

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Tata Steel UK Ltd

**Tata Steel Colors
Shotton Site
Shotton
Flintshire
CH5 2NH**

Permit number

EPR/BR7321IK

Tata Steel Colors

Permit number EPR/BR7321IK

Introductory note

This introductory note does not form a part of the permit

Tata Steel Colors, which extends over 500 acres, is the operational headquarters for a group of works specialising in the manufacture of coated coiled steel. It is situated approximately 1Km from Shotton Town Centre, Deeside, Grid Reference 330274,370560. The site is located in an area predominantly surrounded by agricultural land to the east, marsh land to the west, the River Dee to the south and Deeside Industrial Estate to the north. The site is bounded to the north and west by Chester Road (A548).

The process involves steel coils arriving on site. Cold rolled coils, up to 1650mm wide, are supplied to the works from other plants, mainly in South Wales. They can then pass through two process routes; hot dip galvanising followed by organic coating, or alternatively pass directly through the galvanising line. The hot dip galvanising coats the incoming sheet with either zinc or zinc metal alloys for corrosion resistance. The organic coating lines coat the sheet with specially formulated paints for additional protection and a decorative finish. There are two hot dip galvanising lines (no.5 and no.6) and two colorcoat lines (no.1 and no.2) within the installation. Both colorcoat lines are equipped with a thermal oxidiser to destroy VOCs extracted from the paint application and curing stages. There is a central boiler house with a principal role of providing back up steam to the coating processes. The total output from the installation is around 700,000 tonnes per annum.

The Shotton Lagoons and Reedbeds SSSI is adjacent to the site and accepts storm waters and process waters from the site. Any effluent is treated at an effluent treatment plant to remove metal and metal salts before being discharged to the River Dee.

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

Status log of the permit		
Description	Date	Comments
Application EPR/BR7321IK/A001 received	Duly made 10/07/2003	
Additional information requested	12/12/2003	
Additional information received	05/02/2004	
Application EPR/BR7321IK/A001 determined and permit EPR/BR7321IK issued	12/03/2004	

Status log of the permit

Description	Date	Comments
Variation application EPR/BR7321IK/V002 received (BP3835MQ)	05/09/2006	Removal of "Particulates" from Tables 2.2.2 and S2.
Additional information received	07/09/2006	
Application EPR/BR7321IK/V002 determined and variation notice issued	10/10/2006	
Variation application EPR/BR7321IK/V003 received (QP3838UM)	25/04/2007	Installation of three Zincoff units to recover metallic zinc from the dross skimmed from the surface of the galvanizing baths.
Additional information received	18/05/2007	
Application EPR/BR7321IK/V003 determined and variation notice issued	04/06/2007	
Variation application EPR/BR7321IK/V004 received (XP3235GL)	13/10/2008	Installation of a thermal oxidiser to replace two incinerators for abatement of VOCs from Colorcoat line no.1 paint curing ovens. Installation of new bulk storage tanks for solvents used on Colorcoat line no.2.
Additional information received	10/12/2008	
Application EPR/BR7321IK/V004 determined and variation notice issued	17/12/2008	
Partial surrender application EPR/BR7321IK/S005 received (XP3730KG)	Duly made 05/05/2009	
Additional information requested	15/07/2009	
Additional information received	30/07/2009	
Application EPR/BR7321IK/S005 determined and partial surrender notice issued	31/07/2009	
Notification of change of company name received	29/09/2010	
Updated permit issued to show a change of company name	02/11/2010	
Variation application EPR/BR7321IK/V006 received	05/09/2011	Installation of a thermal oxidiser to replace an existing oxidiser on Colorcoat line no.2

