Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Liberty Steel Newport Limited

Liberty Steel Newport Limited
Corporation Road
Newport
South Wales
NP19 4XE

Permit number

EPR/EP3830GH

Liberty Steel Newport Limited
Permit number EPR/EP3830GH

Introductory note

This introductory note does not form a part of the permit

This permit covers electric arc furnace (EAF) steelmaking, casting and rolling to produce engineering steels, power generation and waste storage.

Scrap steel is delivered by road and stored on hard ground in a purpose-built area, segregated according to type. Blend scraps are melted in 125 tonne capacity EAF units 'A' and 'B'. The furnaces have water cooled walls, roof, refractory hearth and slag line. Three to five baskets of selected scrap are charged to the furnace along with up to 5 tonnes of lime. Within 70 minutes the scrap is brought to a liquid state by striking an electric arc between the scrap and three graphite electrodes. Oxygen is used to assist the melting process. The liquid steel is then refined to a suitable analysis by oxygen injection and reactions of lime and steel. The lime forms a slag and is poured off the surface of the melt into a slag bed on the melting shop floor inside the building. When solid, the slag is removed from the building by a mechanical shovel by a contractor.

When the molten steel is at the required temperature it is tapped into a ladle. The ladle is stirred using an inert gas through refractory lance to homogenise both temperature and analysis. When the steel is at the correct temperature the ladle is positioned above the tundish feeding a continuous casting machine. Molten steel is teemed from the ladle to the tundish, then from the tundishes into a water-cooled copper mould(s). The moulds form the shape of the product and spray water cooling completes the final solidification. The product (billets and slabs) is then cut to required lengths by shears or gas cutting torches. Product is then transferred to a storage bay within the main building, prior to consumption in one of three rolling mills within the installation. Slabs are also imported for rolling, at the adjacent Liberty Steel jetty.

There are 3 mill lines:

- The Delta mill with 24 strands producing wire rod in coil form;
- The Epsilon mill with 20 strands producing reinforcing bar;
- The Gamma mill which uses 6 continuous strands to produce coiled strip.

At present, only the Gamma mill is operational. The Delta and Epsilon mills have been removed from site. However, reference to the associated release points has been retained pending future development.

Controlled emissions to air comprise:

- Primary fume system collecting fume from the furnaces and exhausting through bag filter plant No.1, an open top pulse jet unit at the South end of the furnace building (A1);
- Secondary fume system collecting fume from the furnaces and exhausting through bag filter plant No.2, also an open top pulse jet unit at the South end of the furnace building (A2);
- A 21-metre-high stack on a natural gas fired 24.4MWth reheat furnace on the Delta Mill (A3) Not in use;
- A 21-metre-high stack on a natural gas fired 24.4MWth reheat furnace on the Epsilon mill (A4) Not in use;
- A 34.6-metre-high stack on a natural gas fired (low NO_x burners) 93 MWth reheat furnace on the Gamma mill (A5).

Fugitive emissions to air are rare but may occur from the furnace building if the primary and secondary fume systems are overwhelmed due to an operational problem. Surface water and rain water are discharged to St Julian's Pill (leading to the river Usk) at point W1.

Solid wastes are removed to appropriate off-site facilities. The site has the capacity to store scrap metal and waste derived fuels.

There is a peaking plant on-site, consisting of 9 x 4.5MW units which will generate up to 1.65MWe of electrical power each, there are also associated transformers and switch gear along with fuel storage, all stored on concrete hardstanding with sealed drainage.

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

Status Log of the permit		
Detail	Date	Response Date
Application EPR/BL4885IW	Duly made 30/08/2002	
Additional information Received		16/04/02, 12/06/02:03/09/02 and 05/11/2002
Permit determined EPR/BL4885IW	30/09/2003	
Application EPR/EP3830GH/T001 (full transfer of permit BL4885IW)	Duly made 26/08/08	
Transfer EPR/EP3830GH	Determined 28/11/08	
Agency Initiated Variation EPR/EP3830GH/V002 (PAS ref SP3832GM)	Issued 25/06/09	

Variation Application EPR/EP3830GH/V003 (PAS ref ZP3331KL)	Duly Made 09/12/09	
Variation Notice EPR/EP3830GH/V003	Issued 12/02/10	
Agency Initiated Variation EPR/EP3830GH/V004 (PAS ref WP3332TF)	Issued 16/06/10	
Variation Application EPR/EP3830GH/V005	Duly made 29/10/15	
Variation Application EPR/EP3830GH/V005	Issued 11/11/15	
Regulation 60(1) Notice of request for more information	03/09/13	
Regulation 60(1) response received	28/03/14	Implementations of BAT conclusions under IED
Natural Resources Wales Iron and Steel Sector Review 2014 Permit EPR/EP3830GH Variation issued EPR/EP3830GH/V006	Issued 05/02/2016	Varied and consolidated permit issued in modern IED condition format and varied to include new waste storage
Variation Application EPR/EP3830GH/V007	Duly Made 23/03/17	
Variation Application EPR/EP3830GH/V007	Issued 29/06/17	Permit varied and consolidated

