

Compliance Assessment Report for: CAR_NRW0045066-Q224

Permit number	BL7108IM	Operator name	Tata Steel UK Ltd
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Site name	Port Talbot Steelworks
Site address	Port Talbot Steelworks, Port Talbot, SA13 2NG
Type of assessment	Report/Data Review

Date of assessment	26/07/2024	Time in	N/a	Time out	N/a
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Parts of permit assessed	Q2 2024 Monitoring Returns
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NRW Lead officer	Rhodri Morgan	Accompanied by	N/a
Report sent to – Name and position	Head of Environment TSUK Operations,	Date	30/08/2024

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

Part of permitted activity assessed (use action criteria below)	Assessment result	Permit condition
IR3A - Emission & Monitoring - Emissions to water, air or land	C3 Minor (7)	3.1.2.
IR3E - Emission and Monitoring - Monitoring	C3 Minor (1)	3.5.1a.
IR4B - Information - Reporting	Assessed (A)	
IR4C - Installations - Information - Notification	Assessed (A)	

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

Total number of non-compliances recorded	Total non-compliance score
8	32

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?

Compliance Criteria	Action needed	Complete by
IR3A - Emissions to water, air or land	Ensure emissions from the site are compliant with the emission limits listed within the permit.	Ongoing

Action 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 prosecutions 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 any 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 Port Talbot Steelworks in accordance with Permit 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 2 (Q2) April - June 2024 monitoring submissions, which were submitted by TSUK between the 26th – 31st of July 2024.

Scope

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

- 2024 Q2 continuous emissions monitoring (air) - LCP.
- 2024 Q2 continuous emissions monitoring (air) – other.
- 2024 Q2 discontinuous emissions monitoring (air).
- 2024 Q2 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 Q2, with thirteen exceedances¹ of the 40 mg/m³ daily emission limit noted.

Three Schedule 5 Part A notifications were submitted for the confirmed PM exceedances (S5N_24_33A, S5N_24_39A and S5N_24_54A) 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 A1².

¹ Following the application of the uncertainty value $\pm 30\%$ reported by the operator.

² TSUK are required to notify NRW within 24 hours of detection, breaches greater than twice the permitted ELV.

TSUK have developed and implemented an emissions reduction programme, which outlines the steps required to achieve compliance with the ELV for PM at emission point A1.

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 Q2 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 reported³.

PAH and Dioxins spot extractive sampling (required on a 6-monthly basis) was undertaken during the Q2 reporting period. No exceedances emission limit reported for either parameter.

Mercury spot extractive sampling (required on an annual basis) has not been undertaken during this Q2 reporting period.

On the 28th of June 2024, TSUK submitted two Schedule 5 Part A Notifications (S5N/24/51A and S5N/24/52A) regarding a CEMS outage associated with the A1 Sinter Plant Main Stack. This resulted in the loss of data monitoring regarding SO₂ and NO_x between the 22nd of June and 24th of June 2024. The outage was the result of a sample line blockage and subsequent water ingress into the monitor, this was identified and rectified by TSUK Engineering Team.

Failure to monitor is contrary to condition 3.5.1a 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 Q2 monitoring period have been consolidated into one score.**

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 Q2 reporting period:

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

³ Following the application of the uncertainty value ± 20% reported by the operator.

Ironmaking

A6 – BF4 Hot Blast Stove Stack

Spot extractive sampling undertaken on the 6th of June 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 2024. NRW have received no follow up information indicating that the asset has been returned to operational status.

A7 – BF5 Hot Blast Stove Stack

Spot extractive sampling undertaken on the 2nd of May 2024 indicate no exceedances of the SO₂, NO_x and PM emission limits for the monitoring period.

A9 – BF5 Casthouse Fume Extraction

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

A37 – Fluidised Bed Dryer 1

Spot extractive sampling is an annual requirement and was not reported during the Q2 monitoring period.

