

Compliance Assessment Report CAR_NRW0045391

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: 10/10/2024.

Parts of permit assessed: Quarterly returns - Q2 2024.

NRW Lead Officer: Dale Padfield.

Report sent to: -, Environment Manager, on 11/10/2024.

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)	
IR3E - Installations - Emissions and monitoring - Monitoring	Action only (X)	
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	C3 Minor	3.1.1
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	C3 Minor	3.1.1
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	C3 Minor	3.1.1
IR3A - Installations - Emissions and monitoring - Emissions to water, air or land	C3 Minor	3.1.1

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

Total non-compliances recorded	Total non-compliance score
4	16

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
IR3E	CELSA to calculate an expanded measurement uncertainty for the A1 particulate CEM, using an appropriate uncertainty calculation methodology, such as that outlined in BS EN 15267-3. CELSA to demonstrate how the final uncertainty value was obtained and how the value compares to the requirements of the permitted monitoring standard. Once complete, the schedule 5 notifications should be amended, quoting the newly derived uncertainty value.	30/11/2024
IR3A	Investigate the cause of the abatement dosing failure and identify measures to prevent a re-occurrence. Provide NRW with a summary of your findings and proposed measures.	30/11/2024
IR3A	Provide findings of the internal investigation into the elevated iron levels in the discharge to sewer and implement measures to prevent re-occurrence. Please provide NRW with a summary of your findings and proposed measures.	30/11/2024
IR3A	Provide findings of the internal investigation into the elevated arsenic levels in the discharge to sewer and implement measures to prevent re-occurrence. Please provide NRW with a summary of your findings and proposed measures.	30/11/2024
IR3A	Provide findings of the internal investigation into the elevated suspended solids levels in the discharge to sewer and implement measures to prevent re-occurrence. Please provide NRW with a summary of your findings and proposed measures.	30/11/2024

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

<p>Celsa</p> <p>TP3639BH</p> <p>The following compliance assessment report (CAR) details the following:</p> <ul style="list-style-type: none"> • Quarterly permit reporting for quarter two (April – June) 2024. • Schedule 5 reports for quarter two.
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- Actions from CAR_NRW0044325
- Site updates.

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Quarter two (April – June) 2024 reporting

Reporting form A1

Three reporting forms were received on 29/07/2024, one for each month of the quarter, detailing the particulate monitoring with regards to the daily average recorded on the A1 continuous emissions monitoring (CEM) and daily visual (Ringelmann shade) check for A4. The following table details the results.

Emission point	Month	Result / Mg/m ³ (maximum recorded during reporting period)	Compliant?
A1	April	3.24	Yes
A4		<1	Yes
A1	May	3.55	Yes
A4		<1	Yes
A1	June	5.2	No
A4		<1	Yes

An exceedance of the 5 mg/m³ permit limit was recorded in June. The measured value is marginally above the permitted ELV. No uncertainty value was reported on this form, however, subsequent schedule 5 notifications received in quarter 3 do include an uncertainty value.

An uncertainty of 0.5 mg/m³ was reported on both subsequent schedule 5 notifications. NRW queried how the uncertainty value had been calculated / derived. The approach outlined by CELSA for the uncertainty calculation does not conform with the accepted methodology for uncertainty calculations. It would be expected that an uncertainty value is derived from a combined uncertainty calculation, which identifies and quantifies all the various sources of uncertainty in the measurement process. This value should then be multiplied by a coverage (k) factor to obtain the expanded uncertainty, which allows the uncertainty value to be reported at the required 95% confidence interval. Details on calculating uncertainty for CEMS can be found in BS EN 15267-3. As such, CELSA are tasked with calculating an expanded uncertainty, ensuring all the various sources of uncertainty are identified and quantified.

Action 1: CELSA 2nd October 2024: CELSA to derive an expanded measurement uncertainty for the particulate CEM, using an appropriate uncertainty calculation methodology, such as that outlined in BS EN 15267-3. CELSA to demonstrate how the final uncertainty value was obtained and how the value compares to the requirements of the permitted monitoring standard. Once complete, the schedule 5 notifications should be amended, quoting the newly derived uncertainty value.

The requirement to apply any non-compliance scoring for the elevated particulates levels will be evaluated once Action 1 is complete.

The reporting form is accepted.

Reporting form – Process Monitoring 1

The form details the sum of hourly average results recorded, along with the sum of hourly averages above the 20 mg/m³ trigger level. A total of 486 hourly averages were recorded with 4 hourly averages above the trigger level.

The reporting form is accepted.

Ambient PM₁₀ and PM_{2.5} monitoring report.

The TOPAS monitor situated at Willows High School became unreliable, with frequent periods of 'offline' due to faults requiring maintenance and servicing. As a result of this, CELSA have replaced the monitor with a new 'Oizom' monitor, which is now considered the primary monitor – replacing the TOPAS referenced in the table associated with permit condition 3.5.1(b). The monitoring data for each month of the quarter was received. The report is accepted.

Waste reporting returns.

An extension to the Q2 reporting deadline was requested and granted. All accepted EWC codes are compliant with the permit. The report is accepted.

Reporting form Water 1.