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number
EPR/EP3830GH

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/EP3830GH/V007 authorising,

Liberty Steel Newport Limited

Whose registered office is

Liberty Steel Newport Limited
Corporation Road
Newport
NP19 4XE

Company registration number 6644315

To operate a regulated facility at

Liberty Steel Newport Limited
Corporation Road
Newport
NP19 4XE

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

Name	Date
ADavies	**29/06/2017**

Authorised on behalf of Natural Resources Wales

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.1.4 The operator shall comply with the requirements of an approved competence scheme [or other approval issued by Natural Resources Wales].

1.2 Energy efficiency

1.2.1 The operator shall:

(a) take appropriate measures to ensure that energy is used efficiently in the activities;

(b) take appropriate measures to ensure the efficiency of the energy generation at the permitted installation is maximised;

(c) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and

(d) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 For the following activities referenced in schedule 1, table S1.1 (A1 to AR15) the operator shall:

(a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;

(b) maintain records of raw materials and water used in the activities;

(c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and

(d) take any further appropriate measures identified by a review.

1.4 Avoidance, recovery and disposal of wastes produced by the activities

1.4.1 The operator shall take appropriate measures to ensure that:

(a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

(b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

(c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.4.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

2.1.1 The operator is only authorised to carry out the activities specified in schedule 1 table S1.1 (the "activities").

2.1.2 For the following activities referenced in schedule 1, table S1.1 (A1 to AR15) waste authorised by this permit shall be clearly distinguished from any other waste on the site.

2.2 The site

2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

2.3.1 (a) For the following activities referenced in schedule 1, table S1.1 (A1 - AR15) The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by Natural Resources Wales.

(b) If notified by Natural Resources Wales that the activities are giving rise to pollution, the operator shall submit to Natural Resources Wales for approval within the period specified, a revision of any plan or other documentation ("plan") specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan , and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

2.3.2 Any raw materials or fuels listed in schedule 2 table S2.1 shall conform to the specifications set out in that table.

2.3.3 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2 table S2.1

(b) it conforms to the description in the documentation supplied by the producer and holder.

2.3.4 The operator shall ensure that where waste produced by the activities is sent to a relevant waste operation, that operation is provided with the following information, prior to the receipt of the waste:

(a) the nature of the process producing the waste;

(b) the composition of the waste;

(c) the handling requirements of the waste;

(d) the hazardous property associated with the waste, if applicable; and

(e) the waste code of the waste.

2.3.5 The operator shall ensure that where waste produced by the activities is sent to a landfill site, it meets the waste acceptance criteria for that landfill.

2.3.6 All electric arc furnace dust generated by the permitted activities will only be stored on site for a maximum period of 12 months.

2.4 Improvement programme

2.4.1 The operator shall complete the improvements specified in schedule 1 table S1.3 by the date specified in that table unless otherwise agreed in writing by Natural Resources Wales.

2.5 Pre-operational conditions

2.5.1 The activities shall not be brought into operation until the measures specified in schedule 1 table S1.4A have been completed.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.1 and S3.2

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 For the following activities referenced in schedule 1, table S1.1 (A1 to AR15) where a substance is specified in schedule 3 table S3.1 or S3.2 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.

3.1.4 Periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.

3.2 Emissions of substances not controlled by emission limits

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 The operator shall:

(a) if notified by Natural Resources Wales that the activities are giving rise to pollution, submit to Natural Resources Wales for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;

(b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

3.2.3 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

3.3.2 The operator shall:

(a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to odour, submit to Natural Resources Wales for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;

(b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

3.4 Noise and vibration

3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.

3.4.2 The operator shall:

(a) if notified by Natural Resources Wales that the activities are giving rise to pollution outside the site due to noise and vibration, submit to Natural Resources Wales for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;

(b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by Natural Resources Wales.

3.5 Monitoring

3.5.1 The operator shall, unless otherwise agreed in writing by Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 3 to this permit:

(a) point source emissions specified in tables S3.1 and S3.2

3.5.2 The operator shall maintain records of all monitoring required by this permit including 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.

