

Compliance Assessment Report CAR_NRW0040372

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 09/09/2022.

Parts of permit assessed: Q2 Monitoring Returns

NRW Lead Officer: Paul Challender.

Report sent to: Leon Terrace, Compliance Advisor/, Colin Shaw, Site Business Manager
on 21/09/2022.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
B2 - Infrastructure - Closure and decommissioning	Action only (X)	
E2 - Emissions - Land and groundwater	C3 Minor	Permit Condition 3.1.2, Schedule 3, Table S3.3
E2 - Emissions - Land and groundwater	C3 Minor	Permit Condition 3.1.5, Schedule 3, Table S3.4. CCS Score 3.
E2 - Emissions - Land and groundwater	C3 Minor	Permit Condition 3.1.5, Schedule 3, Table S3.4. CCS Score 3.
E2 - Emissions - Land and groundwater	C4 No impact	Permit Condition 3.1.5, Schedule 3, Table S3.4. CCS Score 3.
B1 - Infrastructure - Engineering for prevention and control of emissions	C3 Minor	Permit Condition 2.8.1, Schedule 3, Table S3.1. CCS Score 3.
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
5	16.1

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
B2	Action 1: Provide Natural Resources Wales (NRW) with an achievable submission date for the completed consultant's work.	23/09/2022
E2	Action 2: If no further reduction in ammonia is detected in the Q3 samples, conduct an investigation into alternate sources of ammonia and take steps to reduce ammonia levels. Report the findings to NRW in writing.	14/10/2022
E2	Action 3: Investigate causes of poor ground water quality at these boreholes as per ongoing actions from CAR_NRW0039044.	23/09/2022
E2	Action 4: Investigate causes of poor ground water quality at these boreholes as per ongoing actions from CAR_NRW0039044.	23/09/2022
E2	Action 5: Implement arrangements to eliminate livestock from the vicinity of BH12 and other at risk groundwater monitoring boreholes as required. Inform NRW when relevant boreholes have been secured.	14/10/2022
B1	Action 6: Reinstate effective leachate pumping at the location of LC4B. Ensure remaining pumps are effectively managing leachate levels.	30/09/2022

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

Previous Hydrological Risk Assessment Review (HRAR)

CAR_NRW0039044 assigned actions to the operator which were to be completed by 31/03/22. FCC Ltd chose to outsource the work to a consultant which has led to delays and the original deadline has now passed. The site Compliance Advisor however, has kept the regulating officer apprised of the situation but a new completion date for the actions is required.

Action 1: Provide Natural Resources Wales (NRW) with an achievable submission date for the completed consultant's work.

Q2 Monitoring Returns

The Q2 monitoring returns for April - June 2022 did 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, CH₄ did not exceed 0% v/v CH₄.

Landfill Gas in Waste Monitoring Points

In waste gas parameters were monitored and reported as being acted upon across Q2. In this quarter, 135 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.

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. Previous ingress of horses had resulted in increased ammonia levels. The lagoons are now returning to normal ammonia levels with a single breach due to 4.7 mg/l in Lagoon 1. Security against ingress of livestock has been improved to prevent further breaches of this limit.

In addition, no discharges were made at point WP4 or WP5.

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

Action 2: If no further reduction in ammonia is detected in the Q3 samples, conduct an investigation into alternate sources of ammonia and take steps to reduce ammonia levels. Report the findings to NRW in writing.

Groundwater

Quarterly groundwater monitoring was conducted as per the requirements of Schedule 3, Tables S3.4 & S3.10. Breaches of emission limit values (elvs) occurred for the zinc and manganese parameters.

BH7, BH14 & T13 breached the elv for manganese.

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

Action 3: Investigate causes of poor ground water quality at these boreholes as per ongoing actions from CAR_NRW0039044.

BH4, BH7, BH12, BH13 & BH14 breached the elv for zinc.

Score: (E2) Land & Groundwater. Permit Condition 3.1.5, Permit Condition 3.1.5, Schedule

3, Table S3.4. CCS Score 3.

Action 4: Investigate causes of poor ground water quality at these boreholes as per ongoing actions from CAR_NRW0039044.

Leachate Levels

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

Leachate Quality

Six monthly leachate monitoring was conducted in May 2022 and reported in the submitted Q2 returns as per Permit Condition 3.5.1(a), Schedule 3, Table S3.8.

Notifications

Ammoniacal nitrogen August 2022

A completed Part A & B notification for a breach of the groundwater ammoniacal nitrogen elv at BH12 was submitted to NRW on 17th August 2022. The minor elevation in detected ammoniacal nitrogen was believed by the operator to be linked to the recent issues with horse ingress to the lagoon area and the resulting significant ground disturbance in the immediate vicinity of BH12. This notification was followed up with an email containing photographic evidence of the disturbed area which, the regulating NRW officer also during the last inspection. Resulting percolation of equine faeces and urine is believed to be the cause of the breach. Follow up work and communications indicates that future occurrences will be mitigated against with the use of electrical fencing to eliminate horses and other livestock from the environs of monitoring boreholes. Although the believed root cause is not believed to be of landfill origin the contamination from livestock has the potential to mask elevations in concentrations for this parameter that may arise from the landfill. As the operator is the landlord of the property in question, the operator has the power to eliminate potential sources of contamination from the immediate environs of off site monitoring boreholes in this area.

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

Action 5: Implement arrangements to eliminate livestock from the vicinity of BH12 and other at risk groundwater monitoring boreholes as required. Inform NRW when relevant boreholes have been secured.

Leachate Head Breach August 2022

A completed Part A & B notification for a breach of leachate head at LC5B was submitted to NRW on 30th August 2022. Root cause for this breach was identified to be a failed pump in LC4B but the pump is jammed in the pipework and the well may have to be re-drilled. Extra checks of functioning pumps are being conducted to ensure maintenance of leachate heads until resolution is finalised.

Score: (B1) Engineering for prevention and control of emissions. Permit Condition 2.8.1,

Schedule 3, Table S3.1. CCS Score 3.

Action 6: Reinstate effective leachate pumping at the location of LC4B. Ensure remaining pumps are effectively managing leachate levels.

NB: Can you ensure that all notifications are not only emailed to the regulating officer but also to the regulatory teams email address too. This will ensure that notifications are received and reviewed if the regulating officer is absent.

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.