Status log of the permit

Description	Date	Comments
Application EPR/BR7321IK/V006 determined and variation notice issued	11/11/2011	
Variation application EPR/BR7321IK/V007 received	Duly made 10/03/2017	Substantial variation
Additional information requested	11/07/2017	Updated air quality modelling report required to take account of effects on wildlife sites
Additional information received	07/08/2017	Statutory deadline extended by 27 days to 03/09/2017
Request for determination extension by NRW	06/09/2017	
Request for determination extension agreed by operator	11/09/2017	Statutory deadline extended by 3 months to 03/12/2017
Additional information requested	18/10/2017	Noise assessment required
Additional information received	19/12/2017	Statutory deadline extended by 62 days to 03/02/2018
Request for determination extension by NRW	29/01/2018	
Request for determination extension agreed by operator	30/01/2018	Statutory deadline extended by 1 month to 03/03/2018
Request for determination extension by NRW	02/03/2018	
Request for determination extension agreed by operator	02/03/2018	Statutory deadline extended by 20 days to 23/03/2018
20 working days draft consultation period	23/03/2018	Statutory deadline extended by 32 days to 24/04/2018
Application EPR/BR7321IK/V007 determined – variation notice and consolidated permit issued	25/04/2018	

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number
EPR/BR7321IK

This is the consolidated permit referred to in the variation and consolidation notice for application **EPR/BR7321IK/V007** authorising

Tata Steel UK Ltd (“the operator”),
whose registered office is

**30 Millbank
London
SW1P 4WY**

company registration number **2280000**
to operate a regulated facility at

**Tata Steel Colors
Shotton Site
Shotton
Flintshire
CH5 2NH**

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

Signed

Date

<i>Holly Noble</i>	25th April 2018
---------------------------	-----------------------------------

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.

1.2 Energy efficiency

1.2.1 The operator shall:

- (a) take appropriate measures to ensure that energy is used efficiently in the activities;
- (b) review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
- (c) take any further appropriate measures identified by a review.

1.3 Efficient use of raw materials

1.3.1 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”).

2.2 The site

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

2.3 Operating techniques

- 2.3.1 (a) 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 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.

2.4 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.

- 2.4.2 Except in the case of an improvement which consists only of a submission to Natural Resources Wales, the operator shall notify Natural Resources Wales within 14 days of completion of each improvement.

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 Total annual emissions from the emission point(s) set out in tables schedule 3 S3.1 and S3.2 of a substance listed in schedule 3 table S3.3 shall not exceed the relevant limit in table S3.3.

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;
 - (b) process monitoring specified in table S3.4;
- 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 continuous), 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 3.5.1 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 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 The operator shall submit an annual solvent management plan in order to demonstrate compliance with the requirements of the Industrial Emissions Directive, by 31 January each year in respect of the previous year.

4.3 Notifications

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

- (i) inform 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.
- 4.3.2 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.
- 4.3.3 Where Natural Resources Wales has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform Natural Resources Wales when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to Natural Resources Wales at least 14 days before the date the monitoring is to be undertaken.
- 4.3.4 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.
- 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
 - (c) 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 of them being in a partnership, dissolving the partnership.
- 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 into 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 listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
Section 1.1 Part A(1) (a) – Burning any fuel in an appliance with a rated thermal input of 50 or more megawatts	Operation of boilers	Operation of boilers
Section 2.1 Part A(2) (c) – Applying protective fused metal coatings with an input of more than 2 tonnes of crude steel per hour	Galvanising process – applying a fused zinc based alloy coating to steel coils using a hot dip process	From receipt of raw materials to storage of finished goods, excluding warehousing of incoming and outgoing steel coils
Section 6.4 Part A(2) (a) – Surface treating substances, objects or products using organic solvents, in particular for dressing, printing, coating, degreasing, waterproofing, sizing, painting, cleaning or impregnating, in plant with a consumption capacity of more than 150kg or more per hour than 200 tonnes per year	Coating process – applying a solvent based painted coating to steel coils	From receipt of raw materials to storage of finished goods, excluding warehousing of incoming and outgoing steel coils
Section 5.4 Part A(1) (a) (ii) – Disposal of non-hazardous waste with a capacity exceeding 50 tonnes per day (or 100 tonnes per day if the only waste treatment activity is anaerobic digestion) by physico-chemical treatment	Removal of metal and metal salts from process effluents and from landfill leachate by physico-chemical treatment	Effluent discharge to River Dee

Directly Associated Activity

Recoiling and trimming - unlisted directly associated activity	Post treatment of finished steel coils	Operation of the recoiling and trimming process
--	--	---

