

Compliance Assessment Report

Report ID: CAR_NRW0036102

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

Site	Port Talbot Steelworks	Permit Ref	BL7108IM
Operator/Permit holder	Tata Steel UK limited		
Regime	Installation		
Date of assessment	25 th November 2019		
Assessment type	Inspection		
Parts of the permit assessed	See section 2		
Lead officer's name	Neil Herbert & Doug Cowie	Accompanied by	N/A
Recipient's name/position	Claire Grainger – Environment Manager (S.H.E. Dept) For distribution to relevant department heads.	Date issued	18 th December 2019

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations. 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	
B1 - Infrastructure - Engineering for prevention and control of emissions	A	
B2 - Infrastructure - Closure and decommissioning	N	
B3 - Infrastructure - Site drainage engineering (clean and foul)	N	
B4 - Infrastructure - Containment of stored materials	N	
B5 - Infrastructure – Plant and equipment	A	
C1 - General Management - Staff competency/training	N	
C2 - General Management - Management system and operating procedures	N	
C3 - General Management - Materials acceptance	N	
C4 - General Management - Storage, handling labelling, labelling and Segregation	N	
D1 - Incident Management - Site security	N	
D2 - Incident Management - accidents, emergency and incident planning	A	
E1 - Emissions - Air	N	
E2 - Emissions - Land and groundwater	N	
E3 - Emissions - Surface water	N	
E4 - Emissions - Sewer	N	
E5 - Emissions - Waste	N	
F1 - Amenity - Odour	N	
F2 - Amenity - Noise	N	
F3 - Amenity - Dust/ fibres/ particulates/ litter	N	
F4 - Amenity - Pests/birds/scavengers	N	
F5 - Amenity - Deposits on road	N	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	N	
G2 - Monitoring and Records, Maintenance and Reporting - Records of activity, site diary/journal/events	N	
G3 - Monitoring and Records, Maintenance and Reporting - Maintenance records	N	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	N	
H1 - Resource Efficiency - Efficient use of raw materials	N	
H2 - Resource Efficiency - Energy efficiency	N	

KEY: See Section 4 for breach categories, suspended scores will be indicated as such.

A = Assessed or assessed in part (no evidence of non-compliance), **N** = Not Assessed, **X** = Action only

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

Introduction

Meeting was scheduled to discuss the following matters:

- to check progress with ongoing continuous noise abatement work at the steelworks and clarify next steps;
- to review blast furnace bleeder valve releases notified by Tata Steel during 2019 and to discuss possible contributing factors and/or identified root causes;
- to discuss potential sources of intermittent steelworks noise and identify ways of mitigating noise from certain activities;
- AOB's

Sinter Plant Circular Cooler – Cooling fans noise abatement improvement programme

During this meeting the following update was provided in respect of the sinter plant cooling fans noise abatement programme:

- sound attenuation unit (silencer) for No.1 cooling fan now installed and online;
- silencer for No.2 cooling fan delayed due to damaged fan mechanism. Scheduled for installation by Friday 29/11/2019;
- silencer for No.3 cooling fan scheduled for installation by 29/11/2019.

Sound monitoring has been carried out following the installation of No.1 cooling fan silencer. Further monitoring is scheduled once No.2 and No.3 units are fitted.

UPDATE: whilst this report was being compiled, we have been informed that the installation of the remaining abatement has been delayed for a variety of reasons (technical and weather related). At the time of writing the operator has indicated that the work to no 3 will be completed by the 22nd December 2019. Subsequent sound monitoring will be undertaken after the Christmas holiday period (weather permitting).

Action: Tata Steel to provide an interim report on actions taken and provide the results of sound monitoring undertaken to date. This action is now overdue. .

Action: Further sound monitoring will need to be undertaken by the operator as soon as reasonably practicable and during suitably calm weather to fully assess the local soundscape following installation of the new cooling fan silencers.

During the meeting NRW also expressed concern over the TATA capability to undertake sound monitoring in a prompt manner. Tata group specialist is based at Rotherham. This makes it difficult for TATA to respond quickly and in turn affects their ability to properly investigate noise complaints. NRW believe that TATA need to develop a sound monitoring capability at the Port Talbot facility to allow the flexible and timely response required to properly investigate noise complaints. **Action**

Intermittent noise issues - 'barrel drop'

The steelworks is perceived to be the source of intermittent night-time 'barrel drop' (crashing/banging) noise complaints. Potential sources of this noise could be the slab handling operations and/or possible grading of site roads. As a precaution TATA have now (routinely¹) restricted the grading of roads to daytime hours. A revised procedure has been developed by Tata to ensure this is done. Tata have also developed (and implemented) a revised procedure for the handling of slabs returned from the Hot Mill Reheat Furnaces. The handling of these slabs will not be undertaken at night- time.

