

## Compliance Assessment Report

Report ID:  
CAR\_NRW0035069

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           | 24/04/2019                                         | Time in     | 10:00      | Out      | 16:00 |
| Assessment type              | Audit                                              |             |            |          |       |
| Parts of the permit assessed | All                                                |             |            |          |       |
| Lead officer's name          | Richards, Gareth (Rivers House)                    |             |            |          |       |
| Accompanied by               |                                                    |             |            |          |       |
| Recipient's name/position    | Richard Lewis/Gabriella Nizam/<br>Environment Team | Date issued | 07/05/2019 |          |       |

### 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 |
|------------------------------------------|--------------|-----------------------|
| E1 - Emissions - Air                     | C3           | 3.2.1                 |

**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 | 1 | Total compliance score<br>(see section 5 for scoring scheme) | 4 |
|-----------------------------|---|--------------------------------------------------------------|---|

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 Wednesday 24<sup>th</sup> April 2019. Weather conditions were initially dry with a steady breeze. Heavy rain started at approx. 1030h which continued until just prior to completion of the audit. The Operator was provided with an agenda prior to the audit and meetings had been pre-arranged with relevant site personnel. RL and GN were present for the duration of the audit.

#### Review of previous CAR actions

CAR\_NRW0033635;

A(1) Report provided. Action complete.

A(2) NRW response documented on CAR\_0033636. Action complete.

A(3) Report provided. Way forward on CO issue agreed. Action complete.

A(4) Celsa have progressed a variation application and this is expected to be ready for submission to NRW soon. Action complete.

A(5) No applications had been submitted by Cargo Services. Celsa and NRW would remind them of the need to do this. **Action (1)**

A(6) Action related to SM and R&BM, relevant reports had been submitted. Action complete.

#### Site Inspection and General Update on Meltshop

The Tidefields Rd area that ran adjacent to the Mineral Site was inspected as there had been a dust complaint directed at Celsa by an adjacent company. There was significant evidence of a large fugitive dust release. The verge vegetation was coated with light grey dust and the pavement was coated with a thin layer of the same dust (photographic evidence was recorded). The slag that was next to the boundary fence was also covered by a layer of dust. There was no windsock in place on the mast so it was not possible to get an indication of the current wind direction or speed.

Celsa need to investigate the circumstances of the release and report to NRW. The time of the event should be determined, the reason for the release and the appropriate measures to be taken to avoid a repeat occurrence. This should information should be included on a Schedule 5 response. **Action (2): Celsa.** The windsock must be reinstated as this provides an effective means for determining the potential impact area of any dust releases and when additional dust suppression measures may be necessary. **Action (3): Celsa.**

Meltshop Manager(PC) gave an update on the Meltshop performance. The production target for 2019 remained at 1Mt, this would require ~1.2Mt of scrap to be melted. A similar target for 2018 had not been attained primarily because of unplanned outages. One of the most significant achievements during the last

year had been the reduction in electrode carbon use.

The improvements and maintenance that had been completed during the summer shut down last year had generally continued to be beneficial although some needed to be revisited this year and there continued to be many other aspects of the facility that also needed attention. The main shutdown was planned for the period 7<sup>th</sup> to 21<sup>st</sup> May and was budgeted to cost ~£1.5M. Notable specific items that were planned to be included were:

- Replacement of some of Meltshop cladding
- Survey work and subsequent general repair as necessary
- T4/T5 repairs
- Replacement of expansion joints (four done last year, more this year)
- Bishop Hat cleaning
- Quench tower refurbishment
- Drop out box repairs
- Surveying of hot ductwork and repairs carried out as required
- Installation of atomising jets with dynamic control in quench tower to improve dioxin abatement
- Dust filter plant
  - Replacement of booster fan
  - Main fan refurbishment
  - Expansion joint replacement
  - Damper replacement
  - Installation of new CO probe for improved process monitoring capability

The EFSOP system is now fully functional following completion of set up by a specialist in October 2018. Tenova have remote access to the data and there is an ongoing assessment process with the aim of process optimisation.

Other recent work items included £50k expenditure on new door closure systems for pedestrian route ways. This has improved the building sealing. There is now dynamic control of carbon injection into the furnace and electrode water cooling to reduce graphite consumption. Improvements have been made to the water treatment plant, an Environmental Waste Management review has been completed and a programme of water and hydraulic pipe replacement has been completed. Overall Environmental related spend has increased by 13%.