Table S1.2 Operating techniques

Description	Parts	Date Received
Application	Chapter 2 and Chapter 7 of Annex 6, Annex 7, Annex 9, Annex 10, Annex 11, Annex 12 and Annex 16	10 th July 2003
Application for variation	All	5 th September 2006
Additional information	All	7 th September 2006
Application for variation	All	25 th April 2007
Additional information	All	21 st May 2007
Application for variation	All	13 th October 2008
Additional information	All	10 th December 2008
Application for variation	All	5 th and 7 th September 2011
Application for variation EPR/BR7321IK/V007	All documents as submitted with the exception of the Habitat and Water Level Management Plan and air quality assessment	10 th March 2017
Additional information	Updated air quality assessment	7 th August 2017

Table S1.2 Operating techniques

Description	Parts	Date Received
Additional information	Noise assessment	2 nd November 2017 (Noise Impact Assessment Report and 3 supporting documents), 21 st November 2017 (email forwarded from Spooner Industries Limited), 4 th December 2017 (Noise Calculation), 18 th December 2017 (updated Noise Calculation), and 19 th December 2017 (email from operator confirming noise levels)
Shotton Lagoons and Reed beds Water level Management Plan	As agreed with NRW on 2 nd November 2017	2 nd November 2017

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
1	The operator shall carry out an investigation into those open channels used for conveying treated process effluents, cooling water and surface water within the site boundary to establish whether they are in hydraulic continuity with the underlying ground water. A report on these investigations shall be submitted to the Environment Agency.	Completed
2	The operator shall carry out an investigation into the risk of pollution from mobilising materials present in the sediment in the open channels formerly used for conveying untreated effluents from surface and rain water collected in these channels, A report on these investigations shall be submitted to the Environment Agency.	Completed
3	The operator shall examine the feasibility of redirecting the boiler blowdown effluent from the package boiler plant to the effluent plant from Greenwood burn. A report on these investigations shall be submitted to the Environment Agency.	Completed
4	The operator shall carry out monitoring of chromium emissions to air from emission points A17, A24, A34 and A36 using a method of sampling and analysis agreed with the Environment Agency. A report shall be made to the Agency on these emissions.	Completed
5	The operator shall submit submit a solvent management plan acceptable to the Environment Agency, using the Guidance provided in Schedule 4 of the Pollution Prevention and Control (Solvent Emissions Directive) (England and Wales) Direction 2002. This plan shall include a calculation of the fugitive emissions value as defined in the said Direction.	Completed
6	In the event that the fugitive emissions value calculated in improvement condition 5 is found to exceed 10% the operator shall submit a reduction scheme which meets the requirements in Schedule 3 of the Pollution Prevention and Control (Solvent Emissions Directive) (England and Wales) Direction 2002.	Completed
7	The operator shall implement measures, acceptable to the Environment Agency, to protect against small accidental spillages of chromate waste during its transfer to the effluent plant for treatment.	Completed
8	The operator shall implement measures acceptable to the Environment Agency, to limit the consequences of an accidental spillage whilst loading and offloading paint in bulk at the Coatings 3 building.	Completed
9	As part of the first water minimisation audit carried out under condition 2.4.2, the operator shall explicitly address the difference in water consumption per tonne of product between Colorcoat line 1 and line 2.	Completed

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
10	In respect of the monitoring requirements set out in tables 2.2.5 and 2.10.1 for emissions to water and from the effluent plant, the operator shall provide a report acceptable to the Agency setting out the monitoring methods, and the accreditation status of the equipment, and/or the monitoring organisation as appropriate for the methods used for both sampling and analysis.	Completed
11	The operator shall review the equipment, techniques, personnel and organisations employed for its emissions monitoring programme against the requirements of condition 2.10.7. The operator shall provide a report and action plan acceptable to the Agency for achieving these standards.	Completed
12	The operator shall include within their site closure environmental toolkit and within their Environmental Management System, proposals/guidance on maintaining the viability of the Tern Lagoon and Shotton Reedbeds SSSI in the event of site closure. The operator shall make this document available for inspection by the Environment Agency.	Completed