The report details the results for the sampling of surface water drainage to soakaway at the Asphalt plant. There are no ELVs for this discharge point.

The report is accepted.

Schedule 5 notifications April to June 2024.

Schedule 5 Part 'A' notifications were received for the following parameters, exceeding the ELVs for emissions to sewer at emission point S1 during sampling conducted on the 01/06/2024:

Iron ~ 6.25 mg/l against and ELV of 5 mg/l

Arsenic ~ 0.0117 mg/l against an ELV of 0.1 mg/l

Suspended Solids ~ 244 mg/l against an ELV of 20 mg/l.

When considering non-compliance scores, ELV exceedances for different parameters cannot be consolidated. However, any subsequent exceedance of the same parameter within the same quarter will be consolidated into one non-compliance score for that quarter. The metal ion exceedances are marginally above the permitted ELVs and are likely to have minimal or minor environmental impact. The suspended solids result is

significantly above the ELV, however, is also likely to only have a minor or minimal environmental impact, considering the discharge is to sewer. As such, the following minor non-compliance scores will be issued.

Non-compliance: A category 3 minor non-compliance is issued for exceeding the iron ELV at the S1 discharge point. Permit condition 3.1.1. **It is an offence under Regulation 38(2) of the Environmental Permitting Regulations (consolidated 2016) to breach a permit condition or emission limit. Non-compliance score CCS3.**

Non-compliance: A category 3 minor non-compliance is issued for exceeding the arsenic ELV at the S1 discharge point. Permit condition 3.1.1. **It is an offence under Regulation 38(2) of the Environmental Permitting Regulations (consolidated 2016) to breach a permit condition or emission limit. Non-compliance score CCS3.**

Non-compliance: A category 3 minor non-compliance is issued for exceeding the suspended solids ELV at the S1 discharge point. Permit condition 3.1.1. **It is an offence under Regulation 38(2) of the Environmental Permitting Regulations (consolidated 2016) to breach a permit condition or emission limit. Non-compliance score CCS3.**

Two additional suspended solid ELV exceedances were also reported, however these occurred in quarter 3, and as such will be captured in the quarter 3 CAR form.

NRW are awaiting the part 'B' of the schedule 5 notifications before detailing and applying any no-compliance scoring for the root-cause of the exceedances. This will be captured in the quarter 3 CAR form, providing the data is available.

A schedule 5 notification detailing an exceedance of the annual PCDD/F sample that was taken on the 12/06/2024 was received on the 16/08/2024. A result of 0.15 ng/m³ was recorded against an ELV of 0.1 ng/m³.

A human health risk assessment (HHRA) undertaken in 2020 as a result of PCDD/F exceedances demonstrated that a 10-year mean PCDD/F emission concentration of 0.34 ng/Nm³ results in no exceedance of the UK COT TDI value. The exceedance recorded in June was below the previous average value modelled. As such, the impact of this recent exceedance is likely to result in no exceedance of the UK COT TDI. The exceedance is however above the permitted ELV and the following minor non-compliance will be issued.

Non-compliance: A category 3 minor non-compliance is issued for exceeding the PCDD/F ELV at the A1 emission point. Permit condition 3.1.1. **It is an offence under Regulation 38(2) of the Environmental Permitting Regulations (consolidated 2016) to breach a permit condition or emission limit. Non-compliance score CCS3.**

A part 'B' was received on the -2/10/2023, which highlighted the root cause of the failure as an issue with the flow rate of the dioxin abatement material. Further information has been requested and will be discussed in the next CAR form, along with any root-cause non-compliance scoring.

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Actions from CAR NRW0044325

A response to both actions issued in CAR_NRW0044325 were received on the 30/06/2024.

Action 1 – Celsa – 8th of May 2024:

Celsa provided an updated procedure 'ECP 22 ~ Environmental Permit Non-Compliances Notification and Management'. The procedure provides some high-level detail on what is considered a permit non-compliance and states how CELSA intends to remain compliant with permit condition 4.3. Further information details the actions that will be taken in the event of permit non-compliance arising, and provides information on the relevant roles, responsibilities, training and reference to other relevant documentation and procedures. The action is considered complete.

Action 2: - Celsa – 8th of May 2024:

Celsa reported that the Meltshop operations team continue to investigate options that would be appropriate for linking the CEMS unit to the operating of the plant. However, this has proven challenging due to the complexity of the process. To mitigate further recurrence, Celsa have delivered refresher training during an environmental meeting in July to re-iterate the importance of the CEMS unit for environmental compliance. Furthermore, a training document was issued to all relevant personnel on the internal training system to communicate the importance of the CEMS unit, permit requirements and roles and responsibilities. The action is considered complete.

Site up-dates

A site visit was undertaken on the 24/09/2024. The visit provided an opportunity for NRW's noise and air quality team, along with industry regulation officers from the Southwest industry regulation team to see an operational electric arc furnace and gain some appreciation and understanding for the various aspects and impacts of an EAF facility in preparation for the changes that are being undertaken at the Port Talbot steel works.

Celsa intends to conduct two trials at the facility, further detail on the trials is available in CAR_NRW0045001 and CAR_NRW0045170. The trials had not commenced at the time of the site visit.

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.