

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

Site	Tata Steel Port Talbot steelworks	Permit Ref	BL7108IM (as amended)
Operator/ Permit holder	Tata Steel UK Ltd		
Date	10 October 2014	Time in	09.30 Out 11.30
What parts of the permit were assessed	See below		
Assessment	EPR - inspection	EPR Activity:	Installation X Waste Op Water Discharge
Recipient's name/position	Jason Heatman, Lead Environmental Engineer, Tata Steel Port Talbot		
Officers names	DMP Broom & DE Cowie	Date issued	10 March 2015

Section 1 - Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations. A detailed explanation and any action you may need to take are given in the "Detailed Assessment of Compliance" (section 3). 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

Condition(s) breached

a) Permitted activities	1. Specified by permit	A	
b) Infrastructure	1. Engineering for prevention & control of pollution	N	
	2. Closure & decommissioning	N	
	3. Site drainage engineering (clean & foul)	N	
	4. Containment of stored materials	N	
	5. Plant and equipment	A	
c) General management	1. Staff competency/ training	N	
	2. Management system & operating procedures	A	
	3. Materials acceptance	N	
	4. Storage handling, labelling, segregation	N	
d) Incident management	1. Site security	N	
	2. Accident, emergency & incident planning	N	
e) Emissions	1. Air	N	
	2. Land & Groundwater	N	
	3. Surface water	N	
	4. Sewer	N	
	5. Waste	N	
f) Amenity	1. Odour	N	
	2. Noise	N	
	3. Dust/fibres/particulates	N	
	4. Pests, birds & scavengers	N	
	5. Deposits on road	N	
g) Monitoring and records, maintenance and reporting	1. Monitoring of emissions & environment	N	
	2. Records of activity, site diary, journal & events	N	
	3. Maintenance records	N	
	4. Reporting & notification	N	
h) Resource efficiency	1. Efficient use of raw materials	A	
	2. Energy	A	

KEY: C1, C2, C3, C4 = CCS breach category (* suspended scores are marked with an asterisk),
A = Assessed or assessed in part (no evidence of non-compliance), N = Not assessed, NA = Not Applicable

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
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If the Total No Breaches is greater than zero, then please see Section 3 for details of 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 (e.g. 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 suspended or consolidated scores.
- details of advice given
- any other areas of concern
- all 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. Two other companies, Cambrian Stone and Harsco, undertake separately-permitted slag handling and iron plating activities at the steelworks on Tata's behalf.

Purpose of visit/assessment

There are a number of major capital projects (CAPEX) that are needed to comply with a number of Iron and Steel Best Available Techniques (BAT) conclusions. This meeting reviewed progress with the CAPEX projects for the steel plant and the sinter plant.

Person(s) present (Office based)

Tata Steel	Richard Leonard	NRW	Mark Broom
	Jason Heatman		Doug Cowie
	Fiona Abbott		
	Wayne Lewis		
	Andrew Jones		
	Stuart Lloyd		

Steel plant secondary de-dusting and fume extraction

BAT 78 requires the steel plant to meet particulate levels of 15 mg/m³ as a daily mean for bag filters and 20 mg/m³ for electrostatic precipitators (ESPs). The site has to comply with these levels by March 2016 – the fourth anniversary of the publication date of these conclusions (unless a derogation is on place within the EPR permit). The Tata Steel BAT conclusions (EPR Regulation 60) response confirms that Port Talbot steelworks will comply (with BAT 78) by March 2016. NRW is reviewing the detail of these submissions and we understand that the CAPEX project for the plant as a whole is needed to comply with this BAT conclusion.

The steel plant fume extraction system has been added to and has evolved over the years without rebalancing and optimising the system as a whole. The CAPEX project to upgrade this system has been split into two phases: £4.8M in the first phase and then £5.2M in the second. As well as allowing Tata to meet BAT 78, the project should offer other benefits in terms of the working environment within the steel plant, reducing dust build up and giving the operators better control of the fume extraction system.

The current system is essentially in two parts that are linked: the secondary de-dust system for the main steel plant building; and the hot metal pouring (HMP) fume abatement system. The HMP system extracts air/fume from the hot metal pouring (into ladles) and the desulphurisation plant areas. For the de-dust system, an additional filter is proposed to serve the two Basic Oxygen Steelmaking (BOS) converters and the CASOB secondary steel area and a new hood for the CASOB plant. For the HMP bay abatement, several improvements are planned including replacement of the travelling hood, overhaul of the filter, addition of another (new) filter, providing a ring main link to the de-dust system and upgrading the drive systems to the abatement fans.

New instrumentation has been installed within the steel plant to help verify the design of these improvements and optimise the duct velocities to help improve capture of the secondary dust. The project team has also looked at the arrangements in place at Tata's Scunthorpe and Ijmuiden plants to see if any good practice/innovative techniques can be adopted. The design is at the concept stage, while the project itself is at the Tata board approval stage and moving towards detailed design.

Sinter plant

There are two main projects that come together to improve the sinter plant operations: upgrade/refurbishment of the main ESPs (primary emissions abatement) and their associated equipment and the improvements to the sinter de-dust system (secondary emissions abatement).

