

Compliance Assessment Report CAR_NRW0049303

Permit being assessed: TP3639BH.

For: Tremorfa Melt Shop, **held by:** 7 Steel Manufacturing (UK) Limited

At: Seawall Road, Tremorfa, Cardiff, Cardiff, CF24 5TH.

Type of assessment: Report/Data Review,

Reason: Routine.

On: 04/09/2025.

Parts of permit assessed: 1.1, 3.1.2, 3.2.1, 3.5.1, 3.7, 4.2.3, 4.3.1(a), 4.3.1(b), 4.3.2.

NRW Lead Officer: Dale Padfield.

Report sent to: -, Environmental Manager, on 04/09/2025.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	Assessed (A)	
IR4B - Installations - Information - Reporting	Assessed (A)	
IR4C - Installations - Information - Notification	Assessed (A)	
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	C3 Minor (Suspended)	3.1.2
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	C3 Minor (Suspended)	3.1.2
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	C3 Minor (Suspended)	3.1.2
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	C3 Minor (Suspended)	3.1.2
IR3B - Installations - Emissions and monitoring - Emissions of substances not controlled by emission limits	C3 Minor	3.2.1
IR1A - Installations - Management - General Management	C3 Minor	1.1.1
IR3I - Installations - Emissions and monitoring - Fire	Action only (X)	

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR1A - Installations - Management - General Management	C3 Minor	1.1.1

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

Total non-compliances recorded	Total non-compliance score
7	12

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(1)	Implement the proposed infrastructure improvements to re-establish compliance with emission limits for iron to the S1 discharge point. Provide NRW with a report detailing the improvements once complete.	30/09/2025
IR3A(1)	Implement the proposed infrastructure improvements to re-establish compliance with emission limits for total suspended solids to the S1 discharge point. Provide NRW with a report detailing the improvements once complete	30/09/2025
IR3A(1)	Implement the proposed infrastructure improvements to re-establish compliance with emission limits for arsenic to the S1 discharge point. Provide NRW with a report detailing the improvements once complete	30/09/2025
IR3A(1)	Implement the proposed infrastructure improvements to re-establish compliance with emission limits for hydrocarbon oil index to the S1 discharge point. Provide NRW with a report detailing the improvements once complete	30/09/2025
IR3B	Conduct a root cause analysis of the fire incident and evaluate the Fire Prevention and Mitigation Plan (FPMP) to identify opportunities for improvement.	Already completed
IR1A	Conduct a root cause analysis of the fire incident and evaluate the Fire Prevention and Mitigation Plan (FPMP) to identify opportunities for improvement	Already completed
IR3I	7Steel to provide any documentation detailing the completion of both the one hour fire-watch and clearance of waste which may have accumulated under equipment following plant shutdown on the 09/05/2025 to demonstrate conformance with the sites FPMP on the day the fire occurred. Additionally, provide NRW with a copy of any revised or updated versions of the sites FPMP.	31/10/2025
IR1A	Ensure the functionality of the SD card is captured within the sites procedures to minimise to risk of delayed detection of elevated particulate matter on the A1 stack. Provide NRW	31/10/2025

Criteria	Action needed	Complete by
	with conformation once this has been implemented.	

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

7Steel Manufacturing (UK) Limited

EPR/TP3639BH

Compliance assessment report (CAR) detailing the following topics:

- Quarter 2 (April - June) 2025 permit reporting returns
- Schedule 5 notifications
- Complaints and reports

Quarter 2 (April - June) 2025 permit reporting returns

Air emissions ~ A1 / A5 / Ambient monitoring

A1 ~ The operator reported the following highest monthly concentrations, 1.94 mg/m³, 2.42 mg/m³ and 5.29 mg/m³ for the months April, May, and June respectively. The June result is discussed further in the Schedule 5 section below.

A4 ~ A Ringelmann shade 0 was reported for each month of the quarter.

A5 ~ The operator reported a total of 436.6 hourly average recordings, with no hourly averages exceeding the 20 mg/m³ trigger level.

Ambient monitoring ~ Ambient monitoring reports received, no reported data gaps within the period, data received for both minerals site boundary locations and both off-site locations. Reports/data accepted.

Waste returns

Waste returns were reported within the reporting window, all received EWC codes are compliant with the permit. The returns are accepted.

Emissions to water & land – Surface water soakaway monitoring from asphalt plant. All required parameters monitored, no ELV associated with the monitoring. Results are consistent with previous sampling. Returns are accepted.

Schedule 5 notifications

Exceedances to sewer discharge point S1

The following schedule 5 notifications were received regarding exceedances of various emission parameters to sewer at emission point S1.

01/05/2025 – Hydrocarbon oil Index (HOI), arsenic, iron, total suspended solids (TSS)

02/06/2025 – HOI, TSS, iron

18/06/2025 – HOI, TSS, iron & arsenic.