Schedule 2 - Waste types, raw materials and fuels

Table S2.1 Raw materials and fuels

Raw materials and fuel description	Specification
-	-

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) ²	Reference period	Monitoring frequency	Monitoring standard or method ¹
A1 Package Boiler House, point 14 on site plan	Package Boiler No. 1	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	300 mg/m ³ ³	-	Annual ⁶	BS EN 14792
		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	450 mg/m ³ ⁴			BS EN 14792
		Particulates	50 mg/m ³ ⁴			BS EN 13284-1 and MID
		Carbon Monoxide	- mg/m ³			BS EN 15058 under gas firing conditions. BS EN 15058 under oil firing conditions if period of operation exceeds 30 days in any year.
		Sulphur Dioxide	- Kg			By calculation from sulphur content of fuel oil. Under oil firing conditions if period of operation exceeds 30 days in any year.
A2 Package Boiler House, point 14 on site plan	Package Boiler No. 2	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	300 mg/m ³ ³	-	Annual ⁶	BS EN 14792
		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	450 mg/m ³ ⁴			BS EN 14792
		Particulates	50 mg/m ³ ⁴			BS EN 13284-1 and MID
		Carbon Monoxide	- mg/m ³			BS EN 15058 under gas firing conditions. BS EN 15058 under oil firing conditions if period of operation exceeds 30 days in any year.
		Sulphur Dioxide	- Kg			By calculation from sulphur content of fuel oil. Under oil firing conditions if period of operation exceeds 30 days in any year.
	Package Boiler No. 3	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	300 mg/m ³ ³	-	Annual ⁶	BS EN 14792

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (including unit) ²	Reference period	Monitoring frequency	Monitoring standard or method ¹
A3 Package Boiler House, point 14 on site plan		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	450 mg/m ³ ⁴			BS EN 14792
		Particulates	50 mg/m ³ ⁴			BS EN 13284-1 and MID
		Carbon Monoxide	- mg/m ³			BS EN 15058 under gas firing conditions. BS EN 15058 under oil firing conditions if period of operation exceeds 30 days in any year.
		Sulphur Dioxide	- Kg			By calculation from sulphur content of fuel oil. Under oil firing conditions if period of operation exceeds 30 days in any year.
A4 Package Boiler House, point 14 on site plan	Package Boiler No. 4	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	300 mg/m ³ ³	-	Annual ⁶	BS EN 14792
		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	450 mg/m ³ ⁴			BS EN 14792
		Particulates	50 mg/m ³ ⁴			BS EN 13284-1 and MID
		Carbon Monoxide	- mg/m ³			BS EN 15058 under gas firing conditions. BS EN 15058 under oil firing conditions if period of operation exceeds 30 days in any year.
		Sulphur Dioxide	- Kg			By calculation from sulphur content of fuel oil. Under oil firing conditions if period of operation exceeds 30 days in any year.
A5 Coatings 2 Boiler House, point 14a on site plan	Steam Boiler No. 1	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	300 mg/m ³ ³	-	Annual ⁶	BS EN 14792
		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	450 mg/m ³ ⁴			BS EN 14792
		Particulates	50 mg/m ³ ⁴			BS EN 13284-1 and MID
		Carbon Monoxide	- mg/m ³			BS EN 15058 under gas firing conditions. BS EN 15058 under oil firing conditions if period of operation exceeds 30 days in any year.

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (including unit) ²	Reference period	Monitoring frequency	Monitoring standard or method ¹
		Sulphur Dioxide	- Kg			By calculation from sulphur content of fuel oil. Under oil firing conditions if period of operation exceeds 30 days in any year.
A6 Coatings 2 Boiler House, point 14a on site plan	Steam Boiler No. 2	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	300 mg/m ³ ³	-	Annual ⁶	BS EN 14792
		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	450 mg/m ³ ⁴			BS EN 14792
		Particulates	50 mg/m ³ ⁴			BS EN 13284-1 and MID
		Carbon Monoxide	- mg/m ³			BS EN 15058 under gas firing conditions. BS EN 15058 under oil firing conditions if period of operation exceeds 30 days in any year.
		Sulphur Dioxide	- Kg			By calculation from sulphur content of fuel oil. Under oil firing conditions if period of operation exceeds 30 days in any year.
A7 Coatings 2 Boiler House, point 14a on site plan	High Pressure Hot Water boiler No. 1	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	300 mg/m ³ ³	-	Annual ⁶	BS EN 14792
		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	450 mg/m ³ ⁴			BS EN 14792
		Particulates	50 mg/m ³ ⁴			BS EN 13284-1 and MID
		Carbon Monoxide	- mg/m ³			BS EN 15058 under gas firing conditions. BS EN 15058 under oil firing conditions if period of operation exceeds 30 days in any year.
		Sulphur Dioxide	- Kg			By calculation from sulphur content of fuel oil. Under oil firing conditions if period of operation exceeds 30 days in any year.
	High Pressure Hot Water Boiler No. 2	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	300 mg/m ³ ³	-	Annual ⁶	BS EN 14792
		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	450 mg/m ³ ⁴			BS EN 14792