A further important aspect is the planned improvement to the Cow Shed (see non-compliance details). This will include improved water jets and main canopy improvements.

Celsa were demonstrating a significant commitment to the continued maintenance of the facility in a good operational status and minimisation of the environmental impact of the operations through compliance with the permit requirements. It was well understood that in view of the aggressive operational conditions this is an essential requirement and will need to be carried out on a continuous basis.

The Scrap Bay Manager gave a summary of the current operations. There continued to be a large input of 'Merchant scrap' into the process. This was predominately mixed metal that required a significant degree of checking and sorting before it can be considered suitable for use in the furnace. The processes in use to achieve this remained effective but rather crude. They also had significant potential to contribute towards the generation of fugitive dust that was an ongoing concern. It was confirmed that bowzers were in regular use during dry periods, however, these were only able to suppress fugitive dust emissions resultant from vehicle movements. There was no dust suppression over the sorting areas as it was important that the scrap did not become wet. Celsa were aware that the scrap sorting equipment was ageing – replacement of this would create an opportunity to consider measures for dust abatement and/or an improved process. **Action (4) Celsa.** Generation of scrap screenings was typically ~2800t/month. It was confirmed that noise minimisation procedures were in use at all times, not just night time. There had not been any noise complaints since the previous inspection. Despite this it was good practise to adopt measure to minimise noise at all times. Overall the quality of merchant scrap was not improving and the material was tending to become lighter in nature. The current scrap inventory was ~30 000t. The adoption of a contained facility for further sorting of scrap screenings (variation application

awaited) would also lead to an additional ferrous stream that could be returned to the Meltshop.

An inspection of the scrap storage area and sorting area was carried out. There was rain at the time of this inspection. The Old Meltshop building was being used for the storage of specific scrap grades, in particular tin cans. It was important these did not become wet due to the potential for water entrapment. There was evidence of many unsuitable items in the merchant scrap e.g. the odd compressed car scrap bale, large items with sealed containers, wheels with tyres, plastic contamination. Some bales of tin cans included a significant proportion of plastic bottles which could have resulted from deliberate inclusion on the basis they did not appear to be randomly incorporated.

The Old Meltshop building was starting to look in a poor condition. A decision had been taken by Celsa to retain the structure as it provided significant noise attenuation benefit for the local community. It was thought that the structure was subject to regular structural checks.

The mechanical scrap sorting process for a single load of delivered scrap was witnessed. This consisted of a grab lifting and dropping the scrap so the dirt migrated to the bottom of the pile. The cleaner scrap was then moved to the scrap pile. The residual material was moved away for screening when further ferrous would be recovered. There was significant potential for fugitive release from this process, although at the time it was raining.

There was a significant queue of HGVs that were waiting to unload scrap. The process is well controlled. Celsa examine each load and make an estimate of the amount of non-ferrous material, an appropriate cost deduction is then applied. Individual HGVs are only permitted to leave site when this process has been completed.

The furnace control room was visited. Melting operations had been suspended due to a problem with the hydraulic system for the furnace roof. Historic EFSOP data was reviewed. This is routinely collected and Celsa's partners in the project assess the data.

It was observed that the slag quench bay was in operation and there was ongoing removal of slag from the tunnel. This process was resulting in large plumes of fugitive dust that were not controlled. The existing water spray system in the Cow Shed was normally only used when loading of the slag trucks was in progress. The extent of fugitive release in this area is very evident from the condition of the cladding which seemed to have deteriorated significantly since the previous inspection. Due to the extent of fugitive release a Cat 3 non-compliance was recorded, see details below. Whilst it had been advised that as part of the programme for the summer shut down improvements were planned to the Cow Shed water spray system, there also needed to be consideration of the effectiveness of the Meltshop extraction system upon the slag tunnel and whether there could be modification to the slag removal process to reduce fugitive releases. See Action below.

#### **General issues and updates**

Dioxin exceedance response: Celsa had received a consultant's report related to the issues that may have led to the recent exceedance of the dioxin limit. NRW had requested a report but this had not yet been provided. See Action (1) on CAR form NRW\_0034949. Celsa should respond to this action without further delay. It was understood that this report had been used to determine what work on the quench tower was necessary during the shutdown.

