

Compliance Assessment Report CAR_NRW0045859

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: Report/Data Review,

Reason: Routine.

On: 29/10/2024.

Parts of permit assessed: Permit conditions: 1.1.1, 3.1.2, 3.5.1, 4.2.2, 4.3.2..

NRW Lead Officer: Benjamin Taylor.

Report sent to: Head of Environment, TSUK Operations, on 20/12/2024.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	C3 Minor	Permit condition 3.1.2.
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	C3 Minor	Permit condition 3.1.2.
IR1A - Installations - Management - General Management	C3 Minor	Permit condition 1.1.1.
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	C3 Minor	Permit condition 3.1.2.
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	C3 Minor	Permit condition 3.1.2.
IR4B - Installations - Information - Reporting	Assessed (A)	
IR4C - Installations - Information - Notification	Assessed (A)	

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

Total non-compliances recorded	Total non-compliance score
5	20

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
IR3A	Not Applicable - Sinter Plant is no longer operational following closure of the Heavy End.	20/12/2024
IR3A	Ensure emissions from the site are compliant with the emission limits listed within the permit.	20/12/2024
IR1A	Ensure measures designed to prevent pollution during maintenance are implemented in the future.	20/12/2024
IR3A	Ensure emissions from the site are compliant with the emission limits listed within the permit.	20/12/2024
IR3A	Ensure emissions from the site are compliant with the emission limits listed within the permit.	20/12/2024

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.

At this time, we do not intend to take any further action.

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 Port Talbot Steelworks in accordance with Permit Number BL7108IM. The Steelworks has several identifiable processes which are conducted sequentially across the site to convert raw iron ores and coal to semi-finished (slab) and finished steel products.

This is a review of the Quarter 3 (Q3) July - September 2024 monitoring submissions, which were submitted by TSUK between the 14th and 29th of October 2024.

Scope

The following reports have been part assessed within this Compliance Assessment Report (CAR):

- 2024 Q3 continuous emissions monitoring (air) - LCP.

- 2024 Q3 continuous emissions monitoring (air) – other.
- 2024 Q3 discontinuous emissions monitoring (air).
- 2024 Q3 emissions monitoring (water).
- Schedule 5: Notifications.

Sinter Plant

A1 - Sinter Plant Main Stack

Continuous emission monitoring system (CEMS) results for Particulate Matter (PM) have been submitted for Q3, with twenty one exceedances^[1] of the 40 mg/m³ daily emission limit noted.

Three Schedule 5 Part A notifications were submitted for the confirmed PM exceedances (S5N_24_59A, S5N_24_63A and S5N_24_68A) corresponding with breaches that occurred within three consecutive months. NRW has previously agreed to accept a monthly Schedule 5 notification from TSUK in the event of continued breaches of the PM daily mean ELV at A1.

As part of the Sites transition to Electric Arc Furnacing (EAF) which includes the closure of the Heavy End, the Sinter Plant (which utilises emission point A1) has been taken out of operation as of the 30th of September 2024. It is important to note that changes to the activities on the Site and associated emissions points will need to be captured within a permit variation.

The breaches of the PM emission limit are contrary to condition 3.1.2 of the permit. Non-compliance scores of C3 have been allocated to these breaches.

- **In accordance with non-compliance scoring guidelines, the non-compliance scores attributed to the PM breaches over the Q3 monitoring period have been consolidated into one score.**

CEMS results for SO₂ and NO_x have been submitted for the monitoring period with no exceedances of the 500 mg/m³ daily mean emission limit reported.

PAH, Dioxins (required on a 6-monthly basis) and Mercury (required on an annual basis) were not undertaken within this reporting period.

A2 – Sinter Plant De-Duster Stack

CEMS results for PM have been submitted for the monitoring period with no exceedances of the 10 mg/m³ daily mean emission limit reported.

Morfa Coke Ovens

Morfa Coke Ovens were no longer operational as of Wednesday, 20th of March 2024.

As a result, the following assets have not been reported within the Q3 reporting period:

- Visible Emissions from Charging.
- A54 – Morfa Coke Oven Batteries.
- A55 – Morfa Main Stack.
- A56 – Minister Stein.
- A57 – Ammonia Incinerator.
- A60B – Quench Tower

Ironmaking

A6 – BF4 Hot Blast Stove Stack

Spot extractive sampling undertaken on the 30th of July 2024 indicate no exceedances of the SO₂, NO_x or PM emission limits.

A8A – BF4 Casthouse Fume Extraction North

The continuous PM results for the monitoring period have been submitted with no exceedances of the 15 mg/m³ daily mean emission limit recorded.

A8B – BF4 Casthouse Fume Extraction South

The continuous PM results for the monitoring period have been submitted with no exceedances of the 15 mg/m³ daily mean emission limit recorded.

