

Compliance Assessment Report

Report ID:
CAR_NRW0026904

This form will report compliance with your permit as determined by an NRW officer

Site	Pwllfawatkin Landfill Site EPR/BU8819IV	Permit Ref	BU8819IV			
Operator/Permit holder	FCC Waste Services (UK) Limited					
Regime	Installations					
Date of assessment	11/11/2016 - 27/01/2017	Time in	N/A	Out	N/A	
Assessment type	Check Monitoring/Sampling					
Parts of the permit assessed	1.1.1, 2.3.1, 3.6.1,4.3.1,4.3.2					
Lead officer's name	Thomas, Ffion					
Accompanied by						
Recipient's name/position	Russell Bromage/ Environment Manager	Date issued	31/08/2017			

Section 1 – Compliance Assessment Summary

This is based on the requirements of the permit under the Environmental Permitting Regulations or the licence under the Water Resources Act 1991 as amended by the Water Act 2003. A detailed explanation is captured in "Compliance Assessment Report Detail" (Section 2) and any actions you may need to take are given in the "Action(s)" (section 4). This summary details where we believe any non-compliance with the permit has occurred, the relevant condition and how the non-compliance has been categorised using our Compliance Classification Scheme (CCS). CCS Scores can be consolidated or suspended where appropriate, to reflect the impact of some non-compliances more accurately. For more details of our CCS scheme, contact your local office.

Permit conditions and compliance summary	CCS Category	Condition(s) breached
C2 - General Management - Management system and operating procedures	C3	2.3.1, schedule 1 table S1.2
E2 - Emissions - Land and groundwater	A	

KEY: See Section 5 for breach categories, suspended scores will be indicated as such.
A = Assessed or assessed in part (no evidence of non-compliance), **X** = Action only,
O = Ongoing non-compliance, not scored.

Number of breaches recorded	1	Total compliance score (see section 5 for scoring scheme)	4
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If the Number of breaches recorded is greater than zero, please see Section 3 for our proposed enforcement response

Section 2 – Compliance Assessment Report Detail

This section contains a report of our findings and will usually include information on:

- The part(s) of the permit that were assessed (eg. Maintenance, training, combustion plant, etc)
- Where the type of assessment was 'Data Review' details of the report/results triggering the assessment
- Any non-compliances identified
- Any non-compliances with directly applicable legislation
- Details of any multiple non-compliances
- Information on the compliance score accrued inc.
- Details of advice given
- Any other areas of concern
- Any actions requested
- Any examples of good practice
- A reference to photos taken

This Compliance Assessment Report (CAR) form has been completed following receipt of a Schedule 5 notification for ground water monitoring limit breaches.

AMEDMENT.

Following a request by FCC to re-assess the scoring undertaken and ensure consistent approach related to consolidation of scores, and FCC providing additional information regarding the GW sampling and reporting undertaken, I have undertaken a review of my original assessment. The original assessment has been included at the bottom of this form for records sake, but has been stricken out and the detail below supersedes those.

Consolidation

I re-examined the CCS guidance related to consolidation which confirmed the approach taken was within the guidance, however I went on to benchmarked my approach by contacting my/NRW's landfill sector colleagues. Whilst an officers indicated that they have in the past consolidated multiple boreholes as one permit breach it was recognised that the consolidation guidance was developed specifically to ensure all industry operators were dealt with consistently, the consequence is that we have to follow the guidance.

I am sympathetic to the point that landfill are likely to generate more monitoring than other industries but it is not for an inspector to deviate from guidance. I have brought this matter to the attention of my colleagues who attend joint EA/industry meetings (as the CSS guidance is an EA document) and suggest that you take the matter up with your representative at the EA landfill sector meetings.

NRW may in future look to review the adopted CCS guidance at which stage I will ask that consolidation is reviewed and comments from landfill sector taken into consideration.

Having received further information of the monitoring results, considered the root cause, and its environmental impact, I have concluded that the root cause of the failure was in fact a management system deviation.

Copied below is the Pwllfawtkin ground water management system, contingency action plan for the breach of emission trigger levels.

WRG Pwllfawtkin Groundwater Management System

Table 1.3: Contingency Action Plan Following the Breach of a Trigger Level

Appropriate Contingency Actions	Timescale	Responsible Personnel
Advise WRG Site Business Manager	Within 24 hrs of monitoring data obtained.	Site Technical Manager
Advise WRG Regional Technical Manager	Within 24 hrs of monitoring data obtained.	Site Technical Manager
Advise Environment Agency	GW level data within 24 hrs of monitoring data obtained via Schedule 6. GW analytical data within 5 working days of receipt of electronic copy of data from laboratory via Schedule 6.	Site Technical Manager
Confirm by retest or repeat analysis	GW analytical data within one month of receipt of data from laboratory. Sampling will also be increased from quarterly to monthly until two successive results are below trigger level, only for the bh and parameter that breached.	Site Technical Manager
Report results of retest to Site Business Manager, Regional Technical Manager and Environment Agency via updated Schedule 6.	Within 5 days of repeat or retest analysis being received.	Site Technical Manager
If breach persists investigate cause and /or review site management and operations, and implement actions to prevent future failure of a trigger level	Within one month of repeat breach reported to EA	Site Technical Manager and Site Business Manager
If investigation shows the landfill is the likely cause and breaches continue despite actions above review existing hydrogeological risk assessment.	Within six months of first breach reported to EA	Site Technical Manager and Regