

Compliance Assessment Report CAR_NRW0046079

Permit being assessed: BL7108IM.

For: Port Talbot Steel Works , **held by:** Tata Steel UK Limited

At: Tata Steel Strip Products UK , PORT TALBOT, PORT TALBOT, WEST GLAMORGAN, SA13 2NG.

Type of assessment: Site Inspection,

Reason: Routine.

On: 10/12/2024 between 10:00 and 16:00.

Parts of permit assessed: Permit conditons 1.1.1, 2.3.1, 3.1.2, 3.2.1.

NRW Lead Officer: Benjamin Taylor, accompanied by Kirsty Thomas.

Report sent to: Head of Environment, TSUK Operations, on 30/01/2025.

1. Summary of our findings (full details in section 4)

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR1A - Installations - Management - General Management	C3 Minor	Permit condition 1.1.1
IR2C - Installations - Operations - Operating techniques	C3 Minor	Permit condition 2.3.1.
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	Action only (X)	
IR3B - Installations - Emissions and monitoring - Emissions of substances not controlled by emission limits	Assessed (A)	
IR1A - Installations - Management - General Management	Action only (X)	

Result types are explained in more detail in the 'Important Information' section below.

Total non-compliances recorded	Total non-compliance score
2	8

How we use the non-compliance score to calculate your annual fee is explained in the 'Important Information' section below.

2. What action is required?

Criteria	Action needed	Complete by
IR1A	Operator is to submit to NRW their records detailing the maintenance and servicing that has undertaken on the W4 Sump, this should include both the time leading up to and since the water pollution incident on the 7th of October 2024.	28/02/2025
IR2C	As above.	28/02/2025
IR3A(1)	Operator is to update NRW on their findings via a Schedule 5 – Part B Notification once the investigation into the Iron exceedance from the Cold Rolling Mill has concluded.	28/04/2025
IR1A	Operator is to submit to NRW their updated Ad-Hoc Maintenance Procedure for the Primary Ore, Secondary and Morfa Coal Stockyard Areas. The procedure document must include details on how TSUK will implement the maintenance procedures and how they will be managed as the landscape of each stockyard continues to change.	28/02/2025

Compliance criteria codes are listed in the 'Important information' section below.

3. What will happen next?

Any non-compliance we have identified and recorded on this form is an offence. It can result in criminal prosecution and/or suspension or revocation of your permit.

You are non-compliant with your permit.

At this time, we are issuing you with a warning for the non-compliance recorded above. Warnings may influence future enforcement response for continued or further non-compliance.

This statement does not stop us from taking additional enforcement action if further relevant information comes to light or offences continue.

4. Details of our assessment

Introduction

Tata Steel UK Limited (TSUK) operates the Port Talbot Steelworks in accordance with the environmental permit EPR/BL7108IM. The Steelworks has several identifiable processes which are carried out sequentially across the site.

Scope

This was a pre-arranged visit to inspect the stockyards associated with the Steelwork's Heavy End which underwent cessation as of the week commencing (w/c) 30th of September 2024. It is the understanding of NRW that the following works areas associated

with the Heavy End including boilers associated with Energy Generation were taken offline on the dates illustrated below:

- **20th of March 2024**
 - Morfa Coke Ovens (MCO).

- **1st of July 2024**
 - Energy Generation
 - No. 5 Boiler
 - Mitchell Boiler

- **5th of July 2024**
 - Blast Furnace 5 (BF5).

- **30th of September 2024**
 - Blending Plant
 - Sinter Plant
 - Blast Furnace 4 (BF4)
 - Basic Oxygen Steelmaking (BOS) Plant

- **Early October 2024**
 - Energy Generation
 - No. 3 Boiler
 - No. 6 Boiler
 - No. 7 Boiler

The closure of the Heavy End was undertaken as part of the Site's transition to Electric Arc Furnacing (EAF) which is proposed to be operational by late 2027/early 2028. This development will also be accompanied by upgraded secondary steelmaking, continuous casting, hot rolling, and cold rolling techniques to produce flat steel products.