Blast furnace bleeder valve releases: 2019

- Blast furnace production, operation and the purpose of bleeder valves is discussed in previous inspection (CAR) reports and not reproduced here.
- Tata Steel has notified NRW about a number of blast furnace bleeder valve releases in 2019. These can be divided into three distinct periods:
- February – April 2019
 - During this period there were several bleeder valve releases when restarting Blast Furnace No.5 (BF5) following a major furnace repair in late 2018. These releases have previously been discussed² with NRW and were not discussed at length during this visit. NRW are now awaiting the submission of the Schedule 5, Part B forms which are now overdue. On submission of this information we will complete the assessment of this event. **Action**

¹ The operator may occasionally need to undertake emergency grading however the decision to undertake the grading in these circumstances would require permission from the shift manager and the reasons documented.

² See CAR_NRW0034781

- June – August 2019

Three bleeder valve events were notified during this period:

- 25 June 2019³. A gas surge within BF5 resulted in a bleeder valve opening. The snort valve was opened to release gas pressure and shorten the opening;
The root cause(s) of this release remain under investigation and NRW are awaiting the findings from this investigation. **Action** Submit Schedule 5, Part B form (overdue).
- 23 July 2019⁴. A gas surge within BF5 resulted in a bleeder valve opening. The snort valve was opened to release gas pressure and shorten the period the bleeder valves were open.
The root cause of this release has been identified as furnace instability following unplanned disruption to the furnace oxygen (O₂) supply. The supply was disrupted following a fire at a nearby industrial gas manufacturing plant. Tata Steel took steps to control furnace activity and to minimise the number of bleeder valve openings. The Schedule 5 Part B form is overdue for this event. **Action**
- 18 August 2019⁵. A gas surge within BF5 resulted in a bleeder valve opening. The snort valve was opened to release gas pressure and shorten the period the bleeder valves were open.
The root cause(s) of this release remain under investigation but are thought to be a combination of factors rather than a single root cause. NRW have agreed that the Schedule 5, Part B form for this event will be submitted by the 31st of January 2020 (unless otherwise agreed). **Action**

- October 2019

- During this period there was a series of bleeder valve releases from both blast furnaces.
Tata believe that raw materials used within the ironmaking process became saturated with moisture following a period of very heavy rain. Excessive moisture within a blast furnace can lead to stability issues, gas surges and bleeder valve openings. At Port Talbot, raw materials are normally stored in open stockyards which are exposed to the elements. Blast furnace operation is normally adjusted to cater for additional moisture entering the furnace. In this case, two specific factors exacerbated the impact of the heavy rainfall.
 1. A site drainage problem within the stockyards – exposed by the heavy rain – resulted in some localised flooding and waterlogged raw materials.
 2. The supply of fresh sinter (a blend of ironmaking raw materials) which is routinely the main feedstock for both blast furnaces was not available due to a sinter plant planned maintenance shutdown.

The destabilising influence of wet raw materials entering both furnaces was therefore significantly greater than it would otherwise have been.

The Schedule 5 Part B form is overdue for this event. **Action**

General Comment

We were informed that for each event the bleeder valves operated as designed (i.e. in response to a sudden gas surge). The valves were only operational for few seconds during each event. These valves are safety critical equipment found at all blast furnace systems across the World. It is understood that no other alternative is available when using this ironmaking technique. Noise abatement is not possible in such devices. A full compliance assessment of the releases will be completed on receipt and assessment of the remaining part B forms.

Environmental Permit (EPR) reporting requirements

NRW have reviewed the frequency at which environmental monitoring data (required by Tata Steel's permit) needs to be reported to the regulator. The current permit appears to have an error in that the reporting periods are inconsistent with other permits, specifically a large portion of the monitoring undertaken at the facility is submitted annually.

For consistency NRW have requested that TATA voluntarily submit their monitoring returns to the correct reporting frequency, until such time as the permit can be corrected. We have requested that this process starts in 2020 with the first submission due on the 28th April 2020.

³ Tata S5 Reference: S5N/19/31

⁴ Tata S5 Reference: S5N/19/35

⁵ Tata S5 Reference: S5N/19/38a

For example

- results from continuous, daily, weekly, monthly or quarterly monitoring would be reported at quarterly intervals (e.g. the results from January to March 2020 monitoring period will be due on the 28th April 2020);
- the results from monitoring undertaken at six monthly frequencies are due at the end of Jul.;
- any other monitoring returns required annually are due by the 28th of January of the following year.