A65 – Ferrous Stock House Filter Plant Stack

Previous monitoring was undertaken on 18th of November 2022. TSUK submitted a Notification (A65 Blast Furnaces 148_011023) in Q4 2023 regarding an outage of the asset on the 1st of October 2023. NRW have received no follow up information indicating that the asset has been returned to operational status, and as a result annual sampling has not been undertaken.

A7 – BF5 Hot Blast Stove Stack

This asset was no longer operational as of the 4th of July 2024 and as a result has not been monitored within this reporting period. This was due to the closure of the Blast Furnace 5, which was undertaken as part of the Site's transition to an EAF and therefore a quarterly sample was not taken. It is important to note that changes to the activities on the Site and associated emissions points will need to be captured within a permit variation.

A9 – BF5 Casthouse Fume Extraction

This asset was no longer operational as of the 4th of July 2024 and as a result has not been monitored within this reporting period. This was due to the closure of Blast Furnace 5, which was undertaken as part of the Site's transition to an EAF.

The continuous PM results between the 1st and 4th of July 2024 were submitted with no exceedances of the 15 mg/m³ daily mean emission limit recorded.

A37 – Fluidised Bed Dryer 1

Spot extractive sampling for A37 is an annual requirement and was not undertaken during this reporting period. The asset was previously sampled on the 9th of February and 13th of March 2024.

A38 – Fluidised Bed Dryer 2

Spot extractive sampling for A38 is an annual requirement and was not undertaken during this reporting period. The asset was previously sampled on the 13th of February 2024.

A39 – Number 1 New Mill Stack (GCI)

Spot extractive sampling for A39 is a six monthly requirement and was not undertaken during this reporting period. Sampling for this asset was last undertaken on the 4th of June 2024.

Basic Oxygen Steelmaking and Casting**A10 – Hot Metal Pouring Fume Extraction Plant Stack**

The continuous PM results for the monitoring period have been submitted with no exceedances of the 15 mg/m³ daily mean emission limit recorded.

A10A – Hot Metal Fume Extraction Number 2

The continuous PM results for the monitoring period have been submitted with no exceedances of the 15 mg/m³ daily mean emission limit recorded.

A11 – Lime Plant Dust Extraction Stack

Spot extractive sampling for A11 is an annual requirement and was not undertaken during this

reporting period. The asset was previously sampled on the 16th of May 2024.

A14 – Secondary Fume Extraction Stack (North)

The continuous PM results for the monitoring period have been submitted with no exceedances of the 15 mg/m³ daily mean emission limit recorded.

A15 – Secondary Fume Extraction Stack (Centre)

The continuous PM results for the monitoring period have been submitted with no exceedances of the 15 mg/m³ daily mean emission limit recorded.

A16 – Secondary Fume Extraction Stack (South)

The continuous PM results for the monitoring period have been submitted with no exceedances of the 15 mg/m³ daily mean emission limit recorded.

A63 – CAS-OB / Desulph Fume Extraction Plant

The continuous PM results for the monitoring period have been submitted with no exceedances of the 15 mg/m³ daily mean emission limit recorded.

A70 – Burning Booth

PM spot extractive sampling for A70 is required on an annual basis and has not been undertaken during this reporting period. The asset was last sampled on the 29th of June 2024.

Hot/ Cold Mills

A34A – Reheat Furnace Duct (North)

Gaseous spot extractive sampling for A34A was undertaken between the 28th and 30th of August 2024, there were no recorded exceedances of the SO₂ or NO_x. Particulate spot extractive sampling is required on an annual basis, this was undertaken on the 29th of August 2024 with no exceedance was recorded.

A34B – Reheat Furnace Duct (South)

This asset has been reported as non-operational since the 26th of June 2024 and as a result monitoring has not been undertaken within this reporting period. The Operator has specified that this asset will be returned to operation in the future, however there is no indication of a timeframe. It is expected that monitoring will be undertaken on the asset once it has been recommissioned.

A21 – Pickle Line Scrubber Fume Extraction

The recorded Chlorides (as HCl) result (1.6 mg/m³) collected on the 14th of August 2024 was under the 5 mg/m³ emission limit.

Energy**A50 – Service Boilers 4 & 5 Stack**

CEMS results for PM, SO₂ and NO_x have been submitted for the monitoring period, with no exceedances of the daily or monthly mean emission limits noted.

A51 – Boiler 5 (Margam A)

As part of the closure of the Heavy End, this asset was taken out of operation on the 1st of July 2024 and as a result monitoring has not been undertaken within this reporting period. It is the understanding on NRW that there is no intention to recommission this asset. It is important to note that changes to the activities on the Site and associated emissions points will need to be captured within a permit variation.