The proposed agenda (set by NRW) was shared ahead of the visit allowing for the Operator time to make safety arrangements (given large portions of the Site are under Construction Design and Management (CDM) Regulations) and prepare material to be

presented to NRW Officers. There was a particular focus surrounding a water pollution incident which occurred on the 6th of October 2024. Surface water runoff, believed to be from the Secondary Stockyards was discharged via emission point W4 (of the EPR permit) which resulted in red discolouration of the River Afan. W4 collects rainwater from the French drainage system within the secondary stockyard area before discharging to the River Afan.

The visit included a series of presentations provided by TSUK key personnel, followed by a site walkover of the Stockyards (Primary Ore Stockyard, Secondary Ore Stockyard and Morfa stockyards known as primary coal stockyards). The overview for the visit is listed below:

- Environmental Performance since Heavy End Closure.
- W4 Incident – 6th of October 2024.
- Morfa Coke Ovens (MCO) Decommissioning.
- Raw Materials Inventory.
- Site Walkover:
 - Primary Ore Stockyards.
 - Secondary Ore Stockyards.
 - W4 Monitoring Point
 - Morfa Coal Stockyards

Environmental Performance since Heavy End Closure

Following introductions, the Operator presented an overview of their recent environmental performance to NRW. The key details of which are summarised below:

- The Operator has successfully completed the blowdown of the final Blast Furnace (Blast Furnace 4).
- Reduction in breaches of permitted emission limit values (ELV) to both atmosphere and controlled waters since the closure of the Heavy End.
- Significant reduction in process emissions (monitored by TSUK's Aloa_Detect system) since the closure of the MCO. TSUK specified that process emissions (fugitive emissions) will cease to be an issue following closure of the Heavy End, with none recorded between October and December 2024.
- Reduction in complaints since the closure of the Heavy End.
- TSUK have installed four temporary package boilers, fuelled by natural gas to provide the necessary energy generation to the site following the cessation of heavy

end facilities. TSUK are in the process of varying the sites permit to cover these activities and have been in discussions with NRW.

- TSUK have undertaken a management level investigation into the consistent Zinc (Zn) and Cyanide (Cy) breaches which occurred within Quarter 2 (Q2) 2024 at the long sea outfall (LSO) emission point (W1). These have been addressed in alternative CARs and as a result, a non-compliance score will not be attributed in this CAR.
 - TSUK concluded that the breaches were the result of the utilisation of galvanised scrap (containing Zn and Cy) within their Blast Furnacing activities.
 - NRW were informed that this resulted in the accumulation of Zn and Cy within the furnaces, which following sufficient time can lead to cave-ins. These cave-ins cause the displacement of dusts within the furnace, which becomes entrained within the effluent and washed out to Sump 1.
 - TSUK informed NRW that to address the issue they are now undertaking additional scrap inspections.
 - TSUK emphasised to NRW that current Zn and Cy levels at the LSO have recently been below the Limit of Detection (LOD).
- In Q4 2024, there was a singular permit breach which related to iron (Fe) levels recorded at W1 (LSO) during the W/C 1st of December 2024. TSUK briefly informed NRW that they believe this was attributed to an issue associated with the Cold Rolling Mills and are currently investigating the stirrers.

Action:

Operator is to update NRW on their findings via a Schedule 5 – Part B Notification once the investigation into the Iron exceedance from the Cold Rolling Mill has concluded.

W4 Incident – 6th of October 2024

The Operator provided an overview and subsequent conclusions/actions from their investigations surrounding the water pollution incident which occurred on the 6th of October 2024.

- TSUK initiated a key stakeholder meeting on the 7th of October 2024.
- TSUK's initial response is summarised below:
 - Water samples collected at 22:00 on the 6th of October 2024 and 08:00 on the 7th of October 2024. NRW were informed via email on the 8th of October

that a full analysis suite had been requested.