For the secondary de-dust system, Tata has considered 3 approaches – a new replacement ESP, upgrade of the existing ESP or installing a bag filter. Initially Tata had rejected upgrading the existing ESP but after detailed inspection Tata believes it can improve the current ESP within the existing site footprint. Tata is currently considering a multi high field ESP upgrade. This work will need to be carried out during a prolonged shutdown of the sinter plant. Such a shutdown is already planned for the sinter cooler replacement project which will take around 5 weeks to complete. This work is currently planned for October 2016; Tata have therefore applied for a derogation for the de-dust plant for the period between March and December 2016. NRW is currently assessing Tata's derogation submission.

There is almost 1.5 km of ducting associated with the sinter plant de-dust system. Tata has employed a contractor to carry out a study of the air flows within the sinter de-dust ducting to help the company optimise dust capture and identify efficiencies. The set-up in place at Ijmuiden steelworks has also been examined.

In terms of primary sinter plant emissions abatement, the lignite lime process (which allows abatement of dioxin emissions) cannot start until a wind main air ingress problem has been resolved. There is an ongoing programme to survey and repair leaks in the wind main. Some sections need to be replaced which will improve the residence time and temperatures inside the ESPs. The replacement double-dome valves have also proved effective but there has been some corrosion found on the domes of some valves. In addition new oxygen probes have been installed on the base of the hoppers under the ESPs which are used to collect the dust. These probes are designed to be used to alert the operators of air ingress and the increased risk of 'glow fires' inside the ESPs. These probes will work in tandem with temperature control sensors on the lignite hopper feed system. Finally, some configuration changes will be needed to the sinter plant conveyor system.

ESP performance is temperature sensitive. Once all the above improvements have been made lignite lime can be reintroduced. These works should be completed during the October 2015 sinter plant stop which allows nearly 6 months of time to optimise the lignite lime and ESP systems to meet the sinter plant BAT-AELs (Associated Emission Limits).

The last strand of Tata's strategy for the sinter plant main stack is to reduce the chloride content of 'reverts' (iron and carbon-rich solids from the blast furnace gas cleaning systems) used in the sintering process. For Port Talbot this means Tata will need to install some hydro-cyclones to treat reverts used in the sintering process. Tata has approached a number of companies to quote on this project, which will be implemented in 2016.

The hydro-cyclones are likely to require a significant amount of water to operate effectively, so the project team is working to ensure this initiative aligns with the overall water strategy for the steelworks. Should any changes be needed to Tata's current licenced water abstractions or if Tata considers a new abstraction point is needed, we would ask the project team to contact us as early as possible to determine if any additional abstraction permissions are required.

Sinter cooler

Detailed planning is under way concerning a replacement sinter cooler. This work is scheduled for a 5-week stop in autumn 2016 which will coincide with the improvements planned under the sinter de-dust project (see above). Stakeholder engagement has been completed for the sinter cooler project.

Tata are looking at different ways of enclosing the circular cooler conveyor as a form of passive emissions abatement. One possibility may be to fit a hood over the top of the conveyor, or use a sidewall and mesh system to enclose it. Either option would represent an improvement compared to the current open conveyor. When combined with effective sinter temperature control and dust suppression techniques, this should minimise the potential to generate fugitive emissions from this part of the sinter plant.

There are no BAT-AELs that will apply to the sinter cooler therefore it does not require a derogation submission. We suggest Tata considers waste heat recovery as a retro-fit option (and which may be required by future legislation) when designing the structural metalwork/supports for the sinter cooler improvements.

[END OF SECTION 2]

	EPR Compliance Assessment Report	Report ID: 05785	
This form will report non-compliance with your permit as determined by an NRW officer			
Site	Tata Steel Port Talbot steelworks	Permit	BL7108IM (as amended)
Operator/ Permit	Tata Steel UK Ltd	Date	10 March 2015

Section 3- Enforcement Response		Only one of the boxes below 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.	n/a	
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.	n/a	
We will now consider what enforcement action is appropriate and notify you, referencing this form.	n/a	

Section 4- Action(s)			
Where a non - compliance has been detected and an enforcement response has been selected above, this section summarises the steps you need to take to return to compliance and also provides timescales for this to be done.			
Criteria Ref.	CCS Category	Action Required/Advised	Due Date
See Section 1 above			
H1	N/A	Recommendation: With regard to the hydro-cyclone project, the operator is advised to contact NRW as early as possible if any changes are needed to Tata's permits such as current licenced water abstractions or if Tata considers a new abstraction point is needed. We will need to determine if any additional abstraction permissions are required under the Water Resources Act 1991 (as amended).	N/A
H2	N/A	Recommendation: We suggest Tata considers waste heat recovery as a retro-fit option (and which may be required by future legislation) when designing the structural metalwork/supports for the sinter cooler improvements.	N/A

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 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 which 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 Natural Resources Wales (NRW) to fulfill its regulatory and monitoring functions and to maintain the relevant public register(s). 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 and taking any resulting action
- preventing breaches of environmental law
- assessing customer service satisfaction and improving its service
- Freedom of Information Act/Environmental Information Regulations request.

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

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 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 the officer's line managers. 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) 601 0987**.