

Compliance Assessment Report CAR_NRW0048522

Permit being assessed: TP3639BH.

For: Tremorfa Melt Shop, **held by:** Celsa Manufacturing UK Ltd

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

Type of assessment: Report/Data Review,

Reason: Routine.

On: 11/06/2025.

Parts of permit assessed: 3.1.1, 2.4.1, 4.3.1, 3.5, .

NRW Lead Officer: Dale Padfield.

Report sent to: -, Environmental Manager, on 11/06/2025.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR4B - Installations - Information - Reporting	Assessed (A)	
IR4C - Installations - Information - Notification	Assessed (A)	
IR3A(2) - Installations - Emissions and monitoring - Emissions to air	Assessed (A)	
IR2E - Installations - Operations - Improvement programme	Action only (X)	
IR3A(1) - Installations - Emissions and monitoring - Emissions to water	C3 Minor (Suspended)	3.1.2
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IR3A(1) - Installations - Emissions and monitoring - Emissions to water	C3 Minor (Suspended)	3.1.2

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

Total non-compliances recorded	Total non-compliance score
3	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
IR2E	IC10: Noise impact assessment not accepted. The operator should review the comments provided within this report and determine a suitable means to progress and satisfy the improvement condition. *It is accepted that the shredder plant is offline / or not operating to normal capacity following the recent fire. It is accepted that the IC is expected to be 'on-going' and a deadline may be difficult to determine / achieve . As such, a due date for this action will set for October 2025, where we will re-visit IC10, should it still remain un-complete.	31/10/2025
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 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

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

7 Steel Manufacturing (UK) Limited (Formally Celsa Manufacturing (UK) Limited)

EPR/TP3639BH

Compliance assessment report (CAR) detailing the following topics:

- Quarter 1 (January - March) 2025 permit reporting returns
- Schedule 5 notifications
- Site up-dates

Quarter 1 (January - March) 2025 permit reporting returns**Air emissions ~ A1 / A5 / Ambient monitoring**

A1 ~ Maximum daily average particulate emissions for January, February and March were reported at 2.03 mg/m³, 2.48 mg/m³, and 4.96 mg/m³, respectively. All maximum average values are below the ELV. The reports are accepted.

A4 ~ Lancing booth reported to not be in use during January and February. A maximum value reported as Ringelmann shade 1 during March. The reports are accepted.

A5 ~ A total of 452.03 hourly averages were recorded during the quarter, with 5 hourly averages exceeding the trigger level. The report is accepted.

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.

Schedule 5 Notifications during quarter 1 (January - March) 2025

12/03/2025 – CEMS data gap : The operator reported a loss of data from the A1 continuous particulate monitor occurring on the 12/03/2025. Further investigation revealed the operating system software had undergone a routine update, this resulted in the daily report, which is automatically generated and sent to the environmental staff, failing to send following the update. However, the CEM was still operational and all data was available. As such, no non-compliance has occurred and no score will be applied. The operator has now include a check to ensure that the automatic report function is checked and reactivated following any system updates.

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

03/01/2025 - Total suspended solids, Iron & Arsenic

31/01/2025 - Total suspended solids & Iron

25/02/2025 – Total suspended solids

11/03/2025 - Total suspended solids

As detailed in CAR_NRW0046686, the non-compliance scoring for these exceedances will be suspended whilst the operator implements proposed improvements to the effluent treatment process. The above non-compliances will see 3 x category 3 non-compliances recorded and immediate

suspended.

Other business and site updates

Improvement condition 10 (IC10)

A report (25_02_305028) was submitted to satisfy IC10, which required the operator to undertake a BS 4142 noise impact assessment following successful commissioning of the new shredder plant.

Review of the report by NRW noise specialist provided the following comments, these comments were emailed to the operator, however, are captured here to record the decision process and for completeness.

1. Source measurement durations

The Celsa 2025 report uses 5 min source sound measurements. A short measurement duration would increase uncertainty. This duration is not included in the uncertainty statement.

