. B2.2 in Application Document.] | 02/06/2003 |
| | 6. Accident Prevention and Control. | |
| | Response to Question B2.8 in Application and Updated Installation Report 63 – C6585 (B)] | 02/06/2003 |
| | 7. Noise Control and Management. | |
| | Response to Question B2.9 in Application and Updated Installation Report 63 – C6585 (B)] | 02/06/2003 |
| | 8. Monitoring. | |
| | Response to Question B2.10 in application and Updated Installation Report 63 – C6585 (B)] | 02/06/2003 |
| | 9. Decommissioning. | |
| | Response to Question B2.11 in application and Annex 10 of Updated Installation Report 63 – C6585 (B)] | 02/06/2003 |

- 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 | 54 MWth reheat furnace stack | The location of the emission points is shown on plan GM297, supplied in response to the Schedule 4 Notice Requesting Further Information. (As supplied to the Agency by the Applicant on the 24 th October 2003, and subsequently appended to the Application.) |
| A2 | Heat exchange boiler stack | |
| A3 | Chemical Cleaning Bath LEV | |
| A4 | Bead Shot Blaster1 LEV | |
| A5 | Bead Shot Blaster2 LEV | |
| A6 | Filter Cleaning LEV | |
| A7 | Metallurgy LEV | |
| A8 | Portable Extractor No.7 LEV | |
| A9 | Portable Extractor No.13 LEV | |
| A10 | Roll Turning LEV | |
| A11 | 6" and 8" Wendt Grinding M/C LEV | Each emission point on Plan GM297 is identified on the plan as shown in this table. |
| A12 | Fuel oil storage tank vent | |
| A13 | Mobile plant fuel storage tank vent | |
| A14 | North holding tank vent | |
| A15 | Waste Oil tank | |
| A16 | Wanson Boiler 1 | |
| A17 | Wanson Boiler 2 | |
| A18 | Cooling Tower | |

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 (Reheat furnace exhaust stack) and A2 (Waste heat boiler exhaust stack.) | Oxides of Nitrogen (NO _x , expressed as mg/m ³) | 400 mg/m ³ , measured over a four-hour reference period. | Quarterly | ISO 10849:1996 Determination of the mass concentration of nitrogen oxides - Performance characteristics of automated measuring systems |
| | Oxides of Sulphur (SO _x , expressed as mg/m ³) | <u>Firing on natural gas</u> 100 mg/m ³ , measured over a four-hour reference period. <u>Firing on light fuel oil</u> 1700 mg/m ³ , measured over a four hour reference period. | Quarterly | BS 6069-4.4:1993 (ISO 7935:1992) Determination of the mass concentration of sulphur dioxides - Performance characteristics of automated measuring systems |
| | Particulates (PM10 fraction, expressed as mg/m ³) | No applicable limit | Quarterly | BS EN 13284-1:2002 Determination of low range mass concentrations of dust - Manual gravimetric method. |
| | Carbon Monoxide (expressed as mg/m ³) | No applicable limit | Quarterly | ISO 12039:2001 Determination of carbon monoxide, carbon dioxide and oxygen - Performance characteristics and calibration of automated measuring systems |

Note 1: See Section 6 for reference conditions

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

2.2.2.1 Part 2.2.2 of this Permit shall not apply to releases of odour, noise or vibration or to releases to groundwater.

Emissions to Water (other than to Sewer)

2.2.2.2 Conditions 2.2.2.3 - 2.2.2.6 shall not apply to emissions to sewer.

2.2.2.3 Emissions to water from the emission point(s) specified in Table 2.2.4 shall only arise from the source(s) specified in that Table.

Table 2.2.4: Emission point to water

| Emission Point Reference or description | Source | Receiving Water |
|---|--------------------------------|-----------------|
| Point W1 on plan GM297 appended to the Application. | Discharge from oil interceptor | Bute East Dock |

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.

Table 2.2.5 : Emission limits to water and monitoring

| Emission point Ref. | Parameter | Limit (including Reference Period) | Monitoring frequency | Monitoring method |
|---------------------|-----------------------|------------------------------------|----------------------|---|
| W1 | Total Hydrocarbon Oil | 5 mg/l | Monthly | The determination of Hydrocarbon Oils in waters by solvent Extraction, Infra Red Absorption and Gravimetry 1983 ISBN 0 11 751728 3. |
| | PH | 6 - 9 | Monthly | To be agreed in writing with the Agency. |
| | Suspended Solids | 80 mg/l | Monthly | Suspended, Settleable, and Total Dissolved Solids in Waters and Effluents 1980 ISBN no. 0 11 751957 X |
| | Free Chlorine | 0.1 mg/l | Monthly | To be agreed in writing with the Agency. |
| | Dissolved Iron | 10 mg/l | Monthly | Inductively Coupled Plasma Optical Emission Spectroscopy [ICPOES] – to Environment Agency Compendium Method 140 or equivalent. |
| | Total Chromium | 0.2 mg/l | Monthly | Inductively Coupled Plasma Mass Spectrometry [ICPMS] – to Environment Agency Compendium Method 120 or equivalent. |
| | Dissolved Nickel | 0.2 mg/l | Monthly | Inductively Coupled Plasma Mass Spectrometry – to Environment Agency Compendium Method 120 or equivalent. |
| | Zinc | 2 mg/l | Monthly | Inductively Coupled Plasma Mass Spectrometry – to Environment Agency Compendium Method 120 or equivalent. |

Emissions to sewer

2.2.2.7 Emissions to sewer from the specified emission points in Table 2.2.7 shall only arise from the source(s) specified in that Table.