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (including unit) ²	Reference period	Monitoring frequency	Monitoring standard or method ¹
A8 Coatings 2 Boiler House, point 14a on site plan		Particulates	50 mg/m ³ ⁴			BS EN 13284-1 and MID
		Carbon Monoxide	- mg/m ³			BS EN 15058 under gas firing conditions. BS EN 15058 under oil firing conditions if period of operation exceeds 30 days in any year.
		Sulphur Dioxide	- Kg			By calculation from sulphur content of fuel oil. Under oil firing conditions if period of operation exceeds 30 days in any year.
A12 No. 1 Colorcoat Line, point 6 on site plan	Regenerative Thermal Oxidiser (Original)	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	100 mg/m ³	-	Annual	BS EN 14792
		Carbon Monoxide	100 mg/m ³ ⁵		Continuous	Not for reporting purposes
		Carbon Monoxide	100 mg/m ³		Annual	BS EN 15058
		Volatile Organic Carbon (as C)	50 mg/m ³		Annual	BS EN 12619
A12a No. 1 Colorcoat Line, point 6 on site plan	Regenerative Thermal Oxidiser (Replacement)	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	100 mg/m ³	-	Annual	BS EN 14792
		Carbon Monoxide	100 mg/m ³ ⁵		Continuous	Not for reporting purposes
		Carbon Monoxide	100 mg/m ³		Annual	BS EN 15058
		Volatile Organic Carbon (as C)	50 mg/m ³		Annual	BS EN 12619
A13 No. 1 Colorcoat Line, point 6 on site plan	Coater House Extraction LEV	Volatile Organic Carbon (as C)	- mg/m ³	-	Annual	BS EN 12619

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (including unit) ²	Reference period	Monitoring frequency	Monitoring standard or method ¹
A14 No. 1 Colorcoat Line, point 6 on site plan	Wash Tank Extraction LEV	Volatile Organic Carbon (as C)	- mg/m ³	-	Annual	BS EN 12619
A15 No. 1 Colorcoat Line, point 6 on site plan	Paint Kitchen Extraction LEV	Volatile Organic Carbon (as C)	- mg/m ³	-	Annual	BS EN 12619
A16 No. 1 Colorcoat Line, point 6 on site plan	Pre Clean Extraction LEV	-	-	-	-	-
A18 – No. 1 Colorcoat Line, point 6 on site plan	COBRA Regenerative Thermal Oxidiser	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	100 mg/m ³	-	Annual	BS EN 14792
		Carbon Monoxide	100 mg/m ³ ₅		Continuous	Not for reporting purposes
		Carbon Monoxide	100 mg/m ³		Annual	BS EN 15058
		Volatile Organic Carbon (as C)	20 mg/m ³		Annual	BS EN 12619
A21 No. 2 Colorcoat Line, point 17 on site plan		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)	100 mg/m ³	-	Annual	BS EN 14792
		Carbon Monoxide	100 mg/m ³ ₅		Continuous	Not for reporting purposes
		Carbon Monoxide	100 mg/m ³		Annual	BS EN 15058

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (including unit) ²	Reference period	Monitoring frequency	Monitoring standard or method ¹
	Thermal Oxidiser Unit (Original)/Regenerative Thermal Oxidiser Unit (Replacement)	Volatile Organic Carbon (as C)	20 mg/m ³		Annual	BS EN 12619
A22 No. 2 Colorcoat Line, point 17 on site plan	Paint Kitchen Extraction LEV	-	-	-	-	-
A23 No. 2 Colorcoat Line, point 17 on site plan	Pre Clean Extraction LEV	-	-	-	-	-
A31 No. 5 Galvanising Line, point 7 on site plan	Direct Fired Furnace Stack (waste heat boiler not used)	Carbon Monoxide	- mg/m ³	-	Annual	BS EN 15058
		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)				BS EN 14792
		Carbon Monoxide	- mg/m ³	-	Annual	BS EN 15058

