

Compliance Assessment Report

Report ID:
CAR_NRW0031115

This form will report compliance with your permit as determined by an NRW officer

Site	Port Talbot Steel Works EPR/BL7108IM	Permit Ref	BL7108IM		
Operator/Permit holder	Tata Steel UK Limited				
Regime	Installations				
Date of assessment	09/02/2017	Time in	14:00	Out	15:30
Assessment type	Audit				
Parts of the permit assessed	1 Management; 2 Operations; 3 Emissions and Monitoring; 4 Information				
Lead officer's name	Broom, Mark				
Accompanied by	Cowie, Douglas,Baskerville, Guy				
Recipient's name/position	Jason Heatman/ Senior Environmental Engineer	Date issued	11/04/2017		

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
A1 - Specified by permit	A	
C2 - General Management - Management system and operating procedures	A	
E1 - Emissions - Air	A	
G2 - Monitoring and Records, Maintenance and Reporting - Records of activity, site diary/journal/events	A	
H1 - Resource Efficiency - Efficient use of raw materials	A	

KEY: See Section 5 for breach categories, suspended scores will be indicated as such.

A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,

O = Ongoing non-compliance, not scored.

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
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If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

Site description

Tata Steel UK Ltd (Tata) operates an integrated iron and steel works at Port Talbot, Neath Port Talbot. The site is permitted as an installation under the Environmental Permitting Regulations (EPR). The steelworks has several identifiable permitted processes which are carried out sequentially across the installation to convert raw iron ores and coal to semi finished (slab) and finished steel products (such as hot rolled, pickled and oiled, cold rolled and annealed). The permit also covers coke making and the reception, stockpiling and blending of raw iron making materials. Three other companies, Cambrian Stone, Harsco Metals and ICL, undertake separately-permitted slag handling, iron plating and cold mill effluent treatment activities at the steelworks on Tata's behalf.

Purpose of visit/assessment

A meeting was held to discuss the data and conclusions from Tata and Harsco's joint assessment undertaken to comply with the requirements of Improvement Condition (IC) 15, concerning emissions from molten iron pouring and plating. We have subsequently assessed Tata's IC15 written submission (equivalent IC3 in Harsco's permit).

A proposal for alternative use of service water was also briefly discussed.

The relevant permit conditions are listed under Sections 1.1, 1.3, 2.3, 2.5, 3.2 and 4.1 of Tata's permit.

Persons present

Tata Steel

Jason Heatman

Andrew Townsend (plating only)

Reg Bennett (plating only)

Paul Davies (plating only)

Chris Roberts (water only)

Harsco Metals

Paul Roberts

Mark Hancock

Mark Tilling

NRW

Mark Broom

Douglas Cowie

Guy Baskerville

Improvement Condition 15

Tata Steel and Harsco Metals share responsibility for the management and preparation of the iron

plating pits at Port Talbot steelworks. In January 2015 there was an incident with plating pit number 3 which resulted in a sudden release of smoke and fumes towards the end of a torpedo pour. This incident was investigated by NRW and our findings recorded in CAR 5854 and CAR 5915. One of the outcomes from our investigation was the incorporation of an Improvement Condition (IC) into both companies' permits to examine the factors that could affect emissions from iron pouring and plating. For Tata, IC15 requests the following:

IC 15	The operator shall provide a written report to Natural Resources Wales XX/02/17 that assesses the influence of the following factors: a) molten iron chemistry; b) molten iron viscosity; c) torpedo temperature and standing time; d) torpedo size; and e) any other relevant factors on the potential for environmental emissions from molten iron pouring and plating. The relationship between torpedo pouring angle and the duration of pouring for different sized torpedoes shall be explored as part of the report.
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Tata and Harsco representatives presented the results from their joint study and analysis in response to IC15 / IC3. A total of 355 molten iron torpedoes were plated in 2016 and 22 Environmental Incident Forms (EIFs) were filed during this period in response to fumes generated from plating activities. Plating was carried out more frequently during June and November 2016 owing to reduced capacity at the Basic Oxygen Steelmaking (BOS) Plant while some BOS converters were being re-lined. Data and observations from a variable range of plating circumstances was available to conduct the study.

Plating activity data from three calendar quarters was examined more closely. No data correlations or relationships were observed for the factors listed in IC15, therefore it is difficult to attribute the potential for emissions to a set of known conditions or one particular factor. Molten iron viscosity proved more difficult to measure than the other factors and was excluded from the analysis. Viscosity is a function of molten iron temperature for which no distinct correlation was observed.

The speed of pour may have some influence but the study found that emissions were recorded at different torpedo pouring speeds and no distinct correlation was found. More critical is the harmonisation of Tata and Harsco operating procedures and communications to ensure that clear lines of responsibility in respect of the torpedo pour are established. Both companies have undertaken a review of procedures since the January 2015 incident to ensure these documents are aligned.

Tata's written submission in response to IC15 was received by NRW on 16 March 2017. An extended deadline was agreed with NRW in response to ambiguity regarding the compliance date (error in permit). The submission confirms the conclusions from our visit on 09/02/17 and NRW accepts that no clear correlation or relationship is evident from the 2016 plating data when the factors listed in IC15 are considered.

Pouring and plating must therefore be carefully monitored to minimise the possibility of violent reactions and/or uncontrolled fume releases. A semi-automated pouring system could be adopted to allow operators to initiate and control the torpedo pour more easily. Tata should ensure enough notice is provided (minimum 1-hour) to allow its contractor Harsco sufficient time to prepare the necessary plating pit(s).

Alternative use of service water

Tata has been looking at ways to reduce costs while maintaining its current level of operations at Port Talbot. One idea being considered is to replace the use of service water at Sump 2 with Arnallt Brook water. Currently the Arnallt Brook watercourse is not utilized and is pumped across

the steelworks and out to sea at Abbey Beach. Significant savings in service water could potentially be achieved if this scheme was implemented; however it would be better to **avoid** the use of any additional water at Sump 2. It is recommended that Tata re-evaluates its activities at Sump 2 to maximise water efficiencies in this part of the steelworks.

[ENDS]

EPR Compliance Assessment Report

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Section 3 – Enforcement Response

You must take immediate action to rectify any non-compliance and prevent repetition.

Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/services relating to environmental matters
- Consulting with the public, public bodies and other organisations (eg. Health and Safety Executive, local authorities) on environmental issues
- Carrying out statistical analysis, research and development on environmental issues
- Providing public register information to enquirers
- Investigating possible breaches of environmental law
- Assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.