3.5.3 Monitoring equipment, techniques, personnel and organisations employed for the emissions monitoring programme and the environmental or other monitoring specified in condition 3.3.1 shall have either MCERTS certification or MCERTS accreditation (as appropriate), where available, unless otherwise agreed in writing by Natural Resources Wales.

3.5.4 Permanent means of access shall be provided to enable sampling/monitoring to be carried out in relation to the emission points specified in schedule 3 tables S3.1 and S3.2 unless otherwise agreed in writing by Natural Resources Wales.

4 Information

4.1 Records

4.1.1 All records required to be made by this permit shall:

(a) be legible;

(b) be made as soon as reasonably practicable;

(c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and

(d) be retained, unless otherwise agreed in writing by Natural Resources Wales, for at least 6 years from the date when the records were made, or in the case of the following records until permit surrender:

(i) off-site environmental effects; and

(ii) matters which affect the condition of the land and groundwater.

4.1.2 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by Natural Resources Wales.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to Natural Resources Wales using the contact details supplied in writing by Natural Resources Wales.

4.2.2 For the following activities referenced in schedule 1, table S1.1 (A1 - AR15), A report or reports on the performance of the activities over the previous year shall be submitted to Natural Resources Wales by 31 January (or other date agreed in writing by Natural Resources Wales) each year. The report(s) shall include as a minimum:

(a) a review of the results of the monitoring and assessment carried out in accordance with the permit including an interpretive review of that data;

(b) the annual production /treatment data set out in schedule 4 table S4.2; and

(c) the performance parameters set out in schedule 4 table S4.3 using the forms specified in table S4.4 of that schedule.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by Natural Resources Wales, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

(a) in respect of the parameters and emission points specified in schedule 4 table S4.1;

(b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.4 ; and

(c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall, unless notice under this condition has been served within the preceding four years, submit to Natural Resources Wales, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

4.2.5 Within 1 month of the end of each quarter, the operator shall submit to Natural Resources Wales using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter, if during that quarter the total amount accepted exceeds 100 tonnes of non-hazardous waste or 10 tonnes of hazardous waste.

4.3 Notifications

4.3.1 Natural Resources Wales shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

(a) any change in the operator's trading name, registered name or registered office address; and

(b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

(a) any change in the operator's name or address; and

(b) any steps taken with a view to the dissolution of the operator.

4.3.2 (a) In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

(i) inform Natural Resources Wales,

(ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and

(iii) take the measures necessary to prevent further possible incidents or accidents;

(b) in the event of a breach of any permit condition the operator must immediately—

(i) inform Natural Resources Wales, and

(ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

(c) in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.3 Any information provided under condition 4.3.1 [(a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit,] shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.4 In any other case:

(a) the death of any of the named operators (where the operator consists of more than one named individual);

(b) any change in the operator's name(s) or address(es); and

4.3.5 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

(a) Natural Resources Wales shall be notified at least 14 days before making the change; and

(b) the notification shall contain a description of the proposed change in operation.

4.3.6 Natural Resources Wales shall be given at least 14 days' notice before implementation of any part of the site closure plan.

4.3.7 Where the operator has entered a climate change agreement with the Government, Natural Resources Wales shall be notified within one month of:

(a) a decision by the Secretary of State not to re-certify the agreement;

(b) a decision by either the operator or the Secretary of State to terminate the agreement; and

(c) any subsequent decision by the Secretary of State to re-certify such an agreement.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made immediately in which case it may be provided by telephone.

Schedule 1 - Operations

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
A1	2.1 Part A (I) (b) (i)	Making and refining steel in an EAF >7 tonnes per hour capacity	(1)
A2	2.1 Part A (I) (c)	Processing ferrous metal and their alloys by hot-rolling with a capacity >20 tonnes per hour	(1)
A3	1.1 Part A (I) (a)	Combustion of fuel in appliances with a rated thermal input >50MWth	(1)
Directly Associated Activity			
A4	Steam and electrical power supply	18 MWth gas-fired CHP plus 2x8MWth gas/gas-oil standby boilers	(1)
A5	Associated activity	Slag handling and processing	(1)
A6	Associated activity	Surface rectification	(1)
A7	Associated activity	Heat treatment	(1)
A8	Associated activity	Product machining, finishing, handling and storage	(1)
A9	Associated activity	Plant services including: steam raising, compressed air and cooling	(1)
A10	Associated activity	Scrap handling and storage	(1)
A11	Associated activity	Scale handling	(1)
A12	Associated activity	Water Treatment Systems	(1)
A13	Associated activity	Electric Arc Furnace Dust storage and handling	(1)
A14	Associated Activity	9 x 1.65MWe biofuel-fired generator units for power provision support	From receipt of bio-diesel to generation of electricity Operation of each individual engine shall not exceed; • 500 hours in any continuous 365-day period and; • 3 hours in any continuous 24-hour period For discharging emissions to air, each of the engines shall have an integrated stack of height 2.6m
Note (1) – The limits of specified and associated activities collectively comprise all activities carried out in the installation between the receipt of raw materials to supply of finished products.			

