

Compliance Assessment Report CAR_NRW0042118

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: 29/06/2023 between 09:00 and 17:00.

Parts of permit assessed: Air Quality .

NRW Lead Officer: Rhodri Morgan, accompanied by Mark Broom, Gary Evans.

Report sent to: Nathan Ace , Head of Environment TSUK Operations, on 04/08/2023.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR1A - Management - General management	Assessed (A)	
IR1F - Management - Multiple operator installations	Assessed (A)	
IR2C - Operations - Operating techniques	Assessed (A)	
IR3A - Emissions and monitoring - Emissions to water, air or land	Assessed (A)	
IR3G - Emissions and monitoring - Air quality management plans	Assessed (A)	
IR4A - Information - Records	Assessed (A)	
IR3D - Emissions and monitoring - Noise and vibration	Action only (X)	
IR3G - Emissions and monitoring - Air quality management plans	Action only (X)	
IR3E - Emissions and monitoring - Monitoring	Action only (X)	

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

Total non-compliances recorded	Total non-compliance score
0	0

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
IR3D	Action 042118/01 – TSUK to provide NRW with a copy of the current inventory of onsite potential sound sources.	29/09/2023
IR3G	Action 042118/02 – TSUK to provide NRW with a copy of the medium and high alert actions which are to be implemented across the Site.	29/09/2023
IR3E	Action 042118/03 – TSUK to provide update on continuous particulate monitor installation at A39 when installation plan has been designed.	29/12/2023

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

Tata Steel UK Limited

Site Description

Tata Steel UK Limited (TSUK) operates the 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.

Four other companies – Tarmac, Harsco, Runtech and ICL – are contracted to undertake their own permitted activities at the steelworks on TSUK's behalf.

Introduction

NRW has initiated a targeted programme of compliance interventions; focusing on key areas of the Site which have the greatest ability to impact the surrounding community. This visit focused on air quality management throughout the steelworks.

The site inspection was split into two distinct sessions. The morning session was held with members of the Sustainability & Environment Team and focused on the wider steelwork's installation (the 'Site').

In the afternoon, an inspection of the Site was undertaken; specifically looking at Tata's dust control measures. This included a visit to the stockyards where the area was inspected from the observation tower. This visit focussed on the measures utilised by TSUK, and did not include an inspection of the other permitted areas within Site.

Attendees

Tata Steel

Sustainability & Environment

- Nathan Ace – Head of Environment TSUK Operations
- Matthew Thomas – Environment Lead Governance
- Nicola Parnell – Environment Lead UK ETS & Air Quality
- Gareth Goss – Environment Engineer Air Quality
- Peter Quinn – Director

Burdening - (Harbour & Blending)

- David Morgan - Works Area Production Manager
- Rachel Hammond – Production Specialist
- Contractor – Lloyd Walters Industrial Services

CGI Plant

- Gavin Holley – Area Production Manager
- Neil Lobo – Section Technical Manager

NRW

- Mark Broom – Senior Specialist Advisor, Industry & Waste Regulatory Approaches
- Gary Evans – Senior Specialist Advisor, Radioactivity & Industry Policy
- Rhodri Morgan – Senior Officer, Industry & Waste Regulation

Sustainability and Environment Team (Morning Session)

Community Complaints

TSUK provided an update on the number of complaints received from the local community throughout May 2023 – 161. The majority of the complaints have been associated with a series of blast furnace bleeder openings between the 12th and 15th May 2023 (Figure 1). The blast furnace bleeder openings generated complaints relating to fallout (>100), visual emissions (18) and noise (9).