NRW have agreed to meet with Jason Massey (S.H.E Department) in the new year to agree and discuss the monitoring and reporting requirements for the permit. **Action**

Coke-side fume arrestment system (Ministerstein)

This project was initially scheduled for completion by September 2019. Project overrun has resulted in a revised completion date of December 2019⁶. However, whilst this report was being compiled NRW have since been informed that the work will not be completed by the revised December 2019 deadline. Tata have now indicated that the project will not be completed until February 2020.

NRW is concerned over the continued delays in replacing the coke-side fume arrestment (abatement) system. Whilst it is acknowledged that there have been project challenges, and temporary water spray fume mitigation has been used in the interim period, the fact remains that the plant will (by February 2020) have been operating without an effective coke-side fume abatement system for nearly 12 months. NRW undertook a site visit to the coke ovens on the 11th of December and a separate report documenting this visit will be issued shortly. As part of that report we intend to assess the compliance implication of the delayed installation of this key abatement measure.

Use of 'incinerator' scrap metal

Tata Steel already uses scrap metal recovered from incinerator bottom ash (IBA) within its Basic Oxygen Steelmaking (BOS) process. At present, IBA is processed off-site to separate useful 'incinerator' scrap metal fragments, which are then transferred to the steelworks as non-hazardous waste.

Tata proposes to receive unprocessed incinerator scrap (which has not been subject to prior treatment/processing), directly from third party incinerators. This material contains an IBA fraction which needs to be separated from the metal. Tata is exploring options to process this material within the steelworks installation before transferring the recovered scrap to the BOS Plant. Tata has asked for permission to conduct a limited trial on this basis.

NRW requires further information regarding:

1. the waste characterisation and categorisation of this unprocessed material; and
2. the proposed trial site infrastructure

before we can consider Tata Steel's trial proposal. This was discussed and clarified with the operator and we await Tata's updated trial proposal.

List of person(s) present at the meeting (some persons only attended parts of the meeting)

Tata Steel	
Claire Grainger	Environment Manager
Andrew Townsend	Lead Environmental Engineer
Beverley Jenkins	Lead Environmental Engineer
Michael Launder	Environmental Engineer
Jason Massey	Environmental Engineer
Ian Vaughan	Works Manager (Ironmaking)
Lee Adams	<i>Hot Mill Engineer</i>
Rob Sydenham	Fire & Environment Manager - Mills
Kevin James	Works Area Engineer, Burdening
NRW	
Neil Herbert	Technical Specialist
Doug Cowie	Senior Officer – Industry Regulation

End of section 2

⁶ See CAR dated 10th October 2019 - CAR_NRW0035822

Compliance Assessment Report

Report ID: CAR_NRW0036102

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Site	Port Talbot Steelworks	Permit Ref	BL7108IM
Operator/Permit holder	Tata Steel UK limited	Date	25 th November 2019

Section 3 – Enforcement Response

Only one box should be ticked

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.

Other than the provision of advice and guidance, at present we do not intend to take further enforcement action in respect of the non-compliance identified above. This does not preclude us from taking enforcement action if further relevant information comes to light or advice isn't followed.

In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.

We will now consider what enforcement action is appropriate and notify you, referencing this form.

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			
		Tata Steel to provide an interim [noise] report on actions taken and provide the results of sound monitoring undertaken to date.	Overdue
		Additional sound monitoring will need to be undertaken by the operator following installation of the new cooling fan silencers	following installation of remaining sinter fan noise abatement enclosure
		TATA need to train and equip staff, based locally to the steelwork, to undertake noise monitoring.	No deadline specified but NRW expect Tata to develop this capability in 2020
		Submit following Schedule 5 part B forms for the blast furnace bleeder release/s: - that occurred between February and April 2019; - that occurred on the 25th June 2019; - that occurred on the 23rd July 2019; - that occurred during October 2019.	Overdue
		Submit following Schedule 5, part B form for the blast furnace bleeder release: that occurred on the 18th August 2019.	31 st of January 2020 (unless otherwise agreed with NRW)
		Tata to provide further information on the incinerator scrap trial, specifically: - the waste characterisation and categorisation of this unprocessed material; and - the proposed trial site pollution control infrastructure.	No deadline specified

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 (e.g. 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 reports should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within twenty 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.