

Compliance Assessment Report CAR_NRW0046686

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: Audit,

Reason: Incident Response (Incident number 2501394).

On: 04/03/2025 between 10:00 and 13:00.

Parts of permit assessed: 3.4, 1.1.1, 3.1.2.

NRW Lead Officer: Dale Padfield.

Report sent to: -, Environmental Manager, on 26/03/2025.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR1A - Installations - Management - General Management	C3 Minor	1.1
IR3D - Installations - Emissions and monitoring - Noise and vibration	C3 Minor	3.4.1
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

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

Total non-compliances recorded	Total non-compliance score
4	8

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
IR1A	*On-going action to review the Noise Management plan as detailed in CAR_NRW0046326. Provide NRW with a copy of the reviewed NMP once complete.	30/04/2025

Criteria	Action needed	Complete by
IR3D	*On-going action to review the Noise Management plan as detailed in CAR_NRW0046326. Provide NRW with a copy of the reviewed NMP once complete.	30/04/2025
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

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.

We are currently considering taking enforcement action against you for the non-compliance recorded above. We will contact you in due course.

4. Details of our assessment

Site visit 04/03/2025

Celsa UK Ltd

EPR/TP3639BH

This report outlines the key topics discussed during the site visit conducted on March 4th, 2025. The following subjects were addressed:

- Ongoing noise investigation
- Evaluation of the proposed measures to facilitate a return to compliance of sewer emissions at emission point S1

Noise investigation

Reports of excessive noise were received by NRW on the 01/02/2025, 05/02/2025 and the 16/02/2025.

Celsa has conducted a comprehensive investigation into the operations at both the Meltshop and Sections Mill sites to identify potential sources of noise. The initial investigation focused on scrap movements during the reported times, but it did not identify any clear source of the noise. In response, Natural Resources Wales (NRW) requested that Celsa expand the scope of the investigation to encompass all operations and material movements— including scrap, as well as product transportation by rail or road— across both the Melt-shop and Sections Mill sites.

During the site visit on the 04/03/2025 the scrap management team presented NRW with the following evidence.

- CCTV footage of the scrap loading area (front scrap yard) during the reported noise times revealed that no scrap movements occurred between 05:00 and 05:30 on the morning of the 16th. In the early hours of both the 2nd and the 16th, the footage showed the basket loading process. During this operation, the crane was positioned within the basket, and no scrap was dropped from height. This is standard practice for loading the basket, as dropping scrap from a height could cause it to miss the basket, creating additional work for the operators. No other scrap movements took place during the night.
- The scrap delivery spreadsheets provided evidence of the start and finish times for scrap deliveries. Several deliveries were recorded entering the weighbridge before 06:00, but the 'tipped' time for all deliveries occurred after 06:00. Similarly, the final loads were typically tipped by 17:00, and no later than 18:00. The report dates were reviewed alongside a randomly selected date, and all confirmed that the tipping times were consistent with the noise management plan.
- The 'heavy movement' operations staff clock-in sheets were reviewed, which showed that the shift operators responsible for scrap deliveries, sorting, and related tasks begin their shift at 06:00 and finish at 18:00 each day. As a result, no scrap tipping or sorting from deliveries occurs outside of these hours.
- Rail deliveries are observed to occur during the night; however, the rail cars are parked and not unloaded until the following morning. Celsa acknowledged that certain sections of the rail delivery records were inadequate, likely due to recent personnel changes. The company is actively addressing this issue, with plans to improve record-keeping, which will provide more detailed information on site rail movements.

Based on the evidence gathered during the site visit and the information provided by Celsa, NRW has been unable to substantiate the reports of excessive noise. The noise reports, particularly those concerning late-night activity, do not appear to be linked to the movement of scrap metal, as the only scrap movements conducted during these hours involve the loading of the furnace basket.

However, Celsa has identified several factors that may have contributed to the elevated off-site noise. One key observation is that the Meltshop doors are frequently left open, including during the times of the reported noise. This could lead to increased off-site noise, particularly when the furnace is arcing down or being loaded. Shift reports indicated that the furnace was arcing down during the timeframe of some of the noise reports, which may have been the source or a contributing factor.

The current noise mitigation plan (NMP) for the Meltshop stipulates that all external doors (both high and low level) must remain closed, and this must be checked by the shift manager and recorded in the shift log. Upon review, Celsa discovered that the shift log lacked a section to document whether the doors had been checked and closed. As a result, shift managers were not consistently following this procedure, leading to the doors being left open regularly.