Table S1.1 activities			
Activity reference	**Activity listed in Schedule 1 of the EP Regulations**	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
Description of activities for waste operations		**Limits of activities**	
AR14	**R13** Storage of wastes pending any of the recovery operations numbered R1 to R12. Receipt and storage of commercial and industrial wastes, excluding those wastes which are hazardous	Receipt of waste and storage on site prior to recovery via use as a fuel in a Waste to Energy plant or export for recovery. Subject to the storage limitations of 10,000 tonnes of SRF and 50,000 tonnes of other waste derived fuel, ASR, waste plastic, waste tyres at any given time. Waste will be stored on-site for a maximum of up to 9 months. To be stored on a concrete platform with a sealed drainage system. Waste types as specified in schedule 2, table S2.1	
Description of activities for waste operations		**Limits of activities**	
AR15	**R4** Recycling/reclamation of metals and metal compounds	Receipt of waste and storage on site prior to recovery for export. Subject to the storage limitations of 40,000 tonnes of scrap metal at any given time. Waste will be stored on-site for a maximum of up to 90 days. To be stored on a concrete platform with a sealed drainage system. Waste types as specified in schedule 2, table S2.1	

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	The response to question B2.3 given in section B2.3 of the application	31/08/01
Response to Schedule 4 Part 1 Notice	Response to question B2.3	16/04/02
Information received in support of Natural Resources Wales Iron and Steel Sector Permit Review 2014	All parts of operator response to Regulation 60 (1) notice	03/09/13
Application EPR/EP3830GH/V006	The response to Part C2 questions 5c and 6 highlighting technical competence and environmental risk assessment. Non-Technical summary in application	15/12/15
Application EPR/EP3830GH/V006	The response to Part C2 questions 3b and 3d highlighting compliance and certification	15/12/15
Application EPR/EP3830GH/V006	The response to Part C3, questions 6a, 6b, 6c and 6e of the main application.	15/12/15
Application EPR/EP3830GH/V006	The response to Part C3, Table 3 given on page 5 of main application. Confirming the waste types to be stored and relevant technical guidance how to comply with regulations	15/12/15

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application EPR/EP3830GH/V006	The response to Form C2, Table 1 given on page 3 of main application document confirming the changes in activity – allowing the storage of several new waste streams on site.	15/12/15
Application EPR/EP3830GH/V007	The response to Part C2 questions 5c and 6 highlighting technical competence and environmental risk assessment. Non-Technical summary in application	14/02/17
Application EPR/EP3830GH/V007	Appendix C – SIMEC Newport AQ Appendix 2017-01-12	14/02/17

Table S1.3 Improvement programme requirements		
Reference	**Requirement**	**Date**
IC1	EAF Furnace 1 & 2 (BAT ref 7.6 1.1) A reduction in the concentration of combustible gas leaving the furnace is required under BAT. A report will be submitted to NRW within 6 months of activity commencing to demonstrate BAT is being achieved.	6 months from commencement of melting activities
IC2	EAF Furnace 1 & 2 (BAT ref 7.6 1.2) Within 6 months after activity has commenced the operator will submit a report to NRW detailing the pollutant present after post combustion to achieve BAT	6 months from commencement of melting activities
IC3	EAF Furnace 1 & 2 (BAT ref 90) The reduction of dust emissions from on-site slag processing. Practices will need to demonstrate BAT upon recommencement of melting operations. A report will be submitted to NRW within 6 months to demonstrate that all practices achieve BAT.	6 months from commencement of melting activities
IC4	Storage and Blending area (BAT ref 7.1.4) When melting, activities commence it is necessary to monitor the surface run-off in the reen system on site. Active treatment of surface water may be needed to achieve BAT. A report will be submitted within 6 months to NRW to demonstrate BAT compliance in relation to the surface water run-off within the reen system	6 months from commencement of melting activities
IC5	The operator will submit a report to NRW outlining how they will comply with the requirements of the Medium Combustion Plant Directive (MCPD) in relation to the 9 bio-diesel generators on-site	12 months from commencement of generator use