Table S3.1 Point source emissions to air – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (including unit) ²	Reference period	Monitoring frequency	Monitoring standard or method ¹
A32 No. 5 Galvanising Line, point 7 on site plan	Direct Fired Furnace Stack (including waste heat boiler)	Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)				BS EN 14792
A33 No. 5 Galvanising Line, point 7 on site plan	Radiant Tube Furnace Stack	Carbon Monoxide	- mg/m ³	-	Annual	BS EN 15058
		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)				BS EN 14792
A34 No. 5 Galvanising Line, point 7 on site plan	Former Chromate Extraction	-	-	-	-	-
A35 No. 6 Galvanising Line, point 8 on site plan	Direct Fired Furnace and Radiant Tube Furnace Stack	Carbon Monoxide	- mg/m ³	-	Annual	BS EN 15058
		Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂)				BS EN 14792

Note 1: Or as subsequently recommended in Technical Guidance Note M2 or devolved equivalent

Note 2: All thermal oxidiser emissions and furnace emissions are to be reported as actual oxygen, not corrected.

Note 3: Limit under gas firing conditions

Note 4: Limit under oil firing conditions

Note 5: Limit based on 24-hour average of 15 minute values

Note 6: Monitoring only to be undertaken if period of operation exceeds 30 days in any year

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 – Broken Bank Pumping House discharging to the River Dee	Lagoon collecting all site surface waters, treated process effluent and waste water from water supply treatment plant	Flow	15,000 m ³ /day(4 hours commencing one hour before each high tide)	-	Continuous	Method to be agreed in writing with NRW
		Flow at all other times	0		Continuous	
		pH	5 - 9		Daily sample ¹	
		Suspended solids (mg/l)	100		Daily sample ¹	
		Chemical Oxygen Demand (mg/l)	200		Daily sample ¹	
		Iron (mg/l)	10		Daily sample ¹	
		Chromium (mg/l)	0.3		Daily sample ¹	
		Mercury (µg/l)	10		Every 3 months	
		Nickel (mg/l)	0.6		Daily sample ¹	
		Zinc (mg/l)	0.8		Daily sample ¹	
		Ammoniacal Nitrogen (mg/l)	-		Daily sample ¹	
Effluent Plant Discharge	Effluent Plant Discharge	pH	-	-	Daily sample ¹	Method to be agreed in writing with NRW

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
Effluent Plant Discharge	Effluent Plant Discharge	Iron (mg/l)	-	-	Daily sample ¹	Method to be agreed in writing with NRW
Effluent Plant Discharge	Effluent Plant Discharge	Chromium (mg/l)	-	-	Daily sample ¹	Method to be agreed in writing with NRW
Effluent Plant Discharge	Effluent Plant Discharge	Nickel (mg/l)	-	-	Daily sample ¹	Method to be agreed in writing with NRW
Effluent Plant Discharge	Effluent Plant Discharge	Zinc (mg/l)	-	-	Daily sample ¹	Method to be agreed in writing with NRW
Effluent Plant Discharge	Effluent Plant Discharge	Mercury (µg/l)	-	-	Every 3 months	Method to be agreed in writing with NRW

Note 1: Monitoring requirement suspended if effluent plant not operational and therefore not discharging

Table S3.3 Annual limits

Substance	Medium	Limit (including unit)
-	-	-

Table S3.4 Process monitoring requirements

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Thermal oxidisers on No.1 and No.2 Colorcoat Lines	Combustion temperature	Continuous monitoring	-	-
Thermal oxidisers on No.1 and No.2 Colorcoat Lines	Flame failure detection	Continuous monitoring	-	-