- Visual inspection at 07:30am on the 7th of October 2024 was undertaken on W4 sump and the outfall to the Afan estuary with normal operations, considering heavy rainfall, observed.
- Removal of 70,000 litres of stormwater from W4 via vacuum tanker (Runtech).
- Mechanical removal of sludges from W4 on the 8th of October 2024 by Lloyd Walters Industrial Services (LWIS).
- Discussions ongoing around the continuation of the LWIS environmental E1 contract which includes maintenance (jetting and vacuuming) of the French drains. TSUK informed NRW that the French drains were cleaned out in September 2024.
- TSUK specified that the red discolouration was likely the result of the presence of iron oxide within the discharge.
- TSUK undertook a management investigation into the root causes of the incident, the conclusions of which is summarised below:
 - Heavy rainfall leading up to the incident.
 - High tide backfilling into W4 via its outlet drainage line, this also resulted in a pooling effect of the discolouration surrounding the Outfall.
 - A reduction in usual attenuation from stockpiles and water displacement from frequent vehicular movements, this facilitated an increased rate of surface water entry into the drainage channels.
 - E1 Contract discontinuation, which meant they were unable to maintain the conditions at the stockyards at that period.
- Subsequently, TSUK have actioned the following:
 - Review of the LWIS environmental E1 contract, which will now be implemented on an Ad-Hoc basis (agreed with LWIS).
 - Mechanical removal of W4 sludges on an Ad-Hoc basis.

The Operator is required (by EPR/BL7108IM) to undertake monthly sampling (if a flow is present) at W4 for the following parameters:

- pH
- Suspended Solids
- Total Iron
- Soluble Iron

- Oil and grease

TSUK submitted their analysis results (samples collected from W4 on the 6th and 7th of October) to NRW on the 2nd of December 2024. Comparison with previous W4 monitoring submissions for 2024 indicated that the iron content within the investigation samples were consistent with previous observed levels, it was considered that there was no additional cause of concern.

While there is the requirement to undertake monthly monitoring at W4, there are no set Emission Limit Values (ELVs) for iron within *Table S3.8* of the permit and as a result, no emissions breach of permit has occurred.

Compliance:

The Operator has failed to manage operations within the Secondary Ore Stockyards in accordance with its management systems. This is considered a breach of permit conditions 1.1.1 and 2.3.1. As a result of this, a non-compliance score of C3 has been allocated against compliance sub-criteria IR1A – General Management and IR2C - Operating techniques.

Action:

Operator is to submit to NRW their records detailing the maintenance and servicing that has undertaken on the W4 Sump, this should include both the time leading up to and since the water pollution incident on the 7th of October 2024.

Morfa Coking Ovens (MCO) Decommissioning Update

The MCO ceased operating as of 20th of March 2024. The Operator provided the following update regarding the decommissioning works at MCO, these are summarised below:

- TSUK are in the “make safe” phase of decommissioning stages and aiming to be “keep safe” by Q1 2025.
- 64 out of 765 decommissioning actions (determined by TSUK) are awaiting completion.
- 4800m³ material stocks currently remaining within MCO, at point of cessation was around 7055m³.
- TSUK informed NRW that they have processed 6,629,683m³ of contaminated liquid through their Biological Effluent Treatment (BET) Plant between 21st of July (Week

30) and 1st of December 2024 (Week 49).

- TSUK informed NRW that with vessels cleaning activities coming to an end, the BET plant will potentially be taken out of operation as of January 2025.
 - However, the Operator is currently exploring potential usage for treatment of contaminated washwater (arising from decommissioning works) from alternative works areas.
 - NRW were informed that following cessation of the BET Plant, contaminated rainwater will be diverted to the nearby DCWW Afan Treatment Works, it is our understanding that the necessary agreements are already in place. Such changes will need to be updated via a permit variation.

Raw Materials Inventory

Ahead of the inspection of the Stockyards, the Operator provided an insight regarding the current quantities of stockpiled material, including their plans for this material prior to the transition. Key information is detailed below:

- Stockpiled levels on closure of the Heavy End was 242,241 tonnes.
- Current stockpiled levels is 106,112 tonnes.
 - The Operator informed NRW that a portion of the 136,712 tonnes of sold material is still present in the stockyards due to limitations of nearby distribution links.
 - 120,096 tonnes of sold material is sourced from the Ore Stockyards, while the remaining 15,752 tonnes has been taken from the Morfa Stockyards (Primary Coal Stockyards).
- TSUK aims to have all material removed from Site by May 2026.