Table S1.4A Pre-operational measures	
Reference	**Pre-operational measures**
PO1	Prior to the operator resuming melting operations on-site, it is required that the operator will submit a report to NRW showing compliance of the following BATC/BAT-AEL's; BAT 1, BAT 2, BAT 5, BAT 6, BAT 8, BAT 9, BAT 10, BAT 11, BAT 12, BAT 13, BAT 14, BAT 15, BAT 16, BAT 88, BAT 89, BAT 95, BAT 7.6 1.3, BAT 7.6 1.4
PO2	Prior to accepting any of the wastes listed in Schedule 2 of the permit – the operator will ensure that there is a concrete pad on which the waste will be stored. This will be communicated to NRW prior to the acceptance of any waste

Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Permitted waste types and quantities for	
Waste code	**Description**
19 12 10	Combustible waste (refuse derived fuel) – dry baled and triple packaged RDF and SRF only
19 10 04	Fluff-light fraction and dust other than those mentioned in 19 10 03 – dry baled and triple packaged ASR containing no metals or hazardous substances
16 01 03	End of life tyres – depolluted tyres (both whole and shredded) only
02 01 04	Waste plastics (Except packaging)
07 02 13	Waste plastics
12 01 05	Plastic shavings and turnings
15 01 02	Plastic packaging
16 01 19	Plastic
17 02 03	Plastic
19 12 04	Plastic and rubber
20 01 39	Plastic
12 01 01	Wastes from shaping and physical and mechanical surface treatment of metals and plastics – Ferrous metal filings and turnings
12 01 03	Wastes from shaping and physical and mechanical surface treatment of metals and plastics – Non-ferrous metal filings and turnings
15 01 04	Waste packaging, absorbents, wiping cloths, filter material, and protective clothing not specified – Metallic packaging
16 01 17	End of life vehicles – Ferrous metals
16 01 18	End of life vehicles – Non-ferrous metals
17 04 02	Construction and Demolition Wastes – Aluminium
17 04 05	Construction and Demolition Wastes – Iron and Steel
17 04 07	Construction and Demolition Wastes – Mixed metals
19 01 02	Wastes from waste management facilities – Ferrous metals removed from bottom ash
19 10 01	Wastes from waste management facilities – Iron and Steel wastes
19 10 02	Wastes from waste management facilities – Non-ferrous wastes
19 12 02	Wastes from waste management facilities – Ferrous metals
19 12 03	Wastes from waste management facilities – Non-ferrous metals
20 01 40	Municipal wastes – Metals

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
A1 point 5 on site plan – Bag filter plant No1	Bag filter plant No 1	Particulates	5 mg/m^3	Daily Average	Continuous	BS ISO 10155
		Particulates	5 mg/m^3		Quarterly	BS EN 13284 – 1:2002
		Carbon Monoxide (2)(3)	100mg/m^3	Hourly Average	Continuous	ISO 12039
		Oxides of Nitrogen (as NO_x) (1)	25 mg/m^3	Spot Sample	Quarterly	ISO 10849
		Sulphur Dioxide	25 mg/m^3	15-minute Average	Annual	BS 6069: Section 4.4:1993 (ISO 7935:1992)
		PCDD/F	0.1 ng/m^3	6 -8 hour random samples during steady state conditions	Annual	BS EN 1948
		VOC (1)	20 mg/m^3		Annual	BS EN 12619
		Metals (4)	-		Annual	USEPA method 29 or BS EN 14385
		Mercury	0.05 mg/m^3	Spot Sample for at least 4 hours	Annual	BS EN 13649
		PAH (1)	-		Annual	BS EN 1948
		PCB (1)	-		Annual	BS EN 1948
A2 Point 6 on site plan – Bag filter plant No 2	Bag filter plant No 2	Particulates	5 mg/m^3	Daily Average	Continuous	BS ISO 10155
		Particulates	5 mg/m^3		Quarterly	BS EN 13284 – 1:2002
		Carbon Monoxide (2)(3)	100mg/m^3	Hourly Average	Annual	ISO 12039
		Oxides of Nitrogen (as NO_x) (1)	25 mg/m^3	Spot Sample	Quarterly	ISO 10849
		Sulphur Dioxide	25 mg/m^3	15 Minute Average	Annual	BS 6069: Section 4.4:1993 (ISO 7935:1992)