Table 2.2.7 Emission points to sewer

| Emission point reference or description | Source | Sewer |
|---|-------------------------------|----------------------------|
| Point S1 on plan GM297 appended to the Application. | Rainwater discharge from site | Dwr Cymru Welsh Water plc. |

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 (S.I. 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, where relevant.

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.
- 2.2.4.2 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.

2.2.5 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

No Equivalent Parameters or Technical Measures have been specified in regard to this Installation.

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 2.4 of the Application [referenced as Section 2.2 in the supporting documentation] 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 site 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.

2.6 Waste recovery or disposal

- 2.6.1 Waste produced at the Permitted Installation shall be recycled or recovered unless technically and/or economically impossible.
- 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 identify the best practicable environmental options for waste disposal.
- 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 H2 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 Emergency generators, alarms, sirens and relief valves shall only be tested between the hours of 08:00 and 20:00 Monday to Saturday and not on any Public Holiday.

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 2.2.8, 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 The Operator shall carry out environmental or other specified monitoring to the frequencies and methods described in Table 2.10.

Table 2.10.1 : Monitoring requirements

| Emission point reference | Substance or parameter | Monitoring frequency | Monitoring method |
|--------------------------|---|----------------------|--|
| A1 | Oxides of Nitrogen (NO _x , expressed as mg/m ³) | Quarterly | ISO 10849:1996 Determination of the mass concentration of nitrogen oxides - Performance characteristics of automated measuring systems |
| | Oxides of Sulphur (SO _x , expressed as mg/m ³) | Quarterly | BS 6069-4.4:1993 (ISO 7935:1992) Determination of the mass concentration of sulphur dioxide - Performance characteristics of automated measuring systems |
| | Particulates (PM ₁₀ fraction, expressed as mg/m ³) | Quarterly | BS EN 13284-1:2002 Determination of low range mass concentrations of dust - Manual gravimetric method. |
| | Carbon Monoxide (expressed as mg/m ³) | Quarterly | ISO 12039:2001 Determination of carbon monoxide, carbon dioxide and oxygen - Performance characteristics and calibration of automated measuring systems |
| W1 | Total Hydrocarbon Oil | Monthly | The determination of Hydrocarbon Oils in waters by solvent Extraction, Infra Red Absorption and Gravimetry 1983 ISBN 0 11 751728 3. |
| | pH | Monthly | To be agreed in writing with the Agency. |
| | Suspended Solids | Monthly | Suspended, Settleable, and Total Dissolved Solids in Waters and Effluents 1980 ISBN no. 0 11 751957 X |
| | Free Chlorine | Monthly | To be agreed in writing with the Agency. |
| | Dissolved Iron | Monthly | Inductively Coupled Plasma Optical Emission Spectroscopy [ICPOES] – to Environment Agency Compendium Method 140 or equivalent. |
| | Total Chromium | Monthly | Inductively Coupled Plasma Mass Spectrometry [ICPMS] – to Environment Agency Compendium Method 120 or equivalent. |
| | Dissolved Nickel | Monthly | Inductively Coupled Plasma Mass Spectrometry – to Environment Agency Compendium Method 120 or equivalent. |
| | Zinc | Monthly | Inductively Coupled Plasma Mass Spectrometry – to Environment Agency Compendium Method 120 or equivalent. |

- 2.10.3 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.
- 2.10.4 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.
- 2.10.5 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.
- 2.10.6 There shall be provided:
- 2.10.6.1 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
- 2.10.6.2 safe means of access to other sampling/monitoring points when required 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

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

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, 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.

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 unless the quantity emitted is so trivial that it would be incapable of causing 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 5.1.4.2.
- 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.
- 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 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.

"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 CELSA Manufacturing (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 |
|--|----------------|------------------|---------------------------|
| Sulphur dioxide mg m ⁻³ | A1 | Every 3 months | 01/12/2003 ^[a] |
| Oxides of nitrogen mg m ⁻³ | A1 | Every 3 months | 01/12/2003 ^[a] |
| Particulates mg m ⁻³ | A1 | Every 3 months | 01/12/2003 ^[a] |
| Carbon Monoxide mg m ⁻³ | A1 | Every 3 months | 01/12/2003 ^[a] |
| Total Hydrocarbon Oil mg/l | W1 | Monthly | 01/12/2003 |
| pH | W1 | Monthly | 01/12/2003 |
| Suspended Solids, mg/l | W1 | Monthly | 01/12/2003 |
| Free Chlorine, mg/l | W1 | Monthly | 01/12/2003 |
| Dissolved Iron, mg/l | W1 | Monthly | 01/12/2003 |
| Total Chromium, mg/l | W1 | Monthly | 01/12/2003 |
| Dissolved Nickel, mg/l | W1 | Monthly | 01/12/2003 |
| Zinc, mg/l | W1 | Monthly | 01/12/2003 |
| Water usage | N/A | Every 12 months | 01/12/2003 ^[b] |
| Energy usage | N/A | Every 12 months | 01/12/2003 ^[b] |
| Waste disposal and/or recovery. | N/A | Every 12 months | 01/12/2003 ^[b] |

Notes

^[a] First Quarter to be reported for period 1/12/2003 to 31/03/2004. Quarterly reporting after this date.

