

Compliance Assessment Report CAR_NRW0042987

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: Report/Data Review,

Reason: Routine.

On: 11/10/2023 between 10:00 and 11:30.

Parts of permit assessed: Quarterly returns .

NRW Lead Officer: Dale Padfield.

Report sent to: Dave Humphriss, Operations Director, on 11/12/2023.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR3A - Emissions and monitoring - Emissions to water, air or land	C3 Minor (Suspended)	3.1.2
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Result types are explained in more detail in the 'Important Information' section below.

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

Criteria	Action needed	Complete by
IR3A	Ensure compliance with total Cr ELV is achieved by August 2024.	21/08/2024

Criteria	Action needed	Complete by
IR3A	Ensure compliance with Cr(vi) ELV is achieved by August 2024.	31/08/2024
IR3A	Ensure compliance with Cu ELV is achieved by August 2024.	31/08/2024
IR3A	Ensure compliance is Pb ELV is achieved by August 2024.	31/08/2024

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

Castle Waste Services

EPR/LP3439HM

This CAR form provides an overview of the quarter three permit returns, summary of the site visit conducted on the 11th of October 2023 and sampling updates.

The waste returns were received on the 30th of October 2023. All accepted EWC codes were compliant with the permit. The waste returns are accepted.

Emissions to sewer Quarter three (July - September) 2023.

The results for parameters that were in breach of the BAT AELs are detailed in the table below. A schedule 5 notification was submitted alongside the S1 form. All other parameters were within the permitted ELVs.

Parameters/Substances	Result	BAT AEL
Total Chromium	0.53 mg/l to 0.54 mg/l	0.3 mg/l
Copper	0.53 mg/l to 0.69 mg/l	0.5 mg/l
Lead	0.34 mg/l to 0.65 mg/l	0.3 mg/l
Cr(VI)	0.15 mg/l to 0.17 mg/l	0.1 mg/l

As stated within the previous CAR forms NRW assess exceedances of different determinants separately and cannot consolidate them together. We do however consolidate into reporting quarters. Therefore, a noncompliance score is being issued for each of the parameters in exceedance of the BAT AEL and immediately suspended as agreed. Consequently **4 x Category 3 non-compliances are being issued against permit condition 3.1.2.** As mentioned in CAR Form CAR_NRW0040821 any exceedances of the BAT AEL's will be scored and suspended until August 2024 where, at this point, Castle will have made the necessary

improvements to their treatment plant, or the suspension will be lifted.

Castle have continued to duplicate the sample analysis, with samples being analysed internally as well as externally via a UKAS accredited laboratory to the required standards. External analysis continues to indicate that all parameters are below the BAT-AELs. Castle are still in the process of re-assessing their submission of improvement condition 5 (IC5). Once NRW receives the revised submission, a re-assessment of the monitoring frequencies will be made to determine if these can be reduced in line with footnote 1 of BAT 7 of the WT BATc - 'Monitoring frequencies may be reduced if the emission levels are proven to be sufficiently stable'.

Site visit

A site visit was conducted on the 11th of October 2023, the primary purpose was to discuss the ongoing sampling programme and Castle provided some preliminary analysis results comparing in-house analysis with that obtained via the external laboratory for the metal ions. External analysis indicates consistent compliance with the ELV's whereas internal analysis has reported results far in exceedance of the ELVs. As mentioned above, this will form part of the re-submission for IC5.

Hexavalent chrome sampling & analysis

Castle have indicated that they are unable to undertake Cr(vi) analysis to the standards specified within the permit. Currently, there are no accredited laboratories within the UK offering analysis to the named standards / methods mentioned in the permit.

Castle currently employs a third-party UKAS (17025) laboratory to conduct the Cr(vi) analysis on their effluent samples. The third-party laboratory analysis method is based on the ISO 11083:1994, which appears to be consistent with the analysis used by other waste treatment operators within South Wales. Although this standard isn't specifically listed within the permit, the 'monitoring method or standard' section of the permit is caveated with 'various EN standards available'. As such, NRW accepts this analysis method and believes this is still in scope of the permit requirements.

Castle have stated that this third-party Cr(vi) analysis has been unreliable, with Cr(vi) results often above that reported for total Cr, and the total Cr analysis is likely to be more accurate as it uses a more reliable method. Castle have queried if NRW would accept total Cr analysis in place of Cr(vi), whereby Castle would assume any result for total Cr was in the Cr(vi) state and any total Cr result that exceeds the Cr(vi) ELV would be further analysed specifically for Cr(vi). Although this would be a more conservative approach, it does not address the issue of the inaccuracy of the Cr(vi) result (i.e., a total Cr result in excess of the Cr(vi) ELV that is then analysed specifically for Cr(vi) may still produce an incorrect Cr(vi) result).

An operator of a similar waste treatment site using the same external laboratory has also encountered some similar issues with their Cr(vi) analysis. The operator, along with the laboratory investigated the issue and concluded the inaccurate Cr(vi) results were due to interference caused by turbidity in the sample. The samples now undergo pre-treatment as part of the operator's internal analysis method, which results in the removal of the interferences identified by the third-party laboratory.

It is suggested that Castle undertake an investigation to identify the cause of the inaccuracy of their Cr(vi) analysis. Once the cause has been established, it may be possible to identify measures to resolve the issue, which may include adjustments to how to sample is taken, prepared, or preserved. The method (ISO

11083:1994) has an LOD of 0.03 mg/l and should be capable of providing accurate results.

An inspection of the site was conducted, re-surfacing of the storage bay has been complete, with the surface across this area now in excellent condition. Castle plan to re-locate the office block, this will allow greater utilisation of the permit boundary to conduct the permitted activities. A new storage tank was seen within the tank farm, Castle have a replacement programme in place, which will eventually see all the historic tanks replaced with new tanks, with the bund flooring also benefitting from resurfacing as each tank is replaced. Further work has been conducted to better utilise the available space in a more efficient manner, such as rearranging the storage of empty and nominally empty IBCs.

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.