Celsa have used rubber crumb as a slag foaming agent for a significant period, but this practice had ceased, the exact date of this was not provided. This was claimed to be due to availability issues for the material. It was noted by NRW that originally it had been stated by Celsa that the use of rubber crumb was as a replacement for fossil fuel based carbon and as a direct consequence of the reduced chlorine input into the furnace this would also be beneficial for dioxin releases. Celsa should provide clarification when rubber crumb ceased and if there was any link between this and the dioxin exceedances. **Action (5): Celsa.** It was confirmed that the next dioxin test was scheduled for June. NRW should be advised of the exact date of the test. **Action (6): Celsa.**

Celsa advised that the planned variation application for the scrap screenings sorting process was nearly ready for submission to NRW. Construction of the building that would be used for the process was advancing well, the skeleton structure was clearly visible on the Mineral Site.

#### **Audit topics**

Contractor monitoring reports: Monitoring reports for 2018 were cross checked with the data reported to NRW. No discrepancies were identified. The monitoring contractor was currently ECL.

Some of the CEMS data for March 2019 was cross checked with the Schedule 5 submissions for CO exceedances. No discrepancies were identified. The data for A1 dust levels was reviewed. For March 2019 the monthly average was 2.34mg/m<sup>3</sup> and the maximum was 2.95mg/m<sup>3</sup>. These were well below the permit limit of 5mg/m<sup>3</sup> suggesting that the dust abatement plant was being well maintained and providing effective dust abatement on a continuous basis.

The maintenance regime for the CEMS was described. There is a programme of monthly checks and quarterly service visits by the contractor. There was no evidence of a call-out contract with a definitive response time. Celsa's view was that they always get a good response in the event of any unplanned outages.

It was noted that there were no specific procedures in place for dioxin abatement, only those that were incorporated under general furnace operation. There was no explicit requirement for a definitive procedure, especially while dioxins levels were being effectively controlled. However, in the event of any exceedances, as had been recently experienced, then there could be value in the documentation of the checks that should be carried out to ensure a timely return to compliance. In that respect documentation of the current measures/response that are being taken could be valuable for future reference.

Summary findings from Celsa's internal audits for January, February and April 2019 were reviewed. These were carried out on a regular basis and served to raise the profile of a variety of issues. Completion of necessary actions was generally prompt. In particular they served to ensure that good housekeeping standards were maintained and minor issues were prevented from becoming more significant. Typical issues noted were; waste related, oil leaks, spill kit condition, achievement against internal targets. It was noted that in the April 2019 report there was mention of dust issues from the slag quenching area – so Celsa were already aware that this is a problem.

The current Mineral Site scrap screenings inventory was stated to be 9962t. A contractor was due to start work on 7<sup>th</sup> May to screen the material which would lead to some then going for final disposal at Trecatti and the other fraction going under TFS to Ferrimet in Spain.

Complaints log: two complaints had been logged, both were recent and related to dust. It was thought that one of these was not attributable to Celsa as it was a report of 'black dust'.

A check was carried out on the PRTR data that had been submitted by Celsa. It was determined that the two different basis for dioxins reported values had been inadvertently transposed. Celsa need to provide confirmation by Email to NRW of the correct data. **Action (7): Celsa.**

Celsa provided a demonstration of the live data stream that can now be obtained from the Willows High School TOPAS monitor. The plans to install a monitor at a second school were well advanced (Baden Powell Primary School). This was slightly further from the installation and NRW do not have any plans to add this to the monitoring requirements that are included on the permit.

#### **AOBs**

The publication of the BREF for Ferrous Metal Processing sector was highlighted to Celsa, although there was already awareness of this.

The recent request for data by Ricardo was discussed, Celsa would respond directly to this. **Action (8).**

## EPR Compliance Assessment Report

**Report ID:  
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|                        |                            |            |            |
|------------------------|----------------------------|------------|------------|
| Site                   | Tremorfa Melt Shop         | Permit Ref | TP3639BH   |
| Operator/Permit holder | Celsa Manufacturing UK Ltd | Date       | 24/04/2019 |

### 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.

In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.

### 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 |              |                                                                                                                      |            |
| E1                  | C3           | Ensure the measures in place to minimise fume release during the removal of slag from the slag tunnel are effective. | 31/05/2019 |

## 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](mailto: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.