^[b] First 12 month period to be reported for period 1/12/2003 to 31/12/2004. Annual reporting after this date.

Schedule 3 - Forms to be used

Table S3: Reporting Forms

| Media / parameter | Form Number | Date of Form |
|-------------------------|-------------|--------------|
| Air | A1, A2 | 28/11/2003 |
| Water (excluding sewer) | W1 | 28/11/2003 |
| Energy and Water Usage | EW1 | 28/11/2003 |
| Waste Return | R1 | 28/11/2003 |
| Performance indicators | PI1 | 28/11/2003 |

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

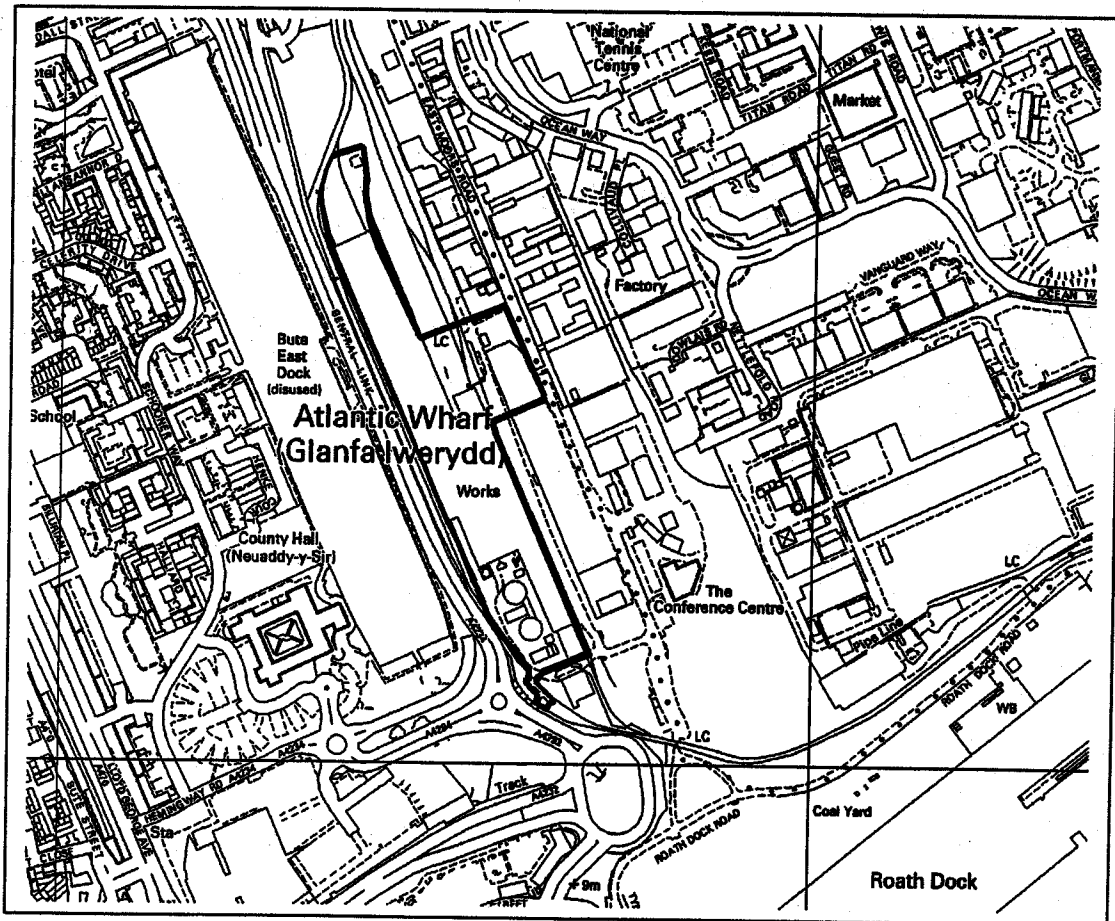
| | |
|------------------------------------|-----------|
| Delivery of raw billet | Tonnes/yr |
| Production of rolled steel product | Tonnes/yr |

Table S4.2: Performance parameters

| Parameter | Frequency of assessment | Performance indicator |
|----------------|-------------------------|---|
| Water Usage | Monthly | Total water supplied per tonne of rolled steel [litres] |
| Usage of oils | Monthly | Total oil usage per tonne of rolled steel [litres] |
| NOx production | Quarterly | NOx release per tonne of steel rolled [kg] |
| SOx production | Quarterly | SOx release per tonne of steel rolled [kg] |

Schedule 5 - Site Plan

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END OF PERMIT