

Compliance Assessment Report CAR_NRW0041768

Permit being assessed: TP3639BH.

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

At: Tremorfa Works New Melt Shop Seawall Road , Tremorfa, Cardiff, South Wales, CF24 5TH.

Type of assessment carried out: Audit, Reason: Routine.

On 12/04/2023 between 10:00 and 15:00.

Parts of permit assessed: 1.0, 2.0, 3.0, 4.0

NRW Lead Officer: Richard Taylor, accompanied by Douglas Cowie.

Report sent to: Hannah Powell, Environment Manager on 02/05/2023.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
A1 - Specified by permit	Assessed (A)	

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

Total number of 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?

No action required.

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

Celsa Meltshop Permit TP3639BH

NRW Site Inspection 12th April 2023

This was a routine inspection which focussed on the following: CEMs monitoring equipment, locations, links, display readings, maintenance, management, and conversion factors used for reporting. On the mineral site the focus was on stockpile management, dust management, dust deposition gauges, and management of the data from the A5 stack.

An outline agenda was sent to site prior to the inspection. The Site was not melting at the time.

Present; Celsa Environment Team; Doug Cowie (NRW Lead Specialist), Richard Taylor (NRW Site Inspector).

1.0 Site updates

Variation V010 -At the time of the inspection, the site has a permit variation being processed through the NRW team. When issued this will be V010

Reduced CO2 - Site are planning to reduce the amount of CO2 emitted from Celsa UK operations whilst increasing the amount of steel produced. Targets have been set which are being worked towards through several projects which are either planned or are being trialled which increase efficiency or reduce CO2. Celsa have recruited more personnel to cope with the planned production increase. Carbon reduction is now amongst the foremost priority for Celsa as they move forward and is at the forefront of the mind when considering investments. Site is employing oxygen enrichment techniques, Oxy ladle gas, cold settings on Tundishes, VSD'd on the Effluent treatment plant amongst others.

NRW is pleased to note the ongoing effort to reduce CO2 emissions from Celsa UK's permitted activities, which broadly aligns with wider decarbonisation priorities for the UK metals sector. It may also help the operator meet applicable UK BAT conclusions dealing with the efficiency of Celsa's associated ferrous metal processing activities.

Phase 1 of the external cladding operation was shown. Site is progressing further reskinning the top roof and sides of the main meltshop. This is double skinned and will improve the fume extraction system further. Fugitive emissions of dust will also be reduced together with noise. The cladding will be an ongoing process on an almost permanent basis of replacement and repair.

Slag bay roof -The proposed roof over the slag pit has been delayed. This would help to further reduce emissions of dust from site. The plan has been redrafted and aims to be pushed through this year. A roof is not required to meet the Iron and Steel BAT conclusions directly for air cooled slag management. Instead, the roof would help reduce dust emissions from the process and enable greater control of fugitive emissions under BAT 90 and elements of BAT 11.

Concrete blocks - A trial to produce blocks is proposed in collaboration with Harsco. Site is clearing legacy waste piles and aims to release 400m2 of space. Site will be applying for permit variation V011 for this operation where the waste process will be thoroughly examined.

Unifloc – fine Millscale removal.

This material is classified as hazardous on the WM3 guidance for waste if it contains more than 0.1% oil.

Action 1. Site need to check the WM3 guidance on oil content in Millscale (p30-35) and treat this material as hazardous if the oil content in the stockpile is found to be greater or equal to 0.1%.

Current guidance also states that hazardous waste cannot be mixed with non-hazardous waste, or a non-waste, or a different category of Haz waste unless the environmental permit authorises it – which it currently does not. [Hazardous waste: segregation and mixing - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/hazardous-waste-segregation-and-mixing)

New Dust Monitors

Site have installed 2 new dust monitors located at the East and West ends of the Minerals site. This means that there are 4 monitors recording dust levels around the site. At present only the one located at Willows school is a permit requirement. A secondary unit at Baden Powell school is used if the Willows school unit is not operating. The 2 new monitors on the minerals site will be in use when permit variation V010 is in place.