A38 – Fluidised Bed Dryer 2

Spot extractive sampling is an annual requirement and was not reported during the Q2 monitoring period.

A39 – Number 1 New Mill Stack (GCI)

Spot extractive sampling for SO₂, NO_x and PM was undertaken on the 4th of June 2024. There were no reported exceedances of emission limits for SO₂ and NO_x.

A Schedule 5 Part A notification (S5N_24_42A) has been submitted following a breach of the PM emission limit (25 mg/m³) with a reported value of 46.3 mg/m³. A retest of PM was subsequently conducted on the 17th of June 2024 and found to be within the compliance level of PM.

The breach of the PM emission limit is contrary to condition 3.1.2 of the permit. In accordance with non-compliance scoring guidelines a non-compliance score of C3 has been allocated.

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 recorded⁴.

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 was conducted on the 2nd of May 2024. A Schedule 5 Part A notification (S5N_24_37A) has been submitted following a breach of the PM emission limit (50 mg/m³) with a reported value of 83.6 mg/m³.

The breach of the PM emission limit is contrary to condition 3.1.2 of the permit. In accordance with non-compliance scoring guidelines a non-compliance score of C3 has been allocated.

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.

Hot/ Cold Mills

A34A – Reheat Furnace Duct (North)

Spot extractive sampling undertaken between the 10th of April and 12th of April 2024, there were no recorded⁵ exceedances of the SO₂, NO_x or PM emission limits for the monitoring period.

⁴ Following the application of the uncertainty value ± 30% reported by the operator.

⁵ Following the application of the uncertainty value ± 20% (30% for Dust) reported by the operator.

A34B – Reheat Furnace Duct (South)

Spot extractive sampling undertaken between the 10th of April and 14th of April 2024, there were no reported exceedances of the SO₂, NO_x or PM emission limits for the monitoring period.

A21 – Pickle Line Scrubber Fume Extraction

The recorded Chlorides (as HCl) result (1.6 mg/m³) collected on the 9th of April 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)

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

Spot extractive sampling undertaken on the 17th of April 2024 indicates compliance with the SO₂ and NO_x emission limits for the monitoring period.

A52A Boiler 6 (Margam C)

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

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.

A53 – Mitchell Boiler (Margam B)

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

Spot extractive sampling undertaken on the 22nd of April 2024 indicate compliance with the SO₂ and NO_x emission limits for the monitoring period.

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.

Effluent

W1 - Long Sea Outfall

The maximum flow rate through the emission point for the quarter was 2,740m³/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)
Zinc	31/03/2024	S5N_24_25A	Not Submitted
Iron	31/03/2024	S5N_24_26A	S5N/24/26B
Phenol	31/03/2024	S5N_24_27A	S5N_24_27B
Zinc	07/04/2024	S5N_24_28A	Not Submitted
Cyanide	07/04/2024	S5N_24_29A	S5N_24_12B
Cyanide	14/04/2024	S5N_24_30A	S5N_24_12B
Zinc	21/04/2024	S5N_24_31A	Not Submitted
Cyanide	21/04/2024	S5N_24_32A	S5N_24_12B
Zinc	28/04/2024	S5N_24_34A	Not Submitted
Zinc	12/05/2024	S5N_24_35A	Not Submitted
Cyanide	12/05/2024	S5N_24_36A	S5N_24_12B
Cyanide	19/05/2024	S5N_24_38A	S5N_24_12B
Cyanide	26/05/2024	S5N_24_40A	S5N_24_12B
Zinc	26/05/2024	S5N_24_41A	Not Submitted
Zinc	02/06/2024	S5N_24_43A	Not Submitted
Cyanide	02/06/2024	S5N_24_44A	S5N_24_12B
Phenol	09/06/2024	S5N_24_45A	S5N_24_27B
Iron	09/06/2024	S5N_24_46A	Not Submitted
Zinc	09/06/2024	S5N_24_47A	Not Submitted
Cyanide	09/06/2024	S5N_24_48A	S5N_24_12B
Zinc	23/06/2024	S5N_24_53A	Not Submitted

