

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	13 April 2015	Time in	13.00 Out 16.30
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	01 May 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	A	
e) Emissions	1. Air	A	
	2. Land & Groundwater	N	
	3. Surface water	N	
	4. Sewer	N	
	5. Waste	N	
f) Amenity	1. Odour	N	
	2. Noise	A	
	3. Dust/fibres/particulates	A	
	4. Pests, birds & scavengers	N	
	5. Deposits on road	N	
g) Monitoring and records, maintenance and reporting	1. Monitoring of emissions & environment	A	
	2. Records of activity, site diary, journal & events	A	
	3. Maintenance records	N	
	4. Reporting & notification	A	
h) Resource efficiency	1. Efficient use of raw materials	N	
	2. Energy	N	

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

Person(s) present (Office based; oil on coal)

Tata Steel	Richard Leonard Jamie-Ross Landeg Andrew Townsend Charlotte Barlow Kirsty Bowen	NRW	Mark Broom Doug Cowie
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Person(s) present (Office based; CAPEX)

Tata Steel	Richard Leonard Fiona Abbott Steve Poretta Wayne Lewis Chris Court Stuart Lloyd P Thomas Claire Grainger Oliver Mullan	NRW	Mark Broom Doug Cowie
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This report has been split into two sections – one covering oil on coal and the other the 'CAPEX' projects to comply with the IED requirements for the coke, iron and steel BAT conclusions.

Oil on coal at Morfa Coke Ovens

This issue was raised and reviewed in CAR form 5849 where we outlined how NRW approaches the 'End of Waste' issue. Tata are looking at using their own recovered site-arising oil to replace bought in oil as a bulking agent in the coke making process. Our previous CAR report concluded that Tata needs to outline the duration of the trial and identify the monitoring parameters which will show the effect (or otherwise) of the use of indigenous oils on the coals used to make coke at Port Talbot.

There are three End of Waste tests that need to be addressed in Tata's **one month** trial:

End of waste test	What needs to be shown in the trial use
the waste has been converted into a distinct and marketable product	Tata is looking to compare its own recovered oil with bought in oil and compare them against the specification needed to make coke
the processed substance can be used in exactly the same way as a non-waste	Tata needs to show if there is any difference in how it uses its own recovered oil against the bought in oil

the processed substance can be stored and used with no worse environmental effects when compared to the material it is intended to replace	Tata needs to identify the monitoring parameters which will show the effect (or otherwise) of the use of indigenous oil on the coals used to make coke at Port Talbot.
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Tata has since confirmed to NRW that the proposed trial start date is **Tuesday 5 May 2015**. An oil tanker has been provided by Tata for specific use during this trial to ensure oil movements to the Coke Ovens are kept separate from other site activities. It is recommended that each batch of recovered oil delivered to the Coke Ovens is sampled and analysed.

Designated emission points at two of Tata's power station boilers that burn coke oven gas (COG) will be monitored during the trial. The data will be compared with four week periods before and after the trial to see if there is any noticeable impact on emissions. It is recognised that this means the full results of the trial should be ready in July 2015.

If the opportunity arises during the trial to sample emissions from other steelworks combustion plant burning 100% COG, Tata have a sample team ready to do so. The dry charge weight of the coal used in the Coke Ovens will also be monitored to ensure the recovered site oil is performing to the same standard as the bought in oil.

It is recommended that Benzo-a-pyrene (BaP) or an equivalent Polycyclic Aromatic Hydrocarbon (PAH) measurement is also obtained on at least 2 occasions during the trial. This would be to show that the use of oil-based bulking agents will not have an adverse effect on the existing air quality target for BaP.

CAR 5849 also had a second action to notify NRW once the trial has been completed and to submit their results for the regulator to consider. We look forward to hearing how the trial has progressed.

Other coke ovens issues

Provisional dates to investigate the coke oven gas flare problem back in February 2015 were discussed. NRW proposes 15, 18, 19 or 20 May for a joint intervention with HSE.

Over Easter 2015 there was a period of poor air quality in Port Talbot which may or may not have been due to problems at the coke ovens. A number of complaints about emissions from the steelworks from local residents in Margam were also received by NRW. This episode will need to be investigated which could be run back to back with the February coke ovens problems.

Tata asked about some conflicting permit conditions in their current permit. Condition 2.10.5 requires eight coke ovens to be assessed very week and a separate condition (6.1.3 Note 1) requires every oven to be assessed every quarter. Following advice from our Knowledge, Strategy and Planning (KSP) Team, as long as the current steelworks permit is in force we will suspend the every oven every week requirement but require Tata to maintain the every oven every quarter using the recognised BCRA methodology. In the meantime NRW is happy for Tata to adopt the daily leak/no leak type assessment for every operational coke oven in place of BCRA TLCF and DLCF assessments required by the current permit.