A52A Boiler 6 (Margam C)

CEMS results for NO_x and SO₂ and have been submitted for the monitoring period, with no exceedances of the daily or monthly mean emission limits noted.

The monitoring returns indicated that there were eighteen exceedances of PM throughout Q3 2024. A Schedule 5 Notification (S5N_24_60A) for the “breaches” was submitted by the Operator on the 13th of August 2024. However, these “breaches” were instead found to be attributed to a fault with the air purge supply leading to contamination of the PM sampling. NRW were informed that this was verified by the contractor responsible for maintenance of the device. This conclusion was presented to NRW during a liaison meeting on the 19th of September 2024 and subsequently a follow up Schedule 5 Notification (S5N_24_65B) which supersedes S5N_24_60A was submitted by the Operator. Due to the proposed cessation (on W/C 30th of September 2024) of the asset as part of the Heavy End Closure, the Operator deemed it unviable to remediate the faulty CEMS unit.

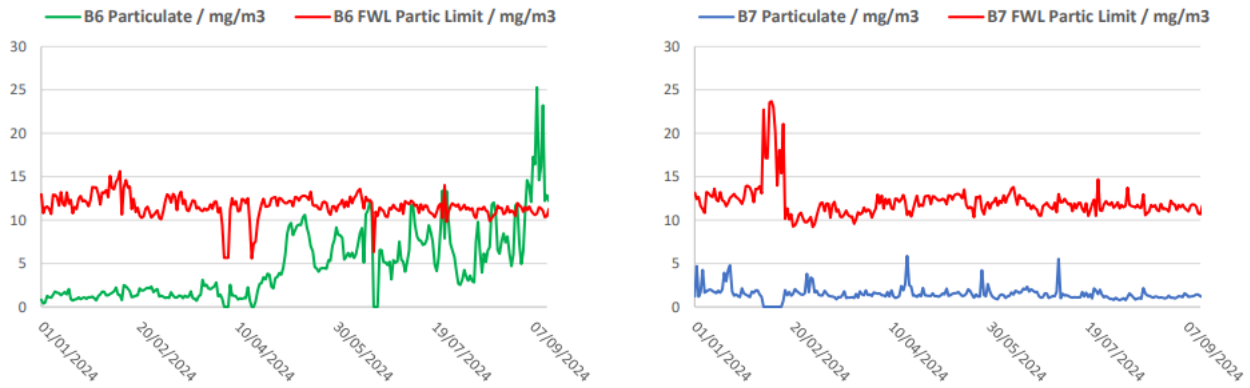


Figure 1: PM Emissions from Boiler 6 and 7 - Provided by TSUK during meeting on 19/09/2024.

Comparison with Boiler 7 (A52B), which is operated on a similar fuel mix as Boiler 6 (A52A) further supports the Operator’s conclusion that there were no exceedances of the PM ELV arising from Boiler 6.

A52B Boiler 7 (Margam C)

CEMS results for PM, NO_x and SO₂ have been submitted for the monitoring period, with no exceedances of the daily or monthly mean emission limits noted. This asset was taken out of service on W/C 30th of September 2024. It is the understanding on NRW that there is no intention to recommission this asset. It is important to note that changes to the activities on the Site and associated emissions points will need to be captured within a permit variation.

A53 – Mitchell Boiler (Margam B)

As part of the closure of the Heavy End, this asset was taken out of operation on the 1st of July 2024 and as a result monitoring has not been undertaken within this reporting period. It is the understanding on NRW that there is no intention to recommission this asset. It is important to note that changes to the activities on the Site and associated emissions points will need to be captured within a permit variation.

A62 – Boiler 3

CEMS results for PM, NO_x and SO₂ have been submitted for the monitoring period, with no exceedances of the daily or monthly mean emission limits noted.

Carbon monoxide (CO) monitoring was not required throughout the monitoring period as a mix of fuels were used within the boiler. The CO limit only applies when boiler is fired exclusively on Natural Gas.

This asset was taken out of service on W/C 30th of September 2024. It is the understanding on NRW that there is no intention to recommission this asset. It is important to note that changes to the activities on the Site and associated emissions points will need to be captured within a permit variation.

Effluent

W1 - Long Sea Outfall

The maximum flow rate through the emission point for the quarter was 2,203m³/hour; under the emission limit of 6,000 m³/hour.