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
		PCDD/F	0.1 ng/m^3	6 -8 hour random samples during steady state conditions	Annual	BS EN 1948
		VOC (1)	20 mg/m^3		Annual	BS EN 12619
		Metals (4)	-		Annual	USEPA method 29 or BS EN 14385
		Mercury	0.05 mg/m^3	Spot sample for at least 4 hours	Annual	BS EN 13649
		PAH (1)	-		Annual	BS EN 1948
		PCB (1)	-		Annual	BS EN 1948
A3 point 8 on site plan - Stack	24.4MWth re-heat furnace on Delta Mill	Particulates	-	-	-	-
		Oxides of Nitrogen (as NO_x)	-	-	-	-
		Carbon Monoxide	-	-	-	-
		PCDD/F	-	-	-	-
		Metals	-	-	-	-
		Mercury	-	-	-	-
		PCB's	-	-	-	-
A4 point 9 on site plan - Stack	24.4MWth re-heat furnace on Epsilon Mill	Particulates	-	-	-	-
		Oxides of Nitrogen (as NO_x)	-	-	-	-
		Carbon Monoxide	-	-	-	-
		PCDD/F	-	-	-	-
		Metals	-	-	-	-
		Mercury	-	-	-	-
		PCB's	-	-	-	-
A5 point 7 on site plan - Stack	93MWth re-heat furnace on Gamma Mill	Oxides of Nitrogen (as NO_x)	400 mg/m^3	Spot Sample	Quarterly	ISO 10849

Table S3.1 Point source emissions to air – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (including unit)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
9 Emission points associated with bio-diesel engines	Bio-diesel engines			No Monitoring Required[5]		

Notes:

1. Refers to any representative manual spot sample
2. The averaging period shall only include those hours during which the plant is in operation including start-up and shut-down.
3. For continuous monitoring the release limit is complied with if 95% of the hourly average readings for each rolling 24 hours do not exceed the emission limit value given in Table S3.1 and the peak hourly average does not exceed 1.5 times the limit value.
4. Metals means elements and compounds expressed as the metal of: Ni, As, Cd, Cr, Cu, Pb, Fe, Zn.
5. Any persistent visible emission will require maintenance to be carried out.

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
W1 on site plan in schedule 7 emission to St. Julian's Pill	Clean, un-contaminated Surface Water	pH	6-10	Spot Sample	Monthly	BS 6068-2.50:1995, ISO 10523:1994
		Suspended Solids	20 mg/l			BS EN 872:1996 or other ISO, BS or SCA blue book method as approved by Natural Resources Wales

Table S3.2 Point Source emissions to water (other than sewer) and land – emission limits and monitoring requirements						
Emission point ref. & location	**Source**	**Parameter**	**Limit (incl. unit)**	**Reference Period**	**Monitoring frequency**	**Monitoring standard or method**
		Total Hydrocarbons	5 mg/l			SCA blue book 77 ISBN 0117517283 2002 or other ISO, BS or SCA blue book method as approved by Natural Resources Wales
		Lead	0.1mg/l			BS 6068-2.60:1998, BS EN ISO 11885 1998
		Nickel	0.1mg/l			BS 6068-2.60:1998, BS EN ISO 11885 1998
		Arsenic	0.01mg/l			BS 6068-2.60:1998, BS EN ISO 11885 1998
		Cadmium	0.05mg/l			BS 6068-2.60:1998, BS EN ISO 11885 1998
		Chromium	0.2mg/l			BS EN ISO 15586 BS EN ISO 11885 1998
		Copper	0.1mg/l			BS EN ISO 15586 BS EN ISO 11885 1998
		Zinc	0.5mg			BS 6068-2.60:1998, BS EN ISO 11885 1998
		Iron Compounds	5mg/l			BS 6068-2.74:2002, BS EN ISO 13506:2002

Schedule 4 - Reporting

Table S4.1 Reporting of monitoring data			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Particulate	A1, A2	Every 3 month	
Oxides of Nitrogen mg/m^3	A1, A2, A5	Every 3 month	
Carbon Monoxide	A1, A2	Every 12 month	
Sulphur Dioxide	A1, A2	Every 12 month	
VOC as Carbon	A1, A2	Every 12 month	
PCDD/F	A1, A2	Every 12 month	
Metals[1]	A1, A2	Every 12 month	
Mercury	A1, A2	Every 12 month	
PAH	A1, A2	Every 12 month	
PCB	A1, A2	Every 12 month	
Suspended Solids	W1	Every 3 month	
Oil and Grease	W1	Every 3 month	
pH	W1	Every 3 month	
Zinc	W1	Every 3 month	
Metals[1] and Iron	W1	Every 3 month	
Energy		Every 12 month	
Environment monitoring		Annual	
Borehole monitoring		Annual	
Waste		Every 12 month	

Notes:

1. Metal include elements and compounds of Pb, As, Cd, Cr, Ni, Cu, Hg and Zn expressed as the metal and shall be individually reported
2. Reporting to approximate with calendar quarters
3. Reporting may be suspended by written agreement of Natural Resources Wales

