

Compliance Assessment Report CAR_NRW0041196

Permit being assessed: LP3439HM.

For: Roath Dock Treatment and Recycling Centre NRW/EPR/LP3439HM/V003, held by Castle Waste Services Limited

At: Roath Dock Transfer Station Old Clipper Road , Roath Dock, Cardiff, CF10 4LX.

Type of assessment carried out: Report/Data Review, Reason: Other.

On 29/12/2022.

Parts of permit assessed: Monitoring Returns

NRW Lead Officer: Geraint Harris.

Report sent to: Dave Humphriss, Technical Director on 16/02/2023.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
C3 - General Management - Materials acceptance	C3 Minor	Permit Condition 1.1.1.

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

Total number of non-compliances recorded	Total non-compliance score
1	4

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
C3	Castle to implement the actions mentioned in this CAR Form	28/04/2023

Action 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

Castle Waste Services Limited

EPR/LP3439HM

NRW received Castle Waste Services Ltd.'s annual report and associated results for 2022, in accordance with condition 4.2 of their environmental permit LP3439HM, on the 31st of January 2023. This report was produced to provide an overview of Castle's site performance over the previous 12 months.

Energy Consumption

It is important that operators define and calculate the specific energy consumption of their activity (or activities) and set up key performance indicators on an annual basis. For example, based on the primary energy consumption for the products or raw material inputs which most closely match the main purpose or production capacity of the plant. This is reiterated in BAT 23 of the Waste Treatment BReF, where it is stated that BAT is to set up key performance indicators on an annual basis for example, specific energy consumption expressed in kWh/tonne of waste processed. Previously Castle have reported energy consumption against 100,000 hours worked. However, Castle have since reconsidered this approach and have instead decided to use a ratio of power consumed to waste accepted on to their site.

Castle report that primary electricity consumption in 2022 has decreased by 7% when compared to 2021. When this is factored against the previous 'hours worked' methodology, 2022 saw a 35% reduction compared to 2021. 2022 also saw a small increase in waste tonnages accepted to the site. Castle state that if power consumption is rationalised using this new approach, parameter consumption for the two years is expressed as 65.8 kWh/T (2021) and 58.4 kWh/T (2022). This equates to a 12.7% reduction in power consumption for 2022.

Castle believes that the reduction in power consumption is related to two factors:

- The installation of a new Filter press had its first full year of operation in 2022. This project has provided improved efficiency using new and improved pumps and filter presses along with delivering general efficiencies in the plant such as removing intermediary holding tanks.
- Further to that, there has also been a reduction in the number of concrete products generated following the nightshift ending in October 2021. The night shift has not been operated since.

Reported primary energy from gas oil consumption is higher than the previous year. When consumption is rationalised per tonne of waste accepted, the values (6.5 kWh/T 2021 and 7.1 kWh/T 2022) show an increased consumption rate in 2022 of 9%.

Water consumption

Water consumption for 2022 is estimated to be 3692.5m³. This value has been attained using the same assumptions as previous years (estimated based on batch recipes and process records). It represents a decrease from the previous year (4477.7m³). According to Castle "the decrease is effectively due to the reduced operation of the construction business. When expressed per tonne of waste accepted the value falls from 0.271m³/T to 0.212m³/T in 2022. It is considered that this drop may be due to the reduced number of concrete products produced over the period as water is consumed in the production process".

NRW are pleased to see that both energy and water consumption have reduced in 2022. There is a correlation between the operations of the concrete plant and the consumption of both energy and water. In order to understand the energy savings within the different operations at the Cardiff site and to try and improve efficiency, have Castle considered utilising separate meters for the concrete plant for both water and energy?

Raw Materials

Raw Materials and Water Consumption: NRW are pleased to see that raw materials usage was zero for 2022. Castle have achieved this by utilising wastes in place of raw materials such as hydrated lime.

Continuous Improvements

NRW are pleased to see a number of improvement works are continuing in 2023 and into 2024. Of particular note is the resurfacing of the old filter press building due to commence at the end of February. Further works are planned for the Yard 2 tank farm which will continue over the 2023 – 2024 period and will encompass the introduction of an effluent polishing plant and associated improvements related to the recent Waste Treatment BReF.

Returns

Form S1(Q2), Emissions to Sewer for 1st of April to the 30th of June 2022 was received on 29th of July 2022. This report has been accepted.

Form S1(Q3), Emissions to Sewer for 1st of July to 30th of September 2022 was received on 28th of October 2022. Form S1(Q4), Emissions to Sewer for 1st of October to 31st of December 2022 was received on 27th of January 2023.

The permit variation, following publication of the BAT Conclusions for the waste treatment sector, introduced new monitoring requirements for Castle. The parameters to be measured from 17th of August 2022 were not finalised until the end of Q4 and so NRW have accepted the reporting requirements from the previous version of the permit. However, going forward (as stated in CAR_NRW0040821) NRW will require Castle to undertake the required monitoring within the required frequency as stated within BAT 7 and CAR_NRW0040821. Castle must submit quarterly monitoring results to NRW for all the parameters given in Table S3.3 of their permit using the latest issue of form S1. Non-compliances will be recorded against the parameters given in Table S3.3 and suspended (as mentioned in CAR_NRW0040821), provided that they are within the limits set by DCWW. Reports S1 -Q3 and Q4 have been accepted.

Waste Returns

Waste returns for Q1 to Q4 have been reviewed.

Within CAR Form CAR_NRW0039332 an agreement was made between NRW and Castle that waste with certain EWC codes will no longer be accepted at the site. This agreement was put in place as an alternative to developing and implementing a fire prevention and mitigation plan as required by Improvement Condition 3 (IC3). Upon review of Castles Q4 waste returns, Castle have accepted 0.4tonnes of waste with an EWC code 160212. Waste with this EWC, under this agreement should not be accepted onto site any longer. After informing Castle, via email, of this non-compliance they subsequently undertook an investigation to identify the root cause. NRW received a non-conformance report investigating the acceptance of 400kg of waste coded as 16 02 12 on the 7th of February 2023. The waste in question was one pallet described as 'Pallet of Mixed WEEE (Floor Cleaner, Dyson Hoover, Chemical Hoover, 1 x Dell Monitor)'. Castle have attributed this noncompliance to human error and state "The fact that the EWC code was previously suitable for acceptance to the site and the methodology for generating and amending previous quotations provided the circumstances that allowed the error to be made". Upon receiving notification, from NRW of this noncompliance, Castle have taken actions to reduce the likelihood of a repeated occurrences, these include:

- Immediate action has been taken on the specific quotation to clearly state that wastes assigned 16 02 12 cannot be accepted at the site.

- Re-circulation of document 1.1.1.3.1 to the Technical Sales Team and Cardiff Operations Team has been completed and a review meeting is booked with the Technical Sales Team.
- Medium Action (to be completed within 4 weeks) – The quotation workbook to be updated to include the ‘master list of acceptable wastes’ and to perform a validation of proposed EWC codes for all sites and processes within group. Roll out of the new quote template will then coincide with annual review which is conducted in March. After that date no waste will be quoted without a valid quotation using the updated template.

Since there is limited impact from accepting a pallet of mixed WEEE (Floor Cleaner, Dyson Hoover, Chemical Hoover, 1 x Dell Monitor’) NRW consider this to be a minor noncompliance. Consequently, a **Cat 3 noncompliance** is being scored against Castle’s management system (permit condition 1.1.1) for failure to identify and prevent prohibited waste from entering their site.

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.