Schedule 4 - Reporting

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

Table S4.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Sulphur Dioxide (Kg)	A1 to A8	Annually	17/03/2004 ¹
Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂) (mg/m ³)	A1 to A8	Annually	17/03/2004 ²
Carbon Monoxide (mg/m ³)	A1 to A8	Annually	17/03/2004 ²
Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂) (mg/m ³)	A1 to A8	Annually	17/03/2004 ³
Particulates (mg/m ³)	A1 to A8	Annually	17/03/2004 ³
Carbon Monoxide (mg/m ³)	A1 to A8	Annually	17/03/2004 ³
Oxides of Nitrogen (NO and NO ₂ expressed as NO ₂) (mg/m ³)	A12 ⁴ , A12a, A18, A21, A31, A32, A33 and A35	Annually	17/03/2004
Carbon Monoxide (mg/m ³)	A12 ^{4,5} , A12a ⁵ , A18 ⁵ and A21 ⁵	Annually	17/03/2004
VOCs (mg/m ³)	A12 ⁴ , A12a, A13 to A15, A18 and A21	Annually	17/03/2004
Flow (m ³ /day)	W1	Every 3 months	01/04/2004 (mean and maximum)
Chemical Oxygen Demand (mg/l)	W1	Every 3 months	01/04/2004 (mean and maximum)
Suspended Solids (mg/l)	W1	Every 3 months	01/04/2004 (mean and maximum)
pH	W1 and Effluent Plant	Every 3 months	01/04/2004 (minimum and maximum)
Iron (mg/l)	W1 and Effluent Plant	Every 3 months	01/04/2004 (mean and maximum)
Chromium (mg/l)	W1 and Effluent Plant	Every 3 months	01/04/2004 (mean and maximum)
Mercury (µg/l)	W1 and Effluent Plant	Every 3 months	01/04/2004
Nickel (mg/l)	W1 and Effluent Plant	Every 3 months	01/04/2004 (mean and maximum)
Zinc (mg/l)	W1 and Effluent Plant	Every 3 months	01/04/2004 (mean and maximum)
Ammoniacal Nitrogen (mg/l)	W1	Every 3 months	01/04/2004 (mean and maximum)
Water usage	-	Annually	17/03/2004
Energy usage	-	Annually	17/03/2004

Table S4.1 Reporting of monitoring data

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Waste disposal and/or recovery	-	Annually	17/03/2004

Note 1: Calculation from sulphur content of fuel oil and fuel oil consumption

Note 2: For gas firing conditions

Note 3: For oil firing conditions if period of operation exceeds 30 days in any year

Note 4: A12 to be removed from condition on confirmation of decommissioning of redundant thermal oxidiser

Note 5: Reported on basis of annual monitoring result

Table S4.2: Annual production/treatment

Parameter	Units
Production of galvanised steel product	tonnes
Production of colorcoated steel product	tonnes
Total production of coated steel products	tonnes

Table S4.3 Performance parameters

Parameter	Frequency of assessment	Units ¹
Primary energy use	Annually	MW-hr/tonne
Total VOC emission to air as Carbon	Annually	Kg/tonne ²
VOC Fugitive emissions value	Annually	%
Potable water use	Annually	m ³ /tonne
Non potable water use	Annually	m ³ /tonne
Quantity of hazardous waste	Annually	Kg/tonne
Quantity of non-hazardous waste	Annually	Kg/tonne

Note 1: Performance indicator should be referenced to total production of coated steel products unless otherwise stated

Note 2: VOC emissions should be referenced to production of colorcoated steel products only

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	25/04/2018
Water (excluding sewer)	Form water 1 or other form as agreed in writing by Natural Resources Wales	25/04/2018
Water usage	Form water usage 1 or other form as agreed in writing by Natural Resources Wales	25/04/2018
Energy usage	Form energy 1 or other form as agreed in writing by Natural Resources Wales	25/04/2018
Other performance indicators	Form performance 1 or other form as agreed in writing by Natural Resources Wales	25/04/2018

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.

“*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.

“*disposal*” means any of the operations provided for in Annex IIA to Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on Waste.

“*EP Regulations*” means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 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 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.

“*hazardous property*” has the meaning in Annex III of the Waste Framework Directive.

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

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

“*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.

“*Waste code*” means the six digit code referable to a type of waste in accordance with the list of wastes established by Commission Decision 2000/532/EC as amended from time to time (the ‘List of Wastes Decision’) and in relation to hazardous waste, includes the asterisk.

“*year*” means calendar year ending 31 December.

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:

in relation to emissions from combustion processes (other than thermal oxidisers and furnaces), 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

in relation to emissions from thermal oxidisers, furnaces and 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