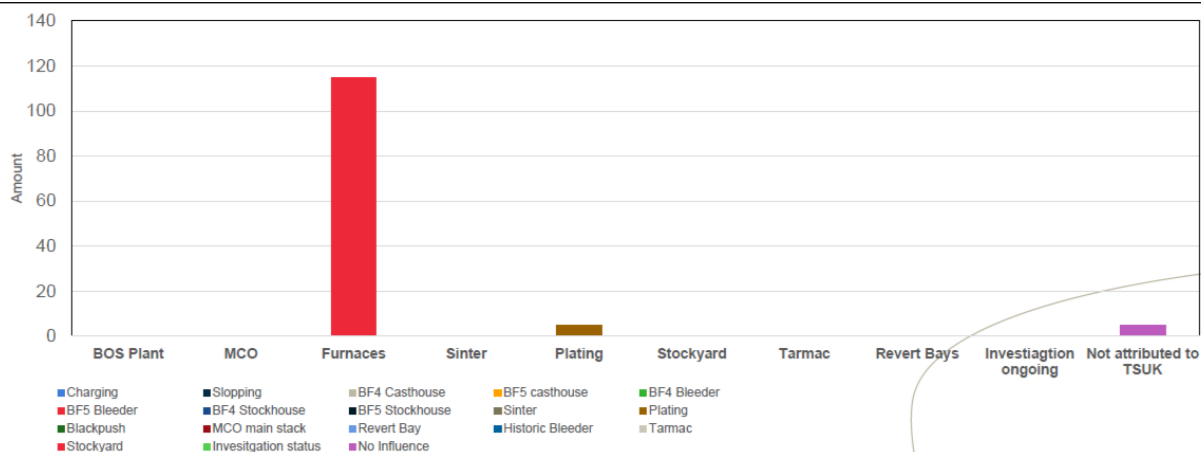


Figure 1 - Fallout Complaints Root Cause (May 2023)

The remaining complaints in May have been associated with iron plating activities. A plating event on the 6th June 2023 led to observable emissions and generated complaints to both TSUK and NRW. TSUK provided an update to the local community through their social media channels; explaining the root cause of the emissions and apologising for any inconvenience caused.

A management Investigation has been initiated following several visible emissions from plating activities in recent months. NRW will consider the compliance implication of the plating events following receipt of the operator's management investigation.

Community Engagement

TSUK provided an update on the Site's community engagement following their recent commitment to improve and develop relationships with the local community (CAR_NRW0041675).

A survey has been launched to gather feedback from the local community on the current complaint management process. Local councillors have been approached for comment and to help disseminate the survey throughout the community.

Complaint feedback letters are being improved to include additional information relating to complaints. Contractors working on behalf of the operator within the community (e.g. complaints helpline, valeting companies) have been trained to improve their knowledge of the Site and the processes which can impact the community.

Noise Management

TSUK provided an update on noise management throughout the Site; including plans to improve the understanding of onsite noise sources and their potential impacts at offsite receptors.

The Site are assessing the proposals of external noise consultants who have been contracted to support the development of a noise management plan (NMP) for the Site. The long-term ambition of the project is to

combine the NMP with the Sites integrated environmental monitoring system; allowing automatic warnings to be generated when noise thresholds are breached.

A noise register has been developed which documents noise sources within the Site. The register is continuously updated as new data is acquired through engineering projects.

Action 042118/01 – TSUK to provide NRW with a copy of the current inventory of onsite potential sound sources.

TSUK are investigating methods to mitigate the impact of onsite level crossing alarm systems on receptors within the local community. Complaints relating to a two-tone alarm have been received by TSUK since the installation of additional level crossings following the rail Torpedo car incident in 2019.

The Site has developed an inventory of the rail crossings, including the ability to record each barrier activation. Complaints are cross referenced against alarm activations to determine which crossings are impacting the community.

A package of works has been implemented which will use background noise monitoring to determine the impact of the alarm systems offsite. Potential mitigation measures were discussed including:

- Transition to a visual warning system during antisocial hours.
- Variable power outputs
- Additional rail crossings

The discussion satisfied actions 041674/03 and 041674/04 of CAR_NRW0041675.

Incident Updates

Ongoing non-compliances were discussed along with the root causes. Each non-compliance has been recorded in a previous CAR form following submission of the relevant quarterly monitoring returns (CAR_NRW0041909).

Sinter Plant PM₁₀ Emissions

A discussion was held on recent particulate matter (PM) emissions from emission point A1 (Sinter Plant Main Stack). The total number of exceedances throughout 2022 (36) was nearly exceeded during the Quarter 1 (Q1) January to March 2023 monitoring period, with thirty-five exceedances recorded.

The likely root causes and contributing factors of the exceedances were discussed, including:

- Plant instability (January – February)
- Single Fan Operations (February)
- Maintenance Issues – DDV Failures (March)
- Chloride levels within flue dust (March)

Progress against TSUK's revised action plan for the emission point was discussed. The revised action plan

details the steps that will be taken to achieve compliance with the 40 mg/Nm³ as a daily mean emission limit.