Site Observations

Primary Ore Stockyards



Image 1: View of Primary Ore Stockyards



Image 2: View of Primary Ore Stockyards.



Image 3: View of Primary Ore Stockyards.

The Primary Ore Stockyards were used to store the various ores and fluxes associated with the Heavy End operation. The Primary Ore Stockyards are split into six elongated bays across three yards, NRW were informed that Bays 1-3 were used to house the iron ores, Bays 4-5 store carbon fluxes and Bay 6 held the coke required. It was noted that the material was stored upon hardstanding concrete, NRW were informed that the Primary Ore Stockyard surface water drains to a soakaway, entering Sumps 1 and 2 prior to discharge to controlled waters via W1 (LSO).

Secondary Ore Stockyards



Image 4: View of Secondary Ore Stockyards



Image 5: View of Secondary Ore Stockyards

The Secondary Ore Stockyards held screening material such as pellets, lumps and scrap, which were readied for utilisation within the Blast Furnaces. It was noted that there was a quantity of material currently housed within the Secondary Ore Stockyards, the Operator specified that this material was sourced from the clean down of alternative works areas including the Sinter Plant and Yards. The Secondary Ore Stockyard is within the parcel of land that is proposed to be surrendered during the transition to EAF, the Operator assured NRW that they will undertake robust sweeping activities to ensure cleanliness prior to its surrender. NRW identified linear drainage channels (French drains) along the concrete kerbing of the ore stockyards which receives surface water prior to discharge to W4. It is our understanding that the Secondary Ore Stockyards was the source of the iron rich material that caused red discolouration to the River Afan on the 6th of October 2024, the Operator informed NRW that there was no material stored on that day which attributed to the pollution incident.

W4 Sump - Monitoring Point



Image 6: W4 Sump - Monitoring Chamber

W4 Sump was noted to be a masonry brick built chamber, with a baffle wall separating the inlets from the outlet. A section of the baffle is lowered, allowing for the water to pass over acting as a weir. There was an accumulation of material noted within the chamber and visible sections of pipework, notably the outlet pipework with an observed cross-sectional loss of approximately 55%. The Operator previously notified NRW of the mechanical sludge removal of W4 Sump which is now undertaken on an Ad-Hoc basis.

Morfa Stockyards (Primary Coal Stockyards)



Image 7: View of Morfa Stockyards (Primary Coal Stockyards)

The Morfa Stockyards (Primary Coal Stockyards) was used to store coals, tarred misc, etc which was associated with the adjacent MCO. The Operator specified that the Stockyards are split into four separate yards A, B, C and D. It was noted that there were still quantities of material being stored throughout the Stockyards, NRW were informed that the Operator plans to remove most of this material by the end of January 2025, Yard A contains material awaiting screening prior to removal. The Stockyards is underlain by hardstanding concrete, surface water is directed to guttering which runs parallel along the yard edges. These are connect to the Deep Sump and Sump 10 prior to discharge via W2. As part of the Site's transition to EAF, Yards B, C and D of the Stockyards will be utilised as laydown areas during construction works. During the site walkover, NRW Officers observed the deployment of mobile bowsers to minimise the risk of fugitive emissions from dust lift off.

Action:

Operator is to submit to NRW their updated Ad-Hoc Maintenance Procedure for the Primary Ore, Secondary and Morfa Coal Stockyard Areas. The procedure document

must include details on how TSUK will implement the maintenance procedures and how they will be managed as the landscape of each stockyard continues to change.

If you have any queries about this report, or to discuss completion of any actions, please contact the NRW Officer named above.

Important information

Legal status of this report

Your permit is issued to you under the Environmental Permitting Regulations. You have a responsibility to comply with the conditions of your permit and prevent pollution/harm of the environment. You must also ensure that you comply with any other relevant legislation that may apply to your site's operations.

This report explains the findings of our assessment and any action you are required to take. We categorise non-compliance using our guidance for assessing non-compliance at regulated sites.

When we find potential non-compliance/s we will normally give you advice on how to maintain compliance.

To correct non-compliance, we may:

- require you to take specific actions
- issue a notice
- review the conditions of your permit.

Any advice and guidance we give will be without prejudice to any other enforcement response that we consider may be required.

