

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 July 2015				Time in	09.30	Out	15.30
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		09 October 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	A	
	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	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	A	
	3. Maintenance records	A	
	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

To review the recent problems with the guides used at Morfa Coke Ovens that resulted in a large number of oven pushes being made without the use of emissions abatement (Ministerstein coke-side arrestment system).

Person(s) present (Office based)

Tata Steel	Richard Leonard	NRW	Mark Broom
	Lee Puckey		Doug Cowie
	Steve Williams		
	Charlotte Barlow		
	Andrew Townsend		
	Jamie-Ross Landeg		
	Sam Gorji		

Background

Morfa Coke Ovens has coke-side emissions arrestment that relies on three guide machines to take captured dust from the coke pushing operation to a land-based water scrubber. On 22 June 2015 Tata Steel submitted a notification that the company had breached a permit limit for the use of the guide without emissions abatement – also known as 'pushing off the hood'.

In weeks 26 and 27 (June 22 – July 3 2015), Tata Steel believed it had breached the permit limit for pushing off the hood. Tata has three guide machines at Port Talbot steelworks: Number 1, 2 and 3. Number 3 Guide, the newest, had been in use prior to the notification when a problem with a door extractor occurred. The required repair was a major piece of work that required the guide to be taken out of service for some time. Tata has since discovered a hidden failure of a bearing that caused the problem (see below).

Number 2 Guide was therefore put into service. However a structural steel joint failure on this machine occurred which left Tata unable to operate it 'on the hood'. This failure prompted Tata to notify NRW of the potential permit breach. Number 2 Guide also had to come out of service so the failure could be repaired.

Number 1 Guide – used as an emergency spare – was then put back into use. This is Tata's oldest and least reliable guide machine and is known to cause operational issues. After a while Number 1 Guide could not be used because the guide cage went out of alignment due to the supporting steelwork distorting as a result of the thermal effect of the red hot coke.

In the face of these difficulties, Tata decided to use Number 1 Guide up to the point of failure (when it got too hot) and then deploy Number 2 Guide to push coke out of the ovens but without connection to the coke-side arrestment system. Once Number 1 Guide had cooled down sufficiently and re-aligned, it was brought back into use. This approach was repeated until the completion of repairs to Number 3 Guide which was brought back online at the end of June. The guide support steelwork normally has to be replaced every three years.

While Number 2 Guide was in use, Number 3 Guide was repaired on day shifts. Following the further failure of Number 2 Guide and emergency deployment of Number 1 Guide, double shifts and contractors were used to speed up the repairs in an effort to bring Number 3 Guide back into use quicker than planned. The cause of the original bearing failure on Number 3 Guide was hidden because the greasing points had been brought down to an easily accessible point. The greasing was done regularly but on detailed inspection the greasing line had become blocked and no grease was able to reach the bearing which then failed. All greasing points have now been changed to minimise the risk of this happening. This is the first time this problem has occurred.

For Number 1 and 2 Guides, Tata has commissioned a specialist contractor (Hendersons) to inspect and review the machines. Tata's initial view is that these guide machines are old and could need significant work to get them back to standard. Tata will make a decision on the continued operation or retirement of these machines once they have received Hendersons' report, but will focus on maintaining them in the meantime. Hendersons will also carry out some checks on Number 3 Guide.

The maintenance regime for these guide machines may benefit from the approach outlined in EEMUA 231 which outlines principles including a written scheme of examination. EEMUA 231 is available [online](#) and is free to download. Tata Steel is reviewing its asset management and maintenance system so there could be scope to incorporate the EEMUA principles.

Informing and Notifying

Tata Steel's latest consolidated permit (v014) has new reporting requirements. The operator (Tata) has to inform the regulator (NRW) if there is significant pollution from its site or it breaches a permit condition. The operator has to formally notify the regulator in writing if it breaches a limit in the permit (Condition 4.3.2). Tata Steel formally notified NRW that there was a breach of a permit limit for pushing off the hood without abatement.

The Environmental Permitting Regulations 2010 includes the following interpretations for 'pollution':

"pollutant" means any substance liable to cause pollution;

"pollution", in relation to a water discharge activity or groundwater activity, means the direct or indirect introduction, as a result of human activity, of substances or heat into the air, water or land which may—

- (a) be harmful to human health or the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems,
- (b) result in damage to material property, or
- (c) impair or interfere with amenities or other legitimate uses of the environment;

"pollution", other than in relation to a water discharge activity or groundwater activity, means any emission as a result of human activity which may—

- (a) be harmful to
 - i) human health or
 - ii) the quality of the environment,
- (b) cause offence to a human sense,
- (c) result in damage to material property, or
- (d) impair or interfere with amenities or other legitimate uses of the environment;

Tata Steel should [review](#) the criteria it uses to notify NRW against any of these five criteria [(a)i), (a)ii), (b), (c) and (d)]. The following are some suggestions that could be used to report to NRW against permit requirements for reporting serious pollution.

