

Compliance Assessment Report

Report ID:
CAR_NRW0032291

This form will report compliance with your permit as determined by an NRW officer

Site	Tremorfa Melt Shop	Permit Ref	TP3639BH		
Operator/Permit holder	Celsa Manufacturing UK Ltd				
Regime	Installations				
Date of assessment	04/10/2017	Time in	12:00	Out	16:30
Assessment type	Audit				
Parts of the permit assessed	General audit				
Lead officer's name	Richards, Gareth (Rivers House)				
Accompanied by					
Recipient's name/position	Richard Lewis/Sioned Hatcher/ Environment Dept.	Date issued	12/10/2017		

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
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KEY: See Section 5 for breach categories, suspended scores will be indicated as such.

A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,

O = Ongoing non-compliance, not scored.

Number of breaches recorded	0	Total compliance score (see section 5 for scoring scheme)	0
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If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

Celsa Meltshop Inspection Report

An audit was carried out at the Celsa Meltshop on 4th October 2017. The Operator was provided with an agenda prior to the audit. Richard Lewis(RL)and Sioned Hatcher were present for the duration of the audit, other Celsa personnel were involved as appropriate.

Review of previous CAR actions (CAR_NRW0026740)

Action (1): Dates confirmed.

Action (2): Initial issues with new contractor were resolved.

Action (3): Updated copy of Fugitive Dust Management Plan provided.

Action (4): Inventory data provided on 15th June 2017.

Action (5): Provided.

Business Update

Updates on various aspects of the operations were provided by Phil Cartlidge – Operations Manager, Nick Wood – Maintenance Manager and Ana Eulalio – Process Manager.

For 2017/18 the Meltshop was on target to produce just over 1Mt, the target production for 2018/19 was likely to be 1.1Mt. Considerable investment is being made in the plant to carry out upgrades and improvements. The whole water ducting system T1 to T5 has now been replaced, the most recent work carried out during the shutdown in August. There is also ongoing work associated with the FSOP. The availability has been poor primarily due to issues associated with the probe and delays obtaining replacement parts. While this had not directly affected the environmental performance of the process it does affect overall efficiency. A further issue that has arisen recently is the cost of graphite electrodes. There is a shortage of needle coke used to make EAF electrodes, consequently prices have increased. Celsa have an aim of reducing electrode consumption by 5%. A further important project was the optimisation of polymer use and carbon in scrap.

The general issue of aging plant was raised. The Meltshop has now been operating for approx. ten years and there have been some significant operational issues and increased emissions for short term periods as a direct result of equipment failures and/or earlier than expected performance deterioration. It is a fundamental requirement of the EPR permit that the facility is operated in accordance with a written management system that includes maintenance activities (Permit Condition 1.1). Discussions with the operational managers indicated that Celsa is aware of this issue and has in place a comprehensive maintenance programme such that issues can be identified before they become significant issues affecting environmental performance and compliance with permit emission limits. This includes a five year plan that details priorities, investment suggestions, upgrades, replacements and improvement of assets. However,

unexpected failures can be difficult to repair in the short term. In the event of significant environmental impact NRW would have to consider what regulatory response was necessary. It is therefore of great importance that Celsa maintain an effective preventative maintenance programme to minimise such occurrences.

The Maintenance Manager gave a detailed account of the work that had been completed during the August shutdown, this included;

- Installation of dedusting plant variable speed drive
- T3, 4 and 5 ducting work. Expected lifetime of three years
- Drop out box panels
- Hydraulic pipe replacements
- Damper control valves removed – awaiting replacement by mid October
- Replacement of Bishops Hat (part of T3, 4, 5 work)

Planning had recently commenced for the next maintenance outage scheduled for 22/12 to 9/1/18. One of the critical areas will be the water tower. No definite date was yet scheduled for the summer maintenance period.

The Process Manager gave an update on current performance. The average tap to tap time was currently 52 minutes. This was being influenced by the number of trim delays that were primarily a consequence of the scrap quality. There has been a tendency for the scrap density to decrease due to the cost/availability of heavy/dense scrap. Frag and other light scrap grades such as steel cans were now in regular use.

Further details were also provided about the issues with the FSOP system. The availability had been very mixed due to problems with the sensor and the availability of spares. This had affected the efficient management of furnace off gas. Work was in hand to optimise spare availability and where beneficial retain important spares in stock.

The issue of persistent CO exceedances was discussed with several members of staff including in the EAF control room. They were caused by many issues but there were some significant ones such as the water tube leaks in T1 to T5 and more recently loss of automated damper control. However, there were other process control issues such as the scrap mix, scrap quality and trim delays which were also influential. The EPR permit sets emission limit values for CO that are based on BAT. The EAF has normally been able to meet such limits without issue. It is accepted that the nature of the process is that the emissions will not be consistent and this is why the existing limits are based on hourly average values. It was agreed that once known significant issues such as damper control were rectified then there would need to be an assessment of performance and if necessary studies on the extent of impact from other process parameters such as scrap quality. Despite that Celsa have decided to change some process parameters that can affect CO releases, it must be realised that the EAF must continue to comply with the permit limits. This may necessitate identification of alternative strategies to regain consistent compliance. Celsa are requested to advise NRW as soon as the automated damper system is functional again. **Action (1).** Depending upon the performance of the plant post this repair it may be necessary to initiate a formal investigation of CO releases. **Action (2):** NRW/Celsa.

The current inventory of scrap screenings was estimated at 6000t. Material removed from site was currently going to Spain (Ferimet- sister company of Celsa) under TFS. None was being landfilled. **Action (3):** Celsa to confirm current inventory in writing.