Assessment results and non-compliance categories (used in section 1):

Assessment result	Description
Assessed (A)	Assessed or assessed in part, no evidence of non-compliance found
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

Non-compliance category	Description	Score
C1 Major	Potential to have a major, serious, persistent and/or extensive impact or effect on the environment, people and/or property	60
C2 Significant	Potential to have a significant impact or effect on the environment, people and/or property	31
C3 Minor	Potential to have a minor or minimal impact or effect on the environment, people and/or property	4
C4 No environmental impact	Non-compliance at a regulated site that cannot foreseeably have any impact on the environment, people and/or property	0.1

How we use assessment scores

The number and severity of non-compliances recorded in a year will affect your annual subsistence fee the following year. A non-compliance factor is added to your site's Operator

Performance Risk Appraisal (OPRA) score when we calculate your fee to reflect the additional resource we use to assess permit compliance.

If your assessment result in Section 1 is suspended, what does this mean?

In line with our guidance, we may suspend scores for up to six months to allow time for remedial action to be taken. Suspended scores will be re-instated if the action is not completed.

Full list of Industry compliance criteria (used in section 1 and 2):

1. Management

- IR1A – General management
- IR1B – Finance (only applicable to Landfill)
- IR1C – Energy efficiency
- IR1D - Efficient use of raw materials
- IR1E - Avoidance, recovery and disposal of wastes produced by the activities
- IR1F - Multiple operator installations

2. Operations

- IR2A – Permitted activities
- IR2B – The site
- IR2C – Operating techniques
- IR2D – Technical requirements
- IR2E – Improvement programme
- IR2F – Pre-operational conditions
- IR2G – Landfill engineering (only applicable to Landfill)
- IR2H – Waste acceptance (only applicable to Landfill)
- IR2I – Leachate levels (only applicable to Landfill)
- IR2J – Closure and aftercare (only applicable to Landfill)
- IR2K – Landfill gas management (only applicable to Landfill)

3. Emission and Monitoring

- IR3A – Emissions to water, air or land
- IR3B – Emissions of substances not controlled by emission limits
- IR3C – Odour
- IR3D – Noise and vibration
- IR3E – Monitoring
- IR3F – Pests
- IR3G – Air quality management plans
- IR3H – Monitoring for the purposes of the Industrial Emissions Directive (this heading includes Large Combustion Plants)
- IR3I – Fire

4. Information

- IR4A – Records
- IR4B – Reporting
- IR4C – Notification

Enforcement response

Any non-compliance with a permit condition is an offence and we may take legal action against you. Action we take can include prosecution, serving a notice on you and/or

suspension or revocation of your permit. See our Enforcement and Sanctions Guidance for further information.

Data protection notice

You should make sure that anyone named in this report knows that the information it contains will be processed by Natural Resources Wales to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s).

We may also use and/or disclose the report in connection with:

- offering or providing you with our literature or 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 our service
- Freedom of Information Act or Environmental Information Regulations requests.

We may also pass it on to our agents or representatives to do these things on our behalf.

Disclosure of information – this report will be available to view on-line

If you think this report contains commercially confidential information that should not be placed on our public register, you must contact your local Natural Resources Wales office within **fifteen working days** of receiving this report, using the contact details in the accompanying email or letter. You must give a full explanation of why it should not be added to our public register, including specifying which information is commercially confidential. We will assess your request and respond to you within twenty working days to let you know if we agree to your request.

What do I do if I disagree with the report or have a complaint?

If you disagree with this compliance assessment report, you should contact the lead officer without delay to discuss your concerns.

If you are unable to resolve the issue with the lead officer or their line manager you should contact our Customer Contact team on 0300 065 3000 (Monday to Friday 08:00 to 18:00), or email enquiries@naturalresourceswales.gov.uk for details of how to raise your dispute further through our Complaints and Commendations procedure.

If you are dissatisfied with our response, you can contact the Public Services Ombudsman for Wales by phone on 0300 7900203 or by email at ask@ombudsman.wales

Welsh Language Standards

We are committed to establishing Natural Resources Wales as a naturally bilingual organisation. We will provide compliance reports in your preferred language.