A key work stream of the action plan is the installation of a revert washing plant (Work Stream 2), which aims to reduce the chloride content of reverts used within the Sinter feedstock. TSUK provided an update on the work stream with final CAPEX approval expected shortly. Elements of the project such as the procurement of a low chloride water supply have already been completed.

A site visit has been scheduled for September 2023 to review progress with the maintenance programme and revised action plan. If there is slippage or unjustified deviation from the revised action plan, or if there is any further deterioration in emissions at emission point A1. NRW will keep under review our regulatory response to this matter to ensure TSUK takes all appropriate steps to improve compliance with its Environmental Permit.

Blast Furnace Bleeder Releases

Blast Furnace 5 (BF5) experienced a period of instability between the 12th and 15th May 2023 following an issue with Stove 13. This led to frequent bleeder openings, including twenty-two separate events on the 13th May 2023.

Operational difficulties were also experienced at Blast Furnace 4 (BF4) over the same time period, with four recorded bleeder openings.

The indicative root causes of the bleeder openings were discussed along with the steps taken by the production teams to restore furnace stability. The operator's management investigation into the causes leading to the blast furnace bleeder openings is presently underway. NRW will consider any compliance implication of the bleeder openings following receipt of the operator's management investigation.

Steelworks Air Quality Management Plan

The Steelworks Air Quality Management Plan (AQMP) details the measures taken by the Site to manage air quality, limit potential atmospheric emissions and respond to air quality alerts regarding PM₁₀ and fugitive dust emissions. NRW recently approved the latest version of the AQMP (V13) which was updated on the 10th March 2023.

TSUK provided an overview of the AQMP including the amendments which have been made in the latest revision. The updated version now documents the entire air quality management processes used at the Site; including monitoring capabilities, communication channels, action implementation and feedback.

The following were discussed:

- Fugitive Dust (PM₁₀₀/Total Suspended Particulate);
- Aloa_ADA Deposition;
- CCTV Monitoring (Aloa_Detect);
- Air Quality Environmentally Critical Equipment (ECE);

- Road Management;
- On-Vehicle Measurement;
- Stockpile and Stockyard Management.

The AQMP works coherently with the Sites integrated environmental monitoring system; allowing automatic alerts to be sent throughout the Site when there is a risk of elevated PM₁₀ concentrations or fugitive dust in Port Talbot. Works areas are required to provide feedback following the issue of an alert. This feedback is used to compile a PM₁₀ breach investigation report; if the daily mean concentration of 50 µg/m³ is exceeded at the Margam AURN.

The AQMP is the overarching plan for the wider steelwork's installation. Each works area and key contractor has an individual AQMP (Figure 2).

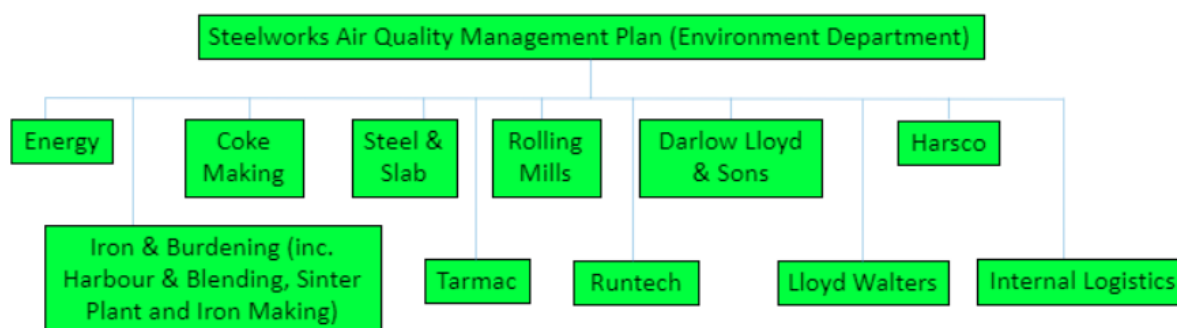


Figure 2: Air Quality Management Plan Organogram

The works area/contractor AQMP's document the actions which are required at certain risk levels for PM₁₀ and Fugitive Dust. The Sustainability and Environment Team undertake an annual review of each AQMP to determine if additional actions are required; this exercise has just been completed for 2023.

Action 042118/02 – TSUK to provide NRW with a copy of the medium and high alert actions which are to be implemented across the Site.

It was clear from the discussion that TSUK understood their responsibilities in relation to the AQMP, representing compliance with the permit condition (3.7.1).