The operator's procedures and plans should be updated to capture these improvements to the off-site monitoring network. It is understood the operator is developing indicators/triggers using dust monitor data which may enhance communications within the site and identify actions to be taken in the event of dry or dusty conditions.

2.0 Actions from previous CAR forms

Two minor issues were cleared up.

1. The first was for the site to ensure that when reporting annual waste totals on the R1 form to include the amounts sent as special waste, offsite disposal, and for recovery/recycling.

Site to report these totals on the next R1 form due Jan 2024.

2. The second was the control of the operational face of the site's stockpiles. Site will be trialling a plasticised binding agent to help keep any dust levels. This is a welcome development and is already in use at other sites in the UK where amber and red trigger levels have been developed to inform site staff of dust lift off. This control is also appropriate for demonstrating adherence to BAT 11 concerning air emissions from fine materials.

3.0 Issues and AoB's

Particulates - Site have reported a loss of particulate matter data from the Willows school with an equal loss of back up data from Baden Powell. This will be dealt with in a separate CAR form which covers the Q1 data which is due at the end of April 2023.

Flies – Site are preparing to reintroduce an external contractor to spray the stockpile of cans prior to the fly breeding season to offset any likely issues.

Energy Conversion Factors - Reporting figures for energy were queried. Historically EPR permits have been issued with a figure of 2.4 or 2.6 for converting delivered electricity to primary electricity generated when reporting energy use on the E1 form. This was because a pan European average was used. But when new countries joined the EU, it changed the overall average which in turn lead to permits being issued with either 2.4 or 2.6. At the same time, reporting under the EUETS and now UK ETS has demanded an exact figure to be used which is derived from the latest statistics. **NRW took an approach to keep whatever conversion figure the site had previously used for reports on the E1, E2 annual return forms.** If there is no conversion figure issued, sites should resort to the guidance in the latest version of 'How to comply with your environmental permit' which is currently 2.4 featured on page 55. <https://cdn.cyfoethnaturiol.cymru/media/2110/how-to-comply-with-your-environmental-permit.pdf?mode=pad&rnd=131467604540000000T>

The UK ETS is dealt with on a separate permit, and under a separate regime where a site will have to

have their annual emissions externally verified. The regime requires the verifier to use the latest published conversion factor.

New Hours for Minerals yard – Currently the site permit limits the operational times for the operation. This was because the noise generated from the shredder and other plant was seen to breach the BS4142 standards for environmental noise. Site will need to demonstrate that any new application to extend operational hours meets the standard.

When compiling any application to change the permitted operating hours, it is **recommended** that the permit holder also considers any associated conditions or statutory requirements which may apply to its operations at Tremorfa e.g., planning permission(s). Early engagement (with the Local Authority) is encouraged if there are planning implications.

4.0 Meltshop CEMs and data inspection.

The visit aimed to inspect the physical locations of the CEMS. The approximate positions were viewed from the ground up and were seen as being generally compliant with the EA M1 guidance on physical location of sampling points. The exact location will be assessed at the next OMA.

The cleaning regime on the A1 stack is carried out by site staff as well as monitoring contractors. The A5 cleaning regime is carried out weekly. Both are signed for on a maintenance schedule by operational staff. Celsa is reminded that they are the permit holders for the A5 stack.

Live data was viewed from the main meltshop stack and the A5 stack on the minerals yard. Residual background data was seen on the A1 meltshop stack due to the meltshop not operating. The system was queried as to how the data is accessed, used, and stored. It was identified that there is a potential time where live data is not seen by environmental staff until the following day. Control room staff are trained to close the operation down if limits are exceeded. Celsa is encouraged to inform the environment team ASAP in the event of serious emission limit exceedances.

It is suggested that a second daily 'check' (afternoon, or shift change) is embedded into Celsa's procedures to aid early identification of ELV breaches and facilitate compliance with the relevant (informing and notifying) permit conditions 4.3.1 and 4.3.2.