A category 3 minor non-compliance will be issued and immediately suspended as previous agreed (CAR_NRW0046686). A meeting is planned in September to discuss the measures 7Steel have implemented to improve water quality being discharged at the S1 emission point.

A schedule 5 notification detailing an exceedance of the 24 hour particulate ELV (5.00 mg/m³) on the A1 stack was received on the 18/06/2025, with the Part B received on the 20/06/2025. A daily average of 5.29 mg/m³ was recorded over the period, with 7Steel identifying damaged bags within compartments 18 and 19 within the abatement 'bag-house' as the cause of the elevated particulate matter. Detection of the damaged bags had been delayed due to a technical issue with the data logging system as the SD card had reached capacity. Once identified, the SD card was replaced and repairs conducted on the abatement plant.

As the elevated result is within the accepted uncertainty for the particulate analyser, no non-compliance will be issued for ELV exceedance. However, early detection of elevated particulate matter relies on the data logging system operating correctly, which in turn requires the SD card to have sufficient capacity. The delay resulting from the full SD card did result in elevated emissions of particulate matter, which could have been more significant under different circumstances. As such, a minor non-compliance will be issued against permit condition 1.1 as the functionality of the SD card should be captured within the sites procedures to minimise the risk of such failures occurring.

Non-compliance: A category 3 minor non-compliance is issued against the management system for failing to identify and minimise the risk of pollution. Permit condition 1.1 (a).

Shredder plant fire: A schedule 5 notification was received on the 12/05/2025 detailing a fire at the

shredder plant which occurred late evening on the 09/05/2025. At approximately 20:30 a fire was detected at the plant, within South Wales Fire and Rescue Services (FRS) attending shortly after. FRS were on site until early hours of the 10th when the fire was deemed to be extinguished. All firewater was reported to have been contained, the site benefits from an impermeable surface and sealed drainage. The fire had impacted various parts of the plant, but in particular the conveyor belts were reported to be significantly damaged.

A part 'B' was received on the 13/06/2025. The investigation summarised that the ignition source was likely a hot fragment originating from the hammer mill. Had travelled through the system and settled on residual waste at the base of the air separation system. After some time the waste had ignited, with the fire spreading along the conveyor belt systems.

Steel have implemented the following measures to minimise a re-occurrence:

"Increase length of 'run empty' time at end of shift from 15 minutes to 30 minutes, to ensure all remaining material flushed through system.

During the 'run empty' period activation of water deluge system into hammer mill which will then flow through full downstream process areas.

Moved daily maintenance checks from beginning of next day to end of shift, whilst also including in the process 1 hour fire watch period, covering complete plant utilizing thermal imaging equipment.

Additional cleaning resources, including new process to quality check cleaning quality level. Finalising quotations ready for order of additional thermal imaging cameras with automated alert system. In addition to existing system."

The fire resulted in the release of smoke and fume and is considered an unpermitted fugitive emission. The emission may have resulted in short-term localised impacts on air quality which has been evaluated as a minor category 3 non-compliance.

Non-compliance: A category 3 minor non-compliance is issued for the fugitive release of smoke and fume and potential impact of air quality. Permit condition 3.2.1.

The measures introduced to prevent a recurrence are a welcome improvement. However, the scope and scale of these new controls suggest that the previous measures may have been insufficient, and that the risks associated with such a fire had not been fully assessed or adequately mitigated. As such the following minor non-compliance is issued against the management system for failing to identify and minimise the risk of pollution.

Non-compliance: A category 3 minor non-compliance is issued against the management system for failing to identify and minimise the risk of pollution. Permit condition 1.1 (a).

Some of the preventive measures listed above were already identified within the existing fire prevention and mitigation plan (FPMP) 'ECP 68 Shredder and Shear Fire Prevention & Mitigation Plan'. Under Section 5.12 ~ Site/Plant Shutdown the following checks are listed:

- A fire-watch at least one hour after the end of operations
- Clearance of waste which have accumulated under equipment

Action 1 - 7Steel UK Limited– 04/09/2025: 7Steel to provide any documentation detailing the completion of both the one hour fire-watch and clearance of waste which may have accumulated under equipment following plant shutdown on the 09/05/2025 to demonstrate conformance with the sites FPMP on the day the fire occurred. Additionally, provide NRW with a copy of any revised or updated versions of the sites FPMP. **Due 31/10/2025**