Site Visit – Afternoon Session

Stockyard Inspection

NRW met with representatives of the Burdening (Harbour & Blending) team who provided an overview of the works area including the dust abatement measures used throughout the stockyards.

The stockyards were observed from the observation tower where numerous material and vehicle movements were witnessed. No evidence of dust lift-off was observed from any of the raw material stockpiles, conveyors, or haul roads.

NRW officers spoke with a control room operative who provided a demonstration of the CCTV equipment and outlined the actions which are followed if any dust lift off is observed.



Image 1 - Image of stockyards taken from Observation Tower

A discussion was held with representatives from Lloyd Walters Industrial Services (LWIS); the contractor who deliver environmental management control measures across the stockyards. NRW officers inspected a selection of documents provided by LWIS, including:

- Daily Haul Road Inspection Report (June 2023)
- Daily Stockpile Inspection Report (June 2023)
- Daily Wheel Wash Inspection Report (June 2023)

Water volumes used for dust suppression activities throughout the Stockyards vary based on weather conditions. Approximately 3.68 million litres of water was used between the 11th and 17th June 2023 when dry weather conditions were recorded. This figure dropped to 1.85 million litres between the 25th June and 1st July 2023, when wet weather conditions were experienced.

There were twelve recorded “possible” visible lift off events from stockpiles throughout June. The Daily Stockpile Inspection Report highlights that additional applications of latex were applied by LWIS on stockpiles where “potential” visible lift off was observed.

Each wheel wash (6) within the stockyard area was operational at the time of the visit. Locations G and H were temporarily unavailable, to facilitate planned cleaning activities. The provided wheel wash inspection report highlights that the cleaning/ maintenance schedule for 2023 was adhered to throughout June.

Throughout the visit multiple bowser units were observed, with the primary haul roads found to be clear of debris and mud. Both bowser filling points within the area (Burdening and Blending) appeared to be operational.

Coal Granulation Injection Plant

A visit was made to the Coal Granulation Injection (CGI) Plant following an earlier discussion regarding ongoing non-compliance at emission point A39 (New Mill Stack).

The 25 mg/m³ emission limit has exceeded the emission limit during the past two sampling events; 2nd December 2022 (332.3 mg/m³) and the 17th May 2023 (336.6 mg/m³).

The breaches have been associated with defective/ failed bags within the bag filter. A management investigation has been launched to determine the root cause of the bag failures.

TSUK are exploring options to install a continuous particulate monitor at the emission point. This will provide advance warning to plant operatives of when the emission point is nearing the compliance limit. The installation of the monitor is welcomed by NRW and would have otherwise been requested if not volunteered by TSUK.

A forward action plan has been developed to ensure the emission point returns to compliance. NRW will check progress against the plan during future site visits.

Action 042118/03 – TSUK to provide update on continuous particulate monitor installation at A39 when installation plan has been designed.

Site Wide – General Observations

Following the visit to the stockyards and the GCI plant, NRW officers conducted random spot checks at various points throughout the Site. The following observations were made:

- No evidence of dust lift-off was noted throughout the Site, including from the other permitted areas within the boundary of the Steelworks.
- Frequent bowser movements were noted throughout the day, with the main roadways dampened down, with no lift off noted.
- No dust lift off was noted from the direction of the harbour; where a vessel was in the process of being unloaded.
- The site employs a site wide 20 mph vehicle speed limit which is strictly enforced. A number of speed cameras were noted throughout the Site and traffic appeared to be adhering to the speed limit.
- No black pushes from Morfa Coke Ovens (MCO) were noted throughout the duration of the inspection.
- There was limited evidence of visible emissions from the ram-side doors at MCO, an improvement

from a previous visit on the 25th May 2023 (CAR_NRW0041945).

Unannounced Site Visit – 4th July 2023

An unannounced Site visit was undertaken on the 4th July 2023 following a visit to Tarmac who operate under a separate permit (BL5636IF) within the Steelworks boundary.

Observations were similar to those made on the 29th June 2023, with no dust lift off noticed from the TSUK permitted area of the Steelworks.

Bowser movements were noted, and all visible dust abatement measures appeared to be functioning correctly. A bower unit was observed applying latex to a newly formed stockpile.

Several large plumes of dust were observed originating from outside of TSUK permitted boundary. The area is operated by Harsco under a separate permit (BP3635MR) and therefor is outside the scope of this compliance report.

Note: Not all potential breaches have been assessed or 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
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.