Celsa have early plans to set up their own scrap screenings recycling plant. Costings have been undertaken. It was advised that such plans should be shared with NRW as they are likely to initiate the need for a permit variation. **Action (4):** Celsa.

Site inspection

The following areas of the site were inspected; scrap bay, furnace control room, dedusting plant and the on site EAF dust storage area. In the control room discussions were held with staff about the persistent beaches of the CO limit. It was reinforced that the situation was being treated very seriously and was often mentioned at the daily meetings. There were known issues that affected CO levels but there seemed to be no evidence of a detailed strategy to rectify the situation. In addition process control staff do not have access to monitoring data, exceedances only become apparent the following day. However, improving the availability of real time data to furnace control staff was under consideration. The slag bay and scrap bay was walked through en route to the dedusting plant. There was no activity in the slag bay. The bay was tidy although the surrounding walls were very badly discoloured, presumably by slag dust. The individual scrap bays were well stocked. There was a noticeable large proportion of light scrap including crushed steel cans. In addition, there was a slight waste type odour (this had not been noticed previously in the scrap bay area). It was not determined if this was from the steel cans or due to being down wind of the scrap screening process where a similar odour has been noticed previously.

The area around the dedusting plant was being used for storage of a significant number of EAF dust bulk bags. These all appeared to be sealed and in good condition. It was noted that there had been a recent shipment of EAF dust from Cargo Services and this was the likely reason for a build up of the bags at the Meltshop. There was no evidence of any dust spillage in the area, although most of the cladding on the surrounding buildings was significantly discoloured (similar colour to the EAF dust). Inside, the plant was being maintained in a tidy condition. The external staircase, where there is access to the stack monitoring platform, was used as a viewing point for the Mineral Site. There was no drop balling or lancing in progress on the Mineral Site. Overall the area seemed to be well managed with stockpiles of normal size. (It is the intention to complete a more detailed inspection of the Mineral Site and scrap screening activities during a separate visit). The scrap screenings inventory could also be seen. It appeared to be well contained.

A fugitive dust release had been noticed from the roof of the Meltshop just behind the 'Bishops Hat', as viewed from Tidefields Road. This appeared to be almost continuous and occasionally increased in intensity. This was also evident from the dedusting plant platform and was pointed out to RL. It was confirmed that this was due to a hole in the roof and would be repaired on the next maintenance day. In consideration that the extended shutdown period had recently been completed it was concerning that new infrastructure failures are evident. Good maintenance of the building fabric is an important requirement to ensure fugitive dust releases are minimised. **Action (5):** Celsa to confirm when the repair work is completed.

It had been noticed that the wind sock located on the Mineral Site was still not functional. Celsa had been advised of this previously. It should always be available as an indicator of wind direction so Mineral Site staff area aware of the potential for offsite impact from fugitive dust emissions. **Action (6)** Celsa to advise NRW as soon as the wind sock is functioning.

Agenda items

Complaints log

There had been no new additions to the log since the last known dust complaints affecting the industrial area on the south side of Rover Way.

Lancing Booth Operational Records

Maintenance records for the Lancing Booth were viewed for 16/5/17. The comments included; filters needed replacement, fan set was noisy and replacement seals were required for the bins. It was confirmed that all the Work Orders had been completed and there were no outstanding maintenance issues. Copies of the Mineral Site daily reports were also examined for August. These included Ringlemann Shade values (always quoted as zero) but no indication that there had been any lancing in progress that day. Definitive evidence that Ringlemann Shade values are noted when lancing is in progress have been

requested previously but not yet provided. The Permit requires (Condition 3.5.1(a)/Table S3.1) that a Ringlemann Shade measurement is taken during lancing booth operation. There is no need to note a value at other times. Celsa must be able to provide operational records for when the booth has been used and the Ringlemann Shade value for a representative period during such operation. Operational procedures for the Lancing Booth may need to be checked to ensure this requirement is documented.

Action (7): Celsa to check the Lancing Booth Operational Procedures and provide NRW with a copy and evidence of Ringlemann Shade measurements for each day the booth is used. **Due date 31st October 2017.**

Review of causes for persistent CO exceedances

This issue was discussed at length with management and operational staff during the inspection. Above Actions (1) and (2) have been identified as a result.

Topas Ambient Monitor

The monitor has not been generating data for a significant time due to problems with the electrical supply on the upper floor at Willows High School. While contact has been established with the new caretaker it is still not known when this situation will be resolved. **Action (8):** Celsa to confirm the situation with NRW by 31st October 2017.

Mineral Site fixed water spray system

Celsa had previously advised NRW about prospective plans for a new fixed water spray system on the Mineral Site to provide additional fugitive dust abatement during slag tipping operations. It was confirmed quotes had been obtained and funding approval was being sought. **Action (9):** Celsa to advise NRW of progress.

Review of Continuous Monitoring Data

There was insufficient time during the inspection to review the monitoring data in detail, this will be done during a subsequent inspection. **Action (10):** NRW.

EPR Compliance Assessment Report

**Report ID:
CAR_NRW0032291**

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Site	Tremorfa Melt Shop	Permit Ref	TP3639BH
Operator/Permit holder	Celsa Manufacturing UK Ltd	Date	04/10/2017

Section 3 – Enforcement Response

You must take immediate action to rectify any non-compliance and prevent repetition.
Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/services relating to environmental matters
- Consulting with the public, public bodies and other organisations (eg. 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 its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.