Table S4.2: Annual production/treatment	
Parameter	**Units**
Total Steel Production	tonnes
Total Waste Produced	tonnes
Total Scrap metal stored on-site	tonnes
Total SRF stored on-site	tonnes
Total RDF stored on-site	tonnes
Total ASR stored on-site	tonnes
Total End of Life Tyres stored on-site	tonnes
Total waste plastic stored on-site	tonnes
Electrical power generated	MWh
Electrical power exported to the grid	MWh

Table S4.3 Performance parameters		
Parameter	**Frequency of assessment**	**Units**
Water usage	Annually	tonnes
Energy usage	Annually	MWh
Total raw material used	Annually	tonnes
Total Particulates	Annually	Mg/m^3
Total amount of bio-diesel used	Annually	tonnes
Operating hours for peaking plant	Every 6 months	Total hours (h), total number of runs (quantity), duration of longest run (h) and number of runs >2 hours duration (quantity)

Table S4.4 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Air	Form air 1 or other form as agreed in writing by Natural Resources Wales	01/04/16
Water	Form water 1 or other form as agreed in writing by Natural Resources Wales	01/04/16
Water usage	Form water usage 1 or other form as agreed in writing by Natural Resources Wales	01/04/16
Energy usage	Form energy 1 or other form as agreed in writing by Natural Resources Wales	01/04/16
Waste	Form performance 1 or other form as agreed in writing by Natural Resources Wales	01/04/16
Particulates	Form particulates 1 or other form as agreed in writing by Natural Resources Wales	01/04/16
Electrical power generated (net), total hours (h), total number of runs (quantity), duration of longest run (h), number of runs >2 hours duration (quantity)	Form operating hours 1 or other form as agreed in writing by Natural Resources Wales	01/06/17

Schedule 5 - Notification

These pages outline the information that the operator must provide.

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

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

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

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

(b) Notification requirements for the breach of a permit condition	
To be notified immediately	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	**Notification period**

(c) In the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment:	
To be notified immediately	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B - to be submitted as soon as practicable

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 which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 - Interpretation

"accident" means an accident that may result in pollution.

"application" means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

"emissions to land" includes emissions to groundwater.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2016 No.675 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

"emissions of substances not controlled by emission limits" means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission or background concentration limit**..**

"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.

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

"year" means calendar year ending 31 December.

"authorised officer" means any person authorised by Natural Resources Wales under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

"operational hours" are whole hours commencing from the first unit ending start-up and ending when the last unit commences shut down

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

- for emissions to surface water, the surface water quality up-gradient of the site; or
- for emissions to sewer, the surface water quality up-gradient of the sewage treatment works discharge.

"disposal". Means any of the operations provided for in Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"hazardous property" has the meaning given in Schedule 3 of the Hazardous Waste (England and Wales) Regulations 2005 No.894 and the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138).

"Industrial Emissions Directive" means DIRECTIVE 2010/75/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 24 November 2010 on industrial emissions

"quarter" means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

"recovery" means any of the operations provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

"Solvent Emissions Directive" means Directive 1999/13/EC (as amended by Directive 2004/42/EC) on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations.

"Waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes (England)Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, and in relation to hazardous waste, includes the asterisk.

"hazardous waste" has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 No.894, the Hazardous Waste (Wales) Regulations 2005 No. 1806 (W.138), the List of Wastes (England) Regulations 2005 No.895 and the List of Wastes (Wales) Regulations 2005 No. 1820 (W.148).

"authorised officer" means any person authorised by Natural Resources Wales under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

"best available treatment, recovery and recycling techniques" shall have the meaning given to it in the document published jointly by the Department for Environment, Food and Rural Affairs, the Welsh Assembly Government and the Scottish Executive on 27th November 2006, entitled "Guidance on Best Available Treatment, Recovery and Recycling Techniques (BATRRT) and Treatment of Waste Electrical and Electronic Equipment (WEEE);

"building" means a construction that has the objective of providing sheltering cover and minimising emissions of noise, particulate matter, odour and litter.

"controlled substances" means chlorofluorocarbons, other fully halogenated chlorofluorocarbons, halons, carbon tetrachloride, 1,1,1-trichloroethane, methyl bromide, hydrobromofluorocarbons and hydrochlorofluorocarbons listed in Annex I of Regulation (EC) No 2037/2000 of the European Parliament and of the Council of 29 June 2000 on substances that deplete the ozone layer, including their isomers, whether alone or in a mixture, and whether they are virgin, recovered, recycled or reclaimed. This definition shall not cover any controlled substance which is in a manufactured product other than a container used for the transportation or storage of that substance, or insignificant quantities of any controlled substance, originating from inadvertent or coincidental production during a manufacturing process, from unreacted feedstock, or from use as a processing agent which is present in chemical substances as trace impurities, or that is emitted during product manufacture or handling.