BS 4142 section 7.2 specifies a 1hr evaluation for daytime source sound measurements. The source sound measurement times, dates and durations as well as reasons for these durations should be provided, and confirmation this has been accounted for in the uncertainty statement.

2. Source measurement method

Source measurements were taken on site rather than at NSR. Section 2.4 of the Celsa 2025 report states that the calculation method was used instead of the measurement method due to the plant not yet being fully operational.

BS 4142 section 7.3 specifies that where possible the assessment should be based on measurements taken at the NSR but that the calculation method to be used where it is not possible to take a measurement at the NSR. The calculation method may not be acceptable as completion of the improvement condition as IC10 specifies that the assessment is to be run “following establishment of routine operation”. Furthermore, the purpose of IC10 was to establish actual noise levels at the NSRs and compare actual data to the predicted data from the application, sound and reasonable justification should be provided as to why no measurement was taken at the NSR locations.

3. Source measurement conditions

Section 6.5 of the Celsa 2025 report states that source measurements were taken “at 1.5m where possible” but does not provide suitable evidence to assure that the source sound measurements were not screened by any barriers, structures or equipment on site.

The BS 4142 Method Implementation Document (EA 2023) Section 7 specifies that if you are using a single sound pressure measurement, these must meet the far-field conditions where hemispherical

propagation can be assumed and provide proof of this. Further details such as source sound measurement location diagrams and specific details of the source locations should be provided to ensure that the far-field requirements are met and that measurements were on the propagation path between the source and the NSR.

4. Source noise calculations

The Celsa 2025 report states that the source sound pressure level and sound power level was calculated using “a commonly used formula”.

BS 4142 section 10.3 “Use a validated method of calculating sound levels, e.g. ISO 9613-2 or similar. If an alternative calculation method is used, fully describe the method and state the reasons for using this method.” Justification of the approach taken should be provided.

5. 1 of 4 NSR assessed

The Celsa 2023 Noise Report used noise modelling for four NSRs (table 1). Of the four locations, NAL03 and NAL04 appear to be the most affected. In the Celsa 2025 report, only NAL01 has been included in the as this is the nearest residential property to the site.

IC10 specified that the assessment should demonstrate that impacts do not exceed those specified in the 2023 Noise report. No reasoning has been provided for why the other 3 NSRs have been omitted.

Table 1 Noise modelling for 4 NSRs

Receptor ID	Specific Sound Level	Acoustic Feature Correction	Rating Level	Background Sound Level	Excess Over Background
Weekday					
NAL01 - Willows Avenue	43	0	43	50	-7
NAL02 - Traveller Site	45	0	45	66	-21
NAL03 - Greenbay Road	43	0	43	39	4
NAL04 - Hind Close	45	0	45	39	6
Weekend					
NAL01 - Willows Avenue	43	0	43	46	-3
NAL02 - Traveller Site	45	0	45	62	-17
NAL03 - Greenbay Road	43	0	43	42	1
NAL04 - Hind Close	45	0	45	42	3

6. Assessment made with assumption of a closed windows

Report section 7.3.8 uses façade Leq and assumption of windows closed to determine compliance with internal WHO level.

Assessments of interior noise levels are generally made assuming open windows due to ventilation requirements. Reasoning for the use of closed windows should be provided.

7. Potential tonal component

It is not clear which frequency this is at due to table/ graph inconsistency. Graph B2 (p25) 1/3 octave band figures do not match table B6 figures.

Conveyor frequency has a spike at (25Hz in chart, 50Hz in table) which appears to have drops of 12dB and 15dB either side. While this does not meet the criteria for tonal scoring (drop of 15dB either side), it may warrant further investigation if there have been complaints of a tonal noise nuisance.

8. Exceedance of proposed sound level

The Celsa 2023 report predicts a specific sound level of 31dB at NAL01. The Celsa 2025 report assessed one NSR (NAL01), where the calculated specific sound pressure level of 46dB exceeds the proposed specific sound level of 31dB given in the 2023 noise assessment.