Given that this has been identified as a potential contributor to external noise, and represents a failure to adhere to the procedures outlined in the NMP, the following minor non-compliance will be issued against the management condition for not fully implementing the current NMP.

Non-compliance: A Category 3 non-compliance has been issued for failing to implement the NMP.

Since this discovery, Celsa have amended the daily shift report to detail the closure of all the external doors, and tool box talks have been had with shift managers to ensure doors are shut, particularly during 'night time' hours. This will now form part of the routine checks conducted during both the day and night and will be logged on each shift report.

On Wednesday, February 19th 2025, NRW made the following observations:

- Noise from the Meltshop site was audible from the Splott area (Coveny Street). The noises, described as loud thudding and crashing sounds, were clearly audible at this location, approximately 980 meters away from the source. With the low background noise in Coveny Street, the sounds were easily distinguishable.
- The noise was intermittently audible during the walk from Coveny Street to the Meltshop, and was likely influenced by varying background noise levels (such as traffic along roadways) and local topography.
- The noise was particularly pronounced along Willows Avenue and became louder as the walk continued along Seawall Road.
- A specific loud operation was identified near the HGV entrance on the Celsa site.

During the site visit, Celsa confirmed that the operation causing the noise was the shearing of scrap, which had been taking place for two weeks but has since ceased. This operation was only conducted during the day shift, so it was not the source of the reported nighttime noise.

Based on NRW's observations, this operation was likely audible over a considerable distance due to the following factors:

- The shearing area is located near the site perimeter and lacks any barriers that could help mitigate the noise levels off-site. Additionally, there is limited vegetation along the fence line, which does not provide significant soundproofing.
- The old Meltshop building, situated behind the shearing area, likely reflected the noise, amplifying the off-site noise levels.

Since this noise was deemed to be at levels likely to cause pollution and was substantiated by NRW, the following minor non-compliance will be issued.

Non-compliance: A category 3 non-compliance is issued for excessive noise beyond the site boundary. Permit condition 3.4.1

For this permit condition to be breached, the operator must not have used appropriate measures, including, but not limited to, those specified in any approved noise management plan. Having

reviewed the current NMP, there is no mention of shearing scrap within the plan and therefore no measures identified to mitigate any noise impacts when undertaking this activity at the Meltshop. Furthermore, when reviewed against the appropriate BAT measures, there appears to be further areas where the NMP could be improved (BAT is discussed further below).

Recommendation:

Celsa should conduct an evaluation of the operations carried out in this section of the site. Although the shearing operation was only conducted during the daytime, permit condition 3.4 requires noise to be controlled at all times. This area of the site does not benefit from noise mitigation provided by the old Meltshop building, and any noise generated here is likely to reflect off the walls, amplifying its off-site impact. Appropriate measures should be implemented to prevent, or where not practicable, minimize off-site noise. It may be more appropriate to relocate such activities to another area of the site or to the minerals site, where they are less likely to cause off-site noise impacts.

As the activities being conducted in this area are primarily associated with scrap management, the waste treatment BREF would be best suited to identify any appropriate measures. BAT 17 and BAT 18 of the Waste Treatment BAT Conclusions detail appropriate measures to prevent or reduce noise emissions.

Some extracts are provided below, further detail can be found in the Waste Treatment BREF document.

6.1.4 Noise and vibrations

BAT 17. In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to set up, implement and regularly review a noise and vibration management plan, as part of the environmental management system (see BAT 1), that includes all of the following elements:

- I. a protocol containing appropriate actions and timelines;
- II. a protocol for conducting noise and vibration monitoring;
- III. a protocol for response to identified noise and vibration events, e.g. complaints;
- IV. a noise and vibration reduction programme designed to identify the source(s), to measure/estimate noise and vibration exposure, to characterise the contributions of the sources and to implement prevention and/or reduction measures.

BAT 18. In order to prevent or, where that is not practicable, to reduce noise and vibration emissions, BAT is to use one or a combination of the techniques given below.

Technique	Description	Applicability
a. Appropriate location of equipment and buildings	Noise levels can be reduced by increasing the distance between the emitter and the receiver, by using buildings as noise screens and by relocating building exits or entrances.	For existing plants, the relocation of equipment and building exits or entrances may be restricted by a lack of space or excessive costs.

There is a school directly opposite this location, and this sensitive receptor should be considered when evaluating the suitability of operations in the area, along with impact to nearby sensitive receptors within the wider community.