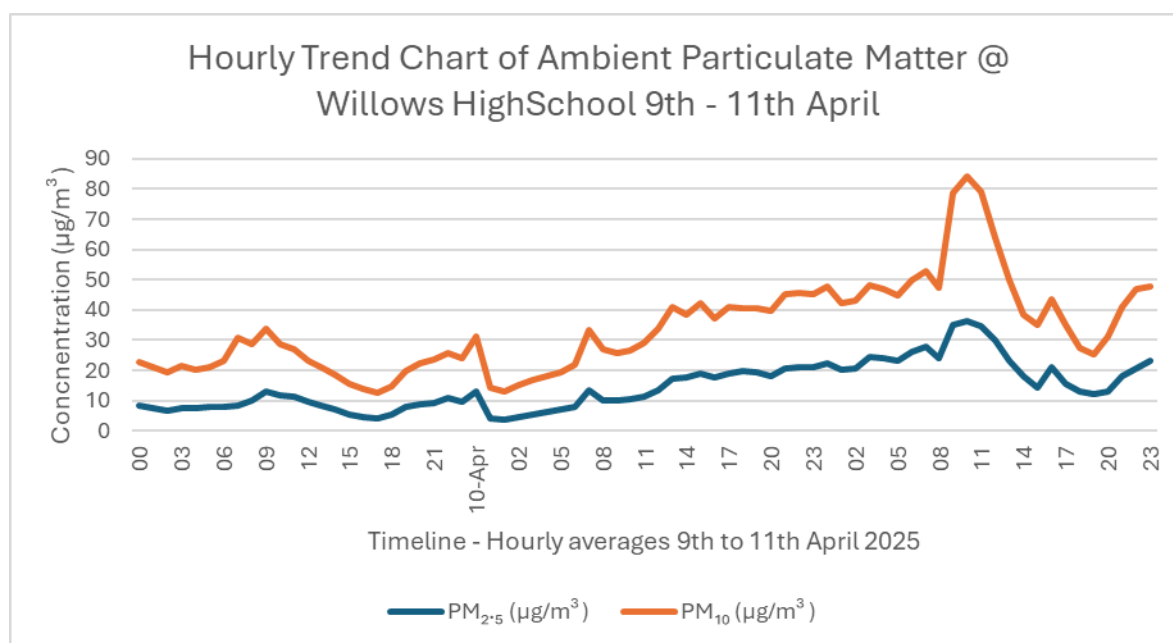
Reports and Complaints

2503715 -Dust – 11/04/2025

The report stated an orange dust had settled over garden furniture and vehicles in the area and was alleged to have originated from the 7Steel installation. The reported location was situated to the North / North West of the installation.

The wind direction over the reported timeframe shows winds predominately originating from the West / North West, suggesting dust deposits are unlikely to have originated from the 7Steel installation.

During April, including the reported date, Saharan dust events were known to be impacting Southern Europe and may have contributed to the dust deposits witnessed by the reporter. Shared regulatory services had also received reports of dust deposits from the wider area, and some were assessed to be a result of ongoing construction works in the area.



The graph above shows the hourly average trend for PM_{2.5} and PM₁₀ concentrations recorded by the ambient particulate monitor situated at Willows High School. The trend shows concentrations increasing over the 10th, the Meltshop operation was not operating during this time due to the sites weekly shut-down day for maintenance. This does show that ambient dusts levels did increase over the period the report was received, but the source is unlikely to be the 7Steel installation and are potentially natural in origin.

WIRS 2506464 – Noise – 13/07/2025

The report stated that a continuous hum, along with loud bangs and slams could be heard at 22:00 which were alleged to be 7Steel. Following notification by NRW, 7Steel provided a copy of the shift log, with a relevant noise management protocols, showing the operator had closed all doors to the main building housing the furnace. This was accompanied by CCTV stills of the corresponding time showing the main doors to be shut. Further images show the scrap being loaded into the furnace basket, with the grab lowered all the way into the basket. From the evidence provided, NRW are content that on the night of the 13th of July, 7Steel had employed the necessary measures to limit noise, as per their noise mitigation plan.

WIRS 2503797 – Noise – 14/04/2025

WIRS 2504210 – Noise – 29/04/2025

Both reports describe various noises – screeching / banging / crashing / loud machinery & activities / high pitched screeching / engine droning and are reported to be occurring over multiple days, all alleged to be originating from 7Steel.

Following the reports, multiple spot checks were conducted off-site in the surrounding area. Some metal crashing noises were substantiated and confirmed to be originating from activities from the installation, however no non-compliance will be issued as further work needs to be undertaken in relation to an assessment of appropriate measures being utilised at the facility. However, the source of other noises described were not substantiated. The investigation did reveal multiple construction projects in the area, which had recently been undertaking piling works. A piling rig was captured in one of the videos submitted as part of one of the reports. Piling works are notoriously noisy activities and have likely contributed to the noise levels experienced by the reporter.

Further work is being undertaken with regards to noise from the activities. NRW will be undertaking noise measurements to identify what site activities are likely to be most impactful and then to assess these activities against any relevant BAT. This will be detailed in a CAR form once complete.

WIRS 2504391 – Dust & noise– 04/05/2025

Report of dust and odour throughout the day with noise beyond midnight, no further details provided. The report will be closed as unsubstantiated due to limited detail provided.

End.

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.