

Compliance Assessment Report CAR_NRW0041145

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 30/12/2022.

Parts of permit assessed: Q3, Q4 Monitoring Returns and Annual Report

NRW Lead Officer: Paul Challender.

Report sent to: Leon Terrace, Compliance Advisor, Colin Shaw, Site Business Manager on 13/02/2023.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
E2 - Emissions - Land and groundwater	Action only (X)	
E3 - Emissions - Surface water	C4 No impact	Permit Condition 3.1.2, Schedule 3, Table S3.3.
E2 - Emissions - Land and groundwater	C4 No impact	Permit Condition 3.1.5, Schedule 3, Table S3.4.
B1 - Infrastructure - Engineering for prevention and control of emissions	C3 Minor	Permit Condition 2.8.1, Schedule 3, Table S3.1.
C2 - General Management - Management system and operating procedures	Action only (X)	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	Action only (X)	

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

Total number of non-compliances recorded	Total non-compliance score
3	4.2

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
E2	Action 1: Discuss gas balance exceeding 20% with better clarity in future monitoring submissions.	31/01/2024
E3	Action 2: If further reductions are not evidenced in the next round of monitoring, investigate other sources of ammoniacal nitrogen in the surface water system.	30/04/2023
E2	Action 3: If further reductions are not evidenced in the next	30/04/2023

Criteria	Action needed	Complete by
	round of monitoring, investigate other sources of ammoniacal nitrogen at this borehole.	
B1	Action 4: Notify the regulating NRW officer upon the outcome of the transducer replacement works.	28/02/2023
C2	Action 5: Confirm with the regulating officer the permit number, variation number and issue date of the permit that the operator is working to. Confirm with the regulating officer that the operator acknowledges the deviation in permit numbers, permit condition numbers and schedule numbers.	28/02/2023
G1	Action 6: Submit to the regulating officer the date and the methodology used to conduct the last topographical survey. This refers to the survey that was conducted to generate the contours displayed on the plan in Appendix 1 of the submitted annual report Annual Site Plan 2023.	17/03/2023

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

This Compliance Assessment Report (CAR) has been raised by the Natural Resources Wales (NRW) regulating officer, Paul Challender to review the submitted Q3 & Q4 Monitoring Returns and the Annual Report.

Q3 Monitoring Returns

The Q3 monitoring returns for July - September 2022 were received by Natural Resources Wales (NRW) in compliance with Permit Condition 4.2.3. Reported parameters are discussed below.

The operator is referring to notifications (Part A & B's) as Schedule 6's in submissions. The schedule number has altered in the permit and notifications are now found in Schedule 5. Please use this correct terminology in future submissions - see further comments in the Annual Report section.

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, CH₄ did not exceed the 1% v/v CH₄ emission limit value at T10. All other boreholes were compliant for this quarter.

Landfill Gas in Waste Monitoring Points

In waste gas parameters were monitored and reported as being acted upon across Q3. In this quarter, 88 readings of oxygen levels exceeding 5% were recorded and multiple readings for percentage gas balance being greater than 20%. Gas balance readings above 20% were not always associated with the locations where oxygen was exceeding 5%. It is unclear from the report if gas balance exceeding 20% alone is triggering an assessment.

Action Only: (E2) Land & Ground Water. Permit Condition 3.5.1, Schedule 3, Table S3.7. CCS Score: Action Only

Action 1: Discuss gas balance exceeding 20% with better clarity in future monitoring submissions.

Point Source Emissions to Water

Surface water sampling was carried out in accordance with Schedule 3, Table S3.3 and S3.9. Lagoons 1 & 3 were dry and no discharge took place from WP5, therefore these monitoring locations could not be sampled. Lagoon 2 was sampled and was found to be compliant with elvs.

Elevated levels of ammoniacal nitrogen in surface water lagoons were detected in previous quarters. Ingress of horses had resulted in increased ammonia levels which have been decreasing with time.

Groundwater

Quarterly groundwater monitoring was conducted as per the requirements of Schedule 3, Tables S3.4 & S3.10. Breaches of the elv for ammoniacal nitrogen occurred at BH12. A Schedule 5 Notification was submitted to NRW at the time of the breach. This breach was discussed in Compliance Assessment Report CAR_NRW0040372 and CCS score applied at the time. Control of horse access to the area has been implemented and readings taken post purging exercise a compliant reading has been obtained.

Leachate Levels

Leachate levels are high but are compliant with the elv applied in Schedule 3, Table S3.1.

During this reporting period a breach did occur for leachate levels due to a failed pump which, is awaiting re-drill. This breach was communicated to NRW by Schedule 5 and was discussed and scores applied in CAR_NRW0040372.