Additionally, Celsa should assess the impact of operations on the community during more sensitive times, particularly early Sunday mornings. Several reports indicated increased noise on Sunday mornings, and while actual noise levels may not differ from any other day, the local community is likely to be more sensitive to noise during this time due to reduced background noise. Although the permit and current Noise Management Plan (NMP) allow scrap operations to commence from 06:00, Celsa should consider delaying particularly noisy operations, such as the movement or sorting of noisier scrap grades, until later in the day. Alternatively, they should look to implement additional measures to reduce the noise impact beyond the site boundary.

It was noted during the site visit that the NMP for the Meltshop has not been reviewed for several years, Celsa are however now in the process of reviewing the plan.

It was also noted that internal audits of the NMP are not currently being conducted. Best practice would suggest that Celsa implement internal audits to ensure the NMP is being adhered to and to identify any issues before they escalate. Ideally, this should be incorporated into the NMP. Consideration should also be given to incorporating a protocol for noise monitoring, which could include perimeter walks, as suggested in BAT 17.

***Action:** Celsa to undertake a review of the current NMP to ensure procedures remain relevant and to identify opportunities for improvement. Additional advice and expectations can be found in the Waste Treatment BREF section 2.3.10. A copy of the reviewed NMP should be provided to NRW upon completion. **Due: 30/04/2025**

*An action requiring review of the MNP remains on-going from CAR_NRW0046326.

Further observations were made regarding the Sections mill, these will be detailed in a separate CAR form issued under the section Mill permit.

Actions from CAR_NRW0046326 relating to emission exceedances at the S1 emission point.

Following an initial investigation into the elevated emissions to sewer at the S1 emission point, which had initially identified the dosing of a dispersant chemical and an unoptimized filtration process as the potential cause. However, following the initial intervention, the following exceedances were recorded:

3 x ELV exceedances for suspended solids and 2 x ELV exceedances for iron.

Celsa provided an update on the progress made in identifying the root cause of the exceedances, along with a detailed action plan outlining the steps that will be taken to return to compliance. The key points of the update are as follows:

Oil and Grease

The first measure Celsa implemented was to reduce the quantity of oil and grease entering the wastewater. They identified that the grease system on the caster relied on a manual on/off valve, meaning that during process stoppages or other issues, the valve was sometimes left open longer than

necessary. This resulted in excessive grease being dosed into the caster and subsequently discharged into the scale pit with the wastewater.

To address this, during the January shutdown, Celsa installed a new greasing system that is now directly controlled by a PLC. This automated system ensures that the greasing operation is turned off when the caster is not in use.

The next step will be to conduct trials to optimize the greasing system and ensure that only the required amount of grease is being dosed, further reducing the loss of excess grease to the wastewater treatment system.

During a review of the wastewater treatment system, Celsa also discovered that the scale pit did not match the original design drawings. The pit was designed to be equipped with an oil skimmer, but no skimmer was installed. Celsa is uncertain why the skimmer was never put in place or whether the pit has ever benefited from one.

Following the above measures, if ELV (Emission Limit Value) exceedances persist, Celsa has been collaborating with a wastewater specialist contractor on the potential use of a chemical solution to assist with oil/water separation.

Suspended Solids

Celsa believes that reducing the suspended solids in the wastewater should help bring the system into compliance with the various metal ELVs, as these metals are primarily suspended in the water rather than dissolved.

To address this, Celsa has scheduled a review with their wastewater specialist contractor at the end of March to evaluate the current treatment process. The evaluation will focus on determining the optimal location for dosing coagulants, as they are currently being dosed to the scale pit, which may not be the most effective approach. Initial evaluations suggest that dosing at the pump uplift between the scale pit and the settlement pit may offer better results. The contractor will also optimize the dosing rate and assess whether the addition of flocculants alongside coagulants could improve system efficiency.

Following this, Celsa will review the performance of the spin disc filters. Depending on the outcome, they may either replace them with a more effective filtration system or reduce the size of the spin disc filter mesh.

NRW acknowledges the effort Celsa has made in addressing the exceedances and working towards compliance with the S1 ELVs. NRW is satisfied that Celsa is actively tackling the issues and has a plan in place to restore compliance within a reasonable timeframe. Some improvements are already underway, and a reduction in ELV exceedances has already been observed.

As a result, non-compliance scoring for ELV exceedances of effluent at the S1 emission point will be suspended until **30/09/2025**. The non-compliance will be noted on the CAR (Compliance Assessment Report) form(s) but will be immediately suspended. If, by **30/09/2025**, Celsa has completed the improvement work and returned to compliance, any suspended non-compliance scoring will remain suspended. If the required improvement work is not completed by that date, the non-compliance will be unsuspended and issued against the permit. Please keep NRW updated with your progress as you

progress to returning to full compliance.

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.