"Waste Framework Directive" or "WFD" means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste

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.

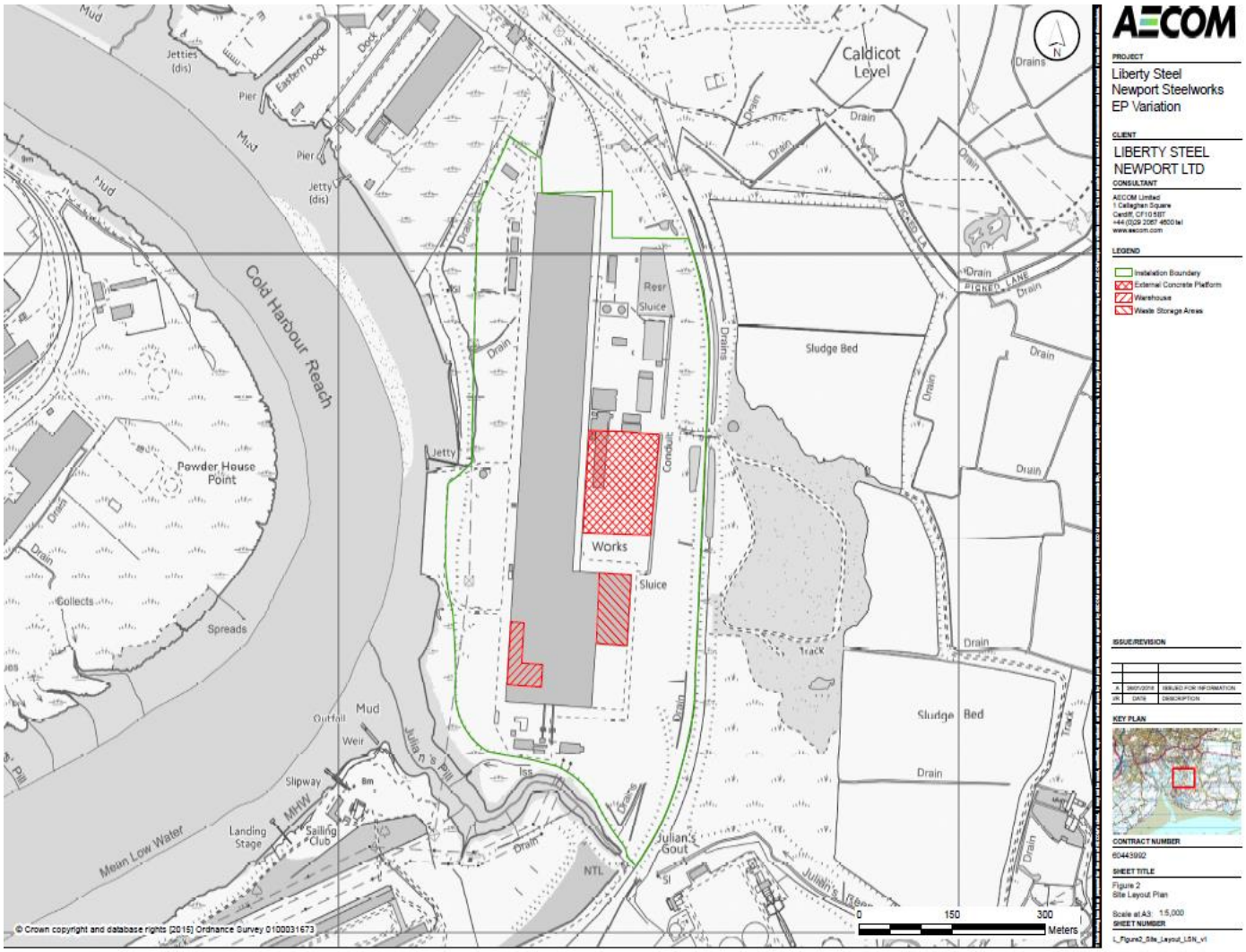
Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means:

(a) in relation to emissions from combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3 kPa and with an oxygen content of 3% dry for liquid and gaseous fuels, 6% dry for solid fuels; and/or

(b) In relation to emissions from gas turbine, spark or compression ignition engine combustion processes, the concentration in dry air at a temperature of 273K, at a pressure of 101.3kPa and with an oxygen content of 15% dry for liquid and aseous fuels; and/or

(c) in relation to emissions 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

Schedule 7 - Site plan



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