Q4 Monitoring Returns**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. No other boreholes displayed readings above 0% v/v for methane in this monitoring round.

Landfill Gas in Waste Monitoring Points

In waste gas parameters were monitored as per table S3.7 and reported as being acted upon across Q4. In this quarter, 186 readings of oxygen levels exceeding 5% were recorded and multiple readings for percentage gas balance being greater than 20%.

Point Source Emissions to Air

Table S3.2 requires the annual monitoring of plant in the gas compound. The submitted data for the annual monitoring states a historic permit number for the site of PP3032LN, the current & correct permit number for your site is GP3830BG. Please, ensure the correct permit number is utilised in future monitoring rounds.

Engine 1 was taken out of commission in April 2021 and the flare was utilised for less than 10% of the time, therefore these two items were not subject to monitoring this year. Engine 2 was monitored and found to be compliant with the elvs in Table S3.2.

Point Source Emissions to Water

Surface water sampling was carried out in accordance with Schedule 3, Table S3.3 and S3.9. No discharge took place from WP5, therefore this monitoring location could not be sampled.

Elevated levels of ammoniacal nitrogen in surface water Lagoon 2 was detected in this quarter. Ingress of horses had resulted in increased ammonia levels which have been decreasing with time. A notification was received upon the operator becoming aware of this breach.

Score: (E3) Surface Water. Permit Condition 3.1.2, Schedule 3, Table S3.3. CCS Score 4

Action 2: If further reductions are not evidenced in the next round of monitoring, investigate other sources of ammoniacal nitrogen in the surface water system.

Groundwater

Groundwater samples were taken throughout the monitoring period in accordance with Tables

S3.4 and S3.10. All reported parameters were within required elvs apart from elevated ammoniacal nitrogen at BH9 which breached the elv on first sampling by 1 mg/l. NRW was notified of this breach with a completed Part A & B. The operator submitted a retest after a purge and the result was found to be well below the elv.

The operator has advised that alternate procedures for monitoring sample collection are being tried at this location in an attempt to obtain more representative samples in the next round of monitoring.

Score: (E2) Land & Groundwater. Permit Condition 3.1.5, Schedule 3, Table S3.4. CCS Score 4.

Action 3: If further reductions are not evidenced in the next round of monitoring, investigate

other sources of ammoniacal nitrogen at this borehole.

Leachate Levels

Leachate levels are broadly compliant including leachate well LC4B which, is awaiting re-drilling this year. The transducer on LC1D is failing and has therefore, breached during this quarter. The operator submitted a notification of the breach and outlined ongoing mitigation until the transducer was replaced. The transducer has now been replaced and the operator is monitoring the decreasing levels. This has attracted a score due to the breach of the elv.

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

Action 4: Notify the regulating NRW officer upon the outcome of the transducer replacement works.

Leachate

Six monthly leachate monitoring was conducted in November 2022 and reported in the submitted Q2 returns as per Permit Condition 3.5.1(a), Schedule 3, Table S3.8. The next round of 6 monthly and annual leachate quality monitoring will take place in May 2023.

Annual Report

The Annual Report was submitted to NRW via email on 31/01/23 as required by Permit Condition 4.2.2 and contained all expected information with no issues identified with the submitted data. The monitoring data review as required by Permit Condition 4.2.2(a) was not submitted with this report and is expected by the 31st March 2023.

It should be noted that in the body of the text of the report the permit condition number 4.2.1 is regularly referenced. The correct permit condition number relating to the condition being addressed is 4.2.2. This referencing error was raised on review of last years' report and has not been corrected. NRW has concerns that the operator is utilising an old version of the permit due to the consistent references to 4.2.1 instead of 4.2.2, Schedule 6 instead of Schedule 5 and the old permit number displayed on the gas compound air emissions monitoring results.

Action Only: (C2) Management System & Operating Procedures. Permit Condition 1.1.1.

Action 5: Confirm with the regulating officer the permit number, variation number and issue date of the permit that the operator is working to. Confirm with the regulating officer that the operator acknowledges the deviation in permit numbers, permit condition numbers and schedule numbers.

All data required to be submitted by Permit Conditions 4.2.2 (b, c, e & f) were received and reviewed with no issues identified.

Permit Condition 4.2.2(d) requires a topographic survey as per the requirements of Permit Condition 3.5.3. This condition requires that *a topographic survey of the site referenced to*

ordnance datum shall be carried out every five years until the end of aftercare.

Action Only: (G1) Monitoring of emissions & the environment. Permit Condition 3.5.3.

Action 6: Submit to the regulating officer the date and the methodology used to conduct the last topographical survey. This refers to the survey that was conducted to generate the contours displayed on the plan in Appendix 1 of the submitted annual report *Annual Site Plan 2023*.

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.