The monitoring submission indicates compliance with the emission limits at W1 except for the following:

Determinand	Monitoring Date (w/c)	Schedule 5 – Part A (TSUK Ref)	Schedule 5 – Part B (TSUK Ref)
Cyanide	30/06/2024	S5N_24_55A	SN5_24_55B
Iron	07/07/2024	S5N_24_57A	S5N_24_57B
Iron	21/07/2024	S5N_24_58A	S5N_24_58B
Zinc	18/08/2024	S5N_24_61A	S5N_24_61B
Iron	25/08/2024	S5N_24_62A	Not Submitted
Cyanide	15/09/2024	S5N_24_64A	Not Submitted

Table 1: Q3 – List of Long Sea Outfall Exceedances

Iron

The Iron emission limit of 5.0 mg/l was exceeded twice throughout the Q3 2024 monitoring period on the weeks commencing:

- 7th of July 2024 (9.74mg/l)
- 21st of July 2024 (5.56mg/l)
- 25th of August 2024 (9.66mg/l)

Investigations undertaken by TSUK determined the following causes of the aforementioned breaches:

- 7th of July:
 - This has been attributed to the decommissioning of the MCO, which resulted in contaminated water (generated from the washing of Coke Oven Gas Waste) entering Sump 3 via surface water drainage.

- 21st of July 2024:
 - This has been attributed to washing activities during a Hot Mill Shutdown. Washwater entered Sump 3 via an overflow present on the Dirty Water Pond. The level in the Pond is normally reduced prior to this activity but in this circumstance this was not undertaken. To prevent the recurrence, the Operator has stated that the Deep Drain will be diverted to Nautilus the day before a Mill Shutdown to capture any particulate from the Dirty Water Pond. Furthermore, Hot Mill will arrange gulping from the Dirty Water Pond at the start of the Hot Mill stop to prevent overspill into the effluent system

The breaches of the Iron emission limit are in contrary to condition 3.1.2 of the permit. Non-compliance scores of C3 have been allocated to these breaches.

- **In accordance with non-compliance scoring guidelines, the non-compliance scores attributed to the Iron breaches over the Q3 2024 monitoring period have been consolidated into one score.**

Failure to manage washdown activities on the 21st of July 2024 is considered to be the root cause behind the breach and subsequently is contrary to permit condition 1.1.1. In-line with NRW Policy an additional non-compliance score of C3 has been attributed against criteria IR1A – General Management.

Cyanide

The Cyanide emission limit of 0.1 mg/l was exceeded twice throughout the Q3 2024 monitoring period on the weeks commencing:

- 30th of June 2024 (0.13mg/l)
- 15th of September 2024 (0.30mg/l)

Investigations undertaken by TSUK determined the following causes of the aforementioned breaches:

- 30th of June 2024
 - This has been attributed to the Blast Furnace 5 blowdown, which was a planned event which was required to undertake the decommissioning process. This resulted in a change of temperature to the furnace, which resulted in pockets of cyanide to drop into the effluent system. This incident is unlikely to occur again due to the closure and subsequent decommissioning of the Blast Furnaces.

The breaches of the Cyanide emission limit is in contrary to condition 3.1.2 of the permit. A non-compliance score of C3 have been allocated to the breaches.

- **In accordance with non-compliance scoring guidelines, the non-compliance scores attributed to the Cyanide breaches over the Q3 2024 monitoring period have been consolidated into one score.**

Zinc

The Zinc emission limit of 2.0 mg/l was exceeded once throughout the Q3 2024 monitoring period on the weeks commencing:

- 18th of August 2024 (4.02mg/l)

Investigations undertaken by TSUK determined the following causes of the aforementioned breaches:

- 18th of August 2024
 - This has been attributed to a stoppage on Blast Furnace 4, which caused a heat gain due to the change of temperatures in the furnace. This caused scabs containing Zinc to fall off from the furnace walls and enter the water system, attributing to the breach. This incident is unlikely to occur again due to the closure and subsequent decommissioning of the Blast Furnaces.

The breach of the Zinc emission limit is in contrary to condition 3.1.2 of the permit. A non-compliance score of C3 have been allocated to this breach.

W2 - Arnallt Culvert Inlet

There are no monitoring requirements associated with W2.

W3 – Abbey Beach Outfall

Due to insufficient water flow over the weir, sampling was unable to be undertaken throughout the entirety of the Q3 2024 Reporting Period.

W4 – Iron Ore Stockyard into Afan Estuary

There are no specific emission limits listed against the emission point. The required monitoring was undertaken (monthly when flow detected), with the relevant data submitted.

W5 – Cooling Water discharge into Port Talbot Dock

The maximum flow rate through the discharge point was 49,464 m³/day, which is under the emission limit of 350,000 m³/day.

No exceedances in the suspended solid (20mg/l) or temperature (36°C) emission limits were reported within discharges throughout the monitoring period.

The Operator has stated that the flow at W5 ceased operation on the 29th of September 2024 as part of the Sites's transition to an EAF. It is important to note that changes to the activities on the Site and associated emissions points will need to be captured within a permit variation.

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.