IC10 specified that the assessment should demonstrate that impacts do not exceed those specified in the 2023 Noise report.

The operator provided a revised version of the report (25_02_305028_CD_01_rev1) to address the above comments. However, upon review, the following comments were made by NRW noise specialist:

“The updated report provides some justification for the use of the calculation method in that the noise climate at the NSRs are influenced by other industrial noise. However, I do not feel that this is sufficient justification as we would expect the report to demonstrate that the criteria set out in BS4142 S7.3.5 was met in order to use this method. Further, we would expect the reference time intervals to meet the specifications set by BS4142 section 7.2.

On these grounds, I would advise that we cannot accept this report as evidence to satisfy IC10.’

As such, the report is not accepted and IC10 remains open.

The new shredder plant suffered a fire on the 15th of May 2025 and the plant remains un-operational at this time. It is accepted that IC10 may remain ‘open’ for sometime if further noise measurements are required to be undertaken when the plant becomes operational.

To note: A Schedule 5 notification was received for the fire, further detail will be captured at a later date following conclusion of the investigation.

Action to review the Noise Management plan as detailed in CAR_NRW0046326

An updated and reviewed NMP was provided by the operator on the 14/04/2025. Amendments were

to include further information across a selection of different operations conducted at the facility. The action is considered completed.

Aspects of the NMP will be reviewed in more detail following a planned noise monitoring campaign planned to be undertaken by NRW at the facility, which is expected to be conducted in the coming weeks.

Ambient PM2.5 data

A query was received from shared regulatory services regarding elevated PM2.5 concentrations record at one of their monitories in the local area. Concentrations were below air quality guideline values but appeared to show an abnormal diurnal pattern, whereby concentrations were elevated during the night time periods and lower during the day time. Pm2.5 monitoring data from 4 of the operators ambient air monitors did not correlate any clear pattern with the data supplied by the local authority.

The Meltshop operation log was also reviewed. No clear correlation was seen between the Meltshop operating and the PM2.5 data, nor any correlation with wind direction and the sudden drops / troughs seen within the data.

Although the operations at the facility are likely to contribute to ambient PM2.5 levels, there was no evidence to suggest the diurnal pattern within the data was a direct result of the operations at the facility.

EAF dust & COMAH update

The operator has notified as an upper tier COMAH establishment, due to the quantity of EAF dust present on site exceeding the relevant threshold (200 tonne for an E1 substance). Some further classification work is believed to be on-going with EAF operators in England and the Environment Agency, with some dispute over the categorisation. However, at present, it has been accepted that EAF dust is classified as an ecotoxic substance and COMAH regulations will apply if quantity thresholds are exceeded.

The operator has made some progress with regards to the EAF dust stockpiled on the mineral site, which is detailed in CAR_NRW00XXXX.

The new EAF dust fractions that arise from the quench tower (QT) and drop out box (DOB) are now collected into appropriate skips and temporarily stored in the old billet bank before taken to the minerals site for processing, bagging and removal from site. As of April 2025, no further EAF dust had been added to the existing stockpile.

A project to modify the de-dusting plant, with the modification providing a means to re-introduce the QT and DOB EAF dusts back in within the primary dust captured at the bag house is underway. A permit variation is waiting within NRW's permit queue for this change to be incorporated into the permit. The Project remains on-going, with completion now expected to go beyond the initial estimate of Q2.

Cement 2 Zero Project

Trials remain on-going in relation to the 'cement 2 zero' project, with work now being conducted for 'phase 2'. A meeting has been arranged between NRW's industrial decarbonisation team and 7 Steels 'Cement 2 Zero' projects team to discuss the progress that has been made.

Change in operator name

7 Steel manufacturing UK Limited officially became the name of the company operating the installation on the 20th May 2025. The operator has advised that the companies house number remains unchanged / and therefore the legal entity is the same. As discussed, a permit variation (administrative) is required to change the company name on each of the permits.

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.