Site are to cross-check the figures provided for reporting releases to air are as required by the permit. Schedule 3 as sub note 5 which refers to the A5 stack particulates and reads 'Concentration reported at a temperature of 273K and at a pressure of 101.3 kPa, with no correction for oxygen or water vapour content'.

The other reporting requirements are listed in Schedule 6 – (interpretation) which states the same reporting requirements for non-combustion processes (like electric arc), but for emissions derived from combustion from solid fuels a conversion factor of 6% Oxygen is used, and for gas it is 3% Oxygen.

Ensure these are reported as required by the permit by checking the stack emissions reports you receive from your stack monitoring contractors. Also ensure the CEMS on Willows school does not have an automatic conversion factor it uses.

Action 2: Check conversion factors obtained from monitoring data are reported as per permit requirements.

The A5 reporting system was seen. Live data was seen and the route to reporting was examined. The data is from a batch process which is on and off several times per day. This results in sporadic

data which is reported as daily averages. The data currently includes the plant start-up and shut-down periods; for permit compliance purposes, these periods normally fall within the scope of what is termed 'Other Than Normal Operating Conditions (OTNOC)'. The definition of what Harsco define as their start-up and shut-down periods needs to be defined more clearly to ensure the data reported for regulatory purposes is representative of normal operating conditions for the asphalt plant.

Action 3: Site to check how the start-up and shut-down data is applied in reporting emissions from the A5 stack and confirm this meets permit requirements.

5.0 Minerals Site

Stockpiles were clearly defined and well managed. No visible dust lift-off was observed, although the weather was poor on the day of inspection.

Site has had problems with vandalism and theft of fuel from the site. these issues are being tackled by the on-site security presence. Two new dust monitors were seen in position on the East and West ends of the site. These are in place prior to being included with the VO10 variation which is currently being processed.

The asphalt plant was seen and the CEMS reporting system was viewed as mentioned above.

The Haith plant was also visited. The unit processes dross from site and reclaims metals which would otherwise be waste. The final dross left after processing is a problematic waste stream for which outlets are currently being sought.

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.

What are suspended scores?

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 and Waste action criteria (used in section 1 and 2):**A: Permitted activities**

- A1 Specified by permit

B: Infrastructure

- B1 Infrastructure – Engineering for prevention and control of emissions
- B2 Infrastructure – Closure and decommissioning
- B3 Infrastructure – Site drainage engineering (clean and foul)
- B4 Infrastructure – Containment of stored materials
- B5 Infrastructure – Plant and equipment

C: General management

- C1 General management – Staff competency/training
- C2 General management – Management system and operating procedures
- C3 General management – Materials acceptance
- C4 General management – Storage, handling, labelling and segregation

D: Incident management

- D1 Incident management – Site security
- D2 Incident management – Accidents, emergency and incident planning

E: Emissions

- E1 Emissions – Air
- E2 Emissions – Land and groundwater
- E3 Emissions – Surface water
- E4 Emissions – Sewer
- E5 Emissions – Waste

F: Amenity

- F1 Amenity – Odour
- F2 Amenity – Noise
- F3 Amenity – Dust/fibres/particulates and litter
- F4 Amenity – Pests/birds and scavengers
- F5 Amenity – Deposits on road

G: Monitoring and records, maintenance and reporting

- G1 Monitoring and records, maintenance and reporting – Monitoring of emissions and environment
- G2 Monitoring and records, maintenance and reporting – Records of activity, site diary/journal/events
- G3 Monitoring and records, maintenance and reporting – Maintenance records
- G4 Monitoring and records, maintenance and reporting – Reporting and notification to Natural Resources Wales

H: Resources efficiency

- H1 Resource efficiency – Efficient use of raw materials
- H2 Resource efficiency – Energy efficiency

Enforcement response

Any permit condition non-compliance 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 20 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 – 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.