CAPEX

Coke Oven Gas Desulphurisation

Costs are increasing as the project definition becomes clearer. The project team have gone to TKS Schwelgern in Duisburg, HKM (also in Duisburg) and TSE Ijmuiden to look at how these European sites have installed the desulphurisation process into their coke oven by-products plants. The favoured approach is to recover elemental sulphur and Tata has started the REACH preparation work needed to produce this material for sale. The use of sea water cooling is currently not viable and the project has looked at how the existing site water mains supply can be reused to minimise the amount of cooling water needed. Initial discussions will be held with Neath Port Talbot County Borough Council about planning issues and scoping as the current plan is to site this plant (including the de-tarring units) between the present coke ovens complex and the sea defences. Tata does not expect there to be any significant planning issues for this development, however consideration should be given to the specific requirement for hazardous substances planning consent. The Port Talbot project is still working alongside Tata's Scunthorpe steelworks project team, but it is likely that that Tata may use a different approach for Port Talbot.

Sinter plant

The Lignite Lime Injection part of Tata's capital investment is progressing and the Electrostatic Precipitator (ESP) upgrade has gone out for tender. The wind main replacement work has started but is causing some concern due to limited crane availability. The new valves needed to overcome the air ingress problems in the ESPs have been replaced in the recent shutdown. Following the dust removal trials (100% ESP dust removal) which resulted in a 50% drop in particulates, Tata will, during May

2015, look at replicating a drop in flue dust but also maintaining the ESP dust content of the sinter blend once the flue dust washing systems are in place.

Planning permission may be needed for the sinter plant bag house (de-dust system). The new bag filter project rather than an ESP upgrade will take longer and will mean that Tata needs to apply for an extension to the current derogation from October 2016 until the summer of 2017. This represents an approximate 6 month delay, but long term sinter de-dust performance will improve from 20 mg/m³ down to 5 mg/m³. A new fan may also be needed to deal with the increased pressure drop due to a bag filter and to ensure good dust capture within the sinter plant. Tata are also looking at installing a flame arrester to minimise the risk of fires inside the bag house.

After looking in more detail at the sinter cooler options – refurbishing/installing a new cooler on the existing base or installing a new cooler off-line with a new bespoke transfer system, Tata have come to the conclusion that installing a new cooler on the old base is best for the site. The current plan is now to install a new cooler on the existing foot print with 5 new fans. However this extended project will still need a four week shutdown and the delay is above and beyond the current derogation agreement (Oct 2016). There is interdependency with the sinter de-dust project – see above.

The hydro-cyclone project is progressing and the use of a third party approach has not been dismissed. Danielli Corus are looking at the design for Port Talbot and now elsewhere. They are looking at achieving a 90% reduction in revert chloride levels using either a two or three-stage hydro-cyclone. Obtaining sufficient water supply is proving a problem but an approach which uses recycled steelworks water is becoming more attractive – this could also represent a significant resource efficiency measure. The capability to treat current iron and steelmaking arisings from day shifts should be in place by October 2016.

BOS plant fume extraction

This project has been split into two phases: Phase 1 is already submitted for approval and is based on a turnkey contract package with the contractor AAF. Phase 1 includes more filters and compressed air systems for the BOS plant, a new replacement hot metal bay travelling hood and the ability to provide emissions abatement in the form of a ring main to the BOS plant as well as overhauling the cleaning system. At present Phase 1 is on plan for completion to meet the IED March 2016 deadline. Further scoping work is needed to inform Phase 2 of the project.

Other BAT conclusions

There are a number of more general BAT conclusions (BATc) that are relevant to Port Talbot steelworks and for which Tata has stated it does not currently meet the BATc requirements. These include BAT 10, 11, 15 and 16. For BAT 10 and 11, Tata is continuing to invest in a number of projects during 2015-17 to reduce dust releases. This includes: ironmaking dust suppression and dust handling; stockyard wind fencing; sinter stocking and reclamation improvements; transport and haul road upgrades; additional site air quality monitoring points. These projects are now prioritised according to a scoring matrix that includes the results of PM₁₀ exceedance days, permit compliance, generation of EIFs and works area/contractor feedback.

Following recent submission of Tata's air quality/PM₁₀ monitoring report for Quarter 2 2015, we acknowledge the reduction in site monitoring capability due to calibration issues with some of the monitors. We will look to review the site monitoring network in the near future with Tata.

For waste water monitoring (BAT 15), Tata has been looking at derogations for the coke oven parameters applying to its direct discharge to Swansea Bay. However they have not explored the potential use of the nearby municipal sewage treatment works (STW). NRW understands that this approach is often used in Europe to treat coke oven effluent. Directing the coke ovens effluent to an appropriate STW may reduce the number of potential derogations needed to comply with this BAT conclusion.

CAPEX progress in summary

The CAPEX projects continue to progress and a few have now reached management approval stage. NRW will continue to contribute to Tata's CAPEX project considerations and where appropriate we will highlight any new areas we feel need to be considered. We recognise however that as these projects are coming to fruition the scope for making significant changes lessens. All major projects remain largely on track to meet either the March 2016 BAT compliance deadline or the derogated deadline of December 2018 (for desulphurisation of coke oven gas). The inspecting officers will obtain further advice within NRW before confirming our position in relation to the other derogation and new timescale required by Tata for the sinter de-dust improvements.

[END OF SECTION 2]

	EPR Compliance Assessment Report	Report ID: 05861	
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	01 May 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			
G4	N/A	ACTION 1: The operator must notify NRW once the trial is complete and submit the trial results to us for our consideration and comment.	Carried forward from CAR 5849; July 2015

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**.