- (a)
 - i) RIDDOR 26 and/or 27, and/or requirement for medical attention due to the release
 - ii) Air – breach of Environmental Quality Standard (EQS), damage plant or animal life
Water – breach of statutory EQS and/or affects aquatic life (vegetation or animal)
Land – ground remediation/removal following a spill or leak of a Hazardous Substance
Ground water – any Hazardous Substances (e.g. mineral oil) discernible above pre-existing levels (see GP3)
- (b) release of a pollutant that can lead to – noise, vibration, odour and/or visual complaints
- (c) release of pollutants that could cause damage to property or a pressure wave that could damage property. RIDDOR 25
- (d) a release that would stop the use
 - i) of the Wales Coast Path
 - ii) of nearby waterbodies for recreation e.g. boating, fishing etc.
 - iii) of roads and/or footpaths near the installation
 - iv) of the land around the facility e.g. for agriculture or leisure activities

The above references to the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR) are described in more detail on page 4.

RIDDOR guidance extract –

Explosion or fire

25 Any unintentional explosion or fire in any plant or premises which results in the stoppage of that plant, or the suspension of normal work in those premises, for more than 24 hours.

This definition covers serious fires and explosions at work premises. Examples of the type of incident which would be reportable are:

- any fire at a factory or office building, causing the suspension of work activities for more than 24 hours or
- an explosion involving dust in a pneumatic conveying system, causing stoppage of the conveying plant for more than 24 hours

Release of flammable liquids and gases

26 The sudden, unintentional and uncontrolled release:

- a. inside a building
 - i. of 100 kilograms or more of a flammable liquid;
 - ii. of 10 kilograms or more of a flammable liquid at a temperature above its normal boiling point;
 - iii. of 10 kilograms or more of a flammable gas; or
- b. in the open air, of 500 kilograms or more of a flammable liquid or gas.

This definition covers releases of flammable liquids or gases (e.g. due to the sudden failure of a storage vessel) where the release, if ignited, would cause a major explosion or fire. 'Flammable' includes those substances classified as highly flammable or extremely flammable.

Hazardous escapes of substances

27 The unintentional release or escape of any substance which could cause personal injury to any person other than through the combustion of flammable liquids or gases.

The substances covered by this definition may be in any form: liquid, solid (e.g. powder), gaseous or vapour and may include, e.g.:

- substances which may be hazardous to health (e.g. asbestos, phosgene, toluene di-isocyanate)
- substances which may be either corrosive or potentially hazardous by virtue of their temperature or pressure (e.g. nitric acid, molten metal, liquid nitrogen)

This definition includes incidents which present a fire or explosion hazard (e.g. combustible powders), but not in relation to releases of flammable liquids or gases, where the relevant thresholds in 26 [link to paragraph 26] are not exceeded.

Examples of the kinds of incident covered by the definition are escapes arising from the failure or breakage of plant, pipes, equipment or apparatus; failures of process control; the operation of a relief valve or bursting disc where the escaping substance is not safely controlled or directed, and spillages from containers and equipment.

Releases from plant etc. during the normal course of operation or maintenance (e.g. during sampling, packaging or draining of lines) that are sufficiently well controlled to ensure that no person is put at risk would not be reportable.

In some cases, the decision as to whether or not an incident is reportable will be straightforward, e.g. if a person is exposed to a hazardous substance at a level which exceeds established safe limits (e.g. a Workplace Exposure Limit).

However, most incidents require judgement. Various factors are relevant including: the nature of the substance and its chemical, physical and toxicological properties, the amount which escaped and its dispersal, and whether people were, or could foreseeably have been, exposed to a significant risk as a consequence of the escape.

Conclusions and further actions required

Closer detailed examination of the latest permit v014 shows it does not contain a limit for the availability of the coke side arrestment system. This omission will be addressed in the next variation. This means that no non-compliance can be attributed for a limit breach such as that notified to NRW following failure of the coke oven guide machines. Tata Steel must continue to report any future failures in accordance with the notification requirements of the permit.

Greasing of Number 3 Guide was being carried out (but the bearing failure was hidden) and no similar failure had happened before. This failure was not foreseeable so again no non-compliance can be attributed to the lack of maintenance.

NRW has provided guidance regarding the new notification requirements in Tata's consolidated permit. Tata Steel should review the criteria it uses to notify NRW against any of the EPR 2010 pollution criteria [(a)i), (a)ii), (b), (c) and (d)].

[END OF SECTION 2]

	EPR Compliance Assessment Report	Report ID: 5937	
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	09 October 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	Tata Steel should review the criteria it uses to notify NRW against any of the EPR 2010 pollution criteria [(a)i), (a)ii), (b), (c) and (d)].	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**.