Table 1: Q2 – List of Long Sea Outfall Exceedances

Iron

The Iron emission limit of 5.0 mg/l was exceeded twice throughout the Q2 2024 monitoring period on the weeks commencing:

- 31st of March 2024 (5.75mg/l)
- 9th of June 2024 (10.98mg/l)

An investigation undertaken by TSUK (S5N/24/26B) determined that the BOS DC1 system south rake had tripped, which elevated the Total Suspended Solids (TSS) causing an increase in Iron ppm. In events like these, water is diverted to the Nautilus for additional treatment however, the elevated concentrations is sufficient for the weekly limit to be exceeded.

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 Q2 2024 monitoring period have been consolidated into one score.**

Cyanide

The Cyanide emission limit of 0.1 mg/l was exceeded eight times throughout the Q2 2024 monitoring period on the weeks commencing:

- 7th of April 2024 (0.49mg/l)
- 14th of April 2024 (0.48mg/l)
- 21st of April 2024 (0.27mg/l)
- 12th of May 2024 (0.23mg/l)
- 19th of May 2024 (0.67mg/l)
- 26th of May 2024 (0.28mg/l)
- 2nd of June 2024 (0.67mg/l)
- 9th of June 2024 (0.16mg/l)

TSUK submitted their investigation regarding Cyanide exceedances (S5N_24_12B) on the 20th of August 2024. The initial root causes have been attributed to increased blast furnace heat gain activity, elevated zinc loading and reduction in overall effluent flow.

The breach 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 breach.

- **In accordance with non-compliance scoring guidelines, the non-compliance scores attributed to the Cyanide breaches over the Q2 2024 monitoring period have been consolidated into one score.**

Zinc

The Zinc emission limit of 2.0 mg/l was exceeded nine times throughout the Q2 2024 monitoring period on the weeks commencing:

- 31st of March 2024 (2.34mg/l)
- 7th of April 2024 (2.09mg/l)
- 21st of April 2024 (3.06mg/l)
- 28th of April 2024 (3.31mg/l)
- 12th of May 2024 (2.97mg/l)
- 26th of May 2024 (2.03mg/l)
- 2nd of June 2024 (2.49mg/l)

- 9th of June 2024 (6.85mg/l)
- 23rd of June 2024 (5.85mg/l)

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 the breach.

- **In accordance with non-compliance scoring guidelines, the non-compliance scores attributed to the Zinc breaches over the Q2 2024 monitoring period have been consolidated into one score.**

Phenol

The Phenol emission limit of 0.5mg/l was exceeded twice throughout the Q2 2024 monitoring period on the weeks commencing:

- 31st of March 2024 (0.8mg/l)
- 9th of June 2024 (1.11mg/l)

TSUK submitted an investigation to NRW (S5N_24_27B) and have attributed the exceedance to the importation of coke contaminated with Phenol.

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

- **In accordance with non-compliance scoring guidelines, the non-compliance scores attributed to the Phenols breaches over the Q2 2024 monitoring period have been consolidated into one score.**

W2 - Arnallt Culvert Inlet

There are no monitoring requirements associated with W2.

W3 – Abbey Beach Outfall

No exceedances in the suspended solid (200mg/l) or hydrocarbon (20mg/l) emission limits were reported within discharges at W3 throughout the monitoring period.

Due to insufficient water flow over the weir, sampling was unable to be undertaken on the following weeks:

- 2nd of June 2024
- 9th of June 2024
- 16th June 2024
- 23rd June 2024

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 65,343 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.

Note: Not all potential breaches have been scored. If you have any queries about this report, please contact the NRW officers named above.

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 in the aspects assessed.
Action only (X)	Action only relating to the activity assessment
Ongoing (O)	Ongoing non-compliance, not scored

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

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 – 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.