

Compliance Assessment Report CAR_NRW0040075

Permit being assessed: GP3830BG.

For: Chirk Landfill Site EPR/GP3830BG, held by FCC Waste Services (UK) Limited

At: Pen-y-Bont Works , Chirk, WREXHAM, Clwyd, LL14 5AR.

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

On 27/06/2022.

Parts of permit assessed: Q1 Returns and partial Annual Report (4.2.2a)

NRW Lead Officer: Paul Challender.

Report sent to: Leon Terrace, Compliance Advisor/, Colin Shaw, Site Business Manager
on 06/07/2022.

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)	
B1 - Infrastructure - Engineering for prevention and control of emissions	C3 Minor	Permit Condition 2.10.1
B1 - Infrastructure - Engineering for prevention and control of emissions	C3 Minor	Permit Condition 2.8.1, Schedule 3, Table S3.1
E1 - Emissions - Air	Assessed (A)	
E2 - Emissions - Land and groundwater	Assessed (A)	
E3 - Emissions - Surface water	Action only (X)	
E5 - Emissions - Waste	Assessed (A)	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	Assessed (A)	
G4 - Monitoring and Records, Maintenance and Reporting - Reporting and notification to Natural Resources Wales	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
2	8

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
B1	Action 1: Conduct and audit of wells and survey transects identifying lost wells, names changes to wells and areas that require vegetation management prior to the next FID &	16/09/2022

Criteria	Action needed	Complete by
	Fluxbox surveys. Submit the review to NRW. Action 2: Ensure correctly identified well identification data is supplied to appointed surveyors and that vegetation is managed to allow access to wells and transects prior to the next Table S3.6 annual survey.	
B1	Action 3: No action applied. Remedial works have been completed and the leachate head in the landfill is now compliant.	Already completed
E3	See CAR_NRW0040066	01/08/2022

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

This Compliance Assessment Report (CAR) has been raised by the Natural Resources Wales (NRW) regulating officer, Paul Challender to review the submitted Q1 Monitoring Returns and the outstanding section of the Annual Report.

Annual Report - Permit Condition 4.2.2(a)

The operator has previously submitted the data complying with Permit Condition 4.2.2 (b - f) and requested an extension to submit the required report to comply with Permit Condition 4.2.2(a). This request was granted and the report was received within the agreed timescale.

The report reviewed all relevant data required by the permit condition. Carbon monoxide levels have improved in the gas field with levels falling in this reporting year with highest reading still found at Gas Well W113. Recent leachate head breaches have returned to compliant levels after remedial works. Relevant Compliance Classification Scheme (CCS) scores applied throughout the reporting year during the review of quarterly monitoring returns.

Permit Condition 4.2.3 requires the monitoring specified in Schedule 4, Table S4.1 which, in turn requires the monitoring of landfill gas from capped surfaces as per Schedule 3, Table S3.6. The document *Annual FID Survey Report, Pen y Bont (Chirk) Landfill Site, October and December 2021, February 2022* was provided as an appendix to the main report. *Section 2.1 Annual FID Survey* states *It was noted during the onsite survey that small areas were inaccessible due to overgrown vegetation and steep slopes.* The table *FID Survey - Transects and Infrastructure* indicate areas where undergrowth prevented access to transects and wells. Furthermore, the table indicated that some wells could not be found

and some wells had been alternately labelled.

Transects and wells not being surveyed has the potential for polluting gaseous emissions not to be identified. Deviations in the labelling system can cause confusion for operation, maintenance and survey of gas wells. Difficulties in identifying wells has the potential to cause difficulty in assessing issues at wells for the operator, it's contractors and the regulator when reviewing gathered data or lack thereof.

Score: (B1) Engineering for prevention and control of emissions. Permit Condition 2.10.1. CCS 3.

Action 1: Conduct and audit of wells and survey transects identifying lost wells, names changes to wells and areas that require vegetation management prior to the next FID & Fluxbox surveys. Submit the review to NRW by the 16/09/22.

Action 2: Ensure correctly identified well identification data is supplied to appointed surveyors and that vegetation is managed to allow access to wells and transects prior to the next Table S3.6 annual survey.

Q1 Monitoring Returns

The Q4 monitoring returns for January - March 2022 were received by NRW in compliance with Permit Condition 4.2.3. Reported parameters are discussed below.

Landfill Gas in External Monitoring Boreholes

T11 is a monitoring point with constantly high CH₄ levels that are known not to be of landfill origin. T11 is in close proximity to T10 and is believed to give rise to interference of recorded gas levels at T10. During this reporting period however, although 0.9% v/v CH₄ was detected at T10 this does not represent a permit breach.

Landfill Gas in Waste Monitoring Points

In waste gas parameters were monitored and reported as being acted upon across Q1. In this quarter, 123 readings of oxygen levels exceeding 5% were recorded and multiple readings for percentage gas balance being greater than 20%. Elevated values can be attributed to actions taken during previous gas balancing actions. These exceedances result in air ingress assessments being performed.

Point Source Emissions to Water

Surface water sampling was carried out in accordance with Schedule 3, Table S3.3 and S3.9. Elevated levels of ammoniacal nitrogen in surface water lagoons were detected in this quarter. Breaches were subject of a Schedule 5 notification and appropriate CCS scores and remedial actions were applied in CAR_NRW0040066.

There were no detections of oil or grease recorded during the reporting period. In addition, no discharges were made at point WP4 or WP5.

Groundwater

Quarterly groundwater monitoring was conducted as per the requirements of Schedule 3, Tables S3.4 & S3.10 with no breaches of emission limit values (elvs) identified.

Leachate Heads

There have been ongoing issues with leachate heads. Since, the identified leachate head levels in CAR_NRW0037604, exceedances of leachate heads have improved over time with regular issues only occurring at LC1D. FCC submitted a plan of action and timeframe to NRW and has supplied officers with weekly leachate head levels which show falling levels across the landfill infrastructure, with only LC1D remaining permanently in breach of the 43 metre (AoD) limit. Other wells have been in breach during this timeframe with exceedances of limits identified in Schedule 5 notifications earlier in the year, followed by weekly submissions as agreed by operator and regulator. Further to these notifications exceedances were also highlighted in the quarterly monitoring returns. During Q1 2022 desilting works at LC1D have been completed. The ongoing works at this well have been fully communicated to NRW. The operator has returned to the normal Schedule 5 notification system as consistent leachate heads levels have reached ongoing compliance.

Breaches of the 43 metre elv did occur in Q1 and therefore the CCS score below has been applied.

Score: (B1) Engineering for prevention and control of emissions. Permit Condition 2.8.1, Schedule 3, Table S3.1. CCS3

Action 3: No action applied. Remedial works have been completed and the leachate head in the landfill is now compliant.

Leachate Quality

Leachate quality is monitored at a 6 monthly interval and is reported annually. The next scheduled leachate quality monitoring campaign is due in May.

Flare & Gas Engine Emissions

Annual monitoring of the flare and gas engine emissions was carried out in January 2022. The data was received in the data submission for Q4 2021 and was discussed in the previous CAR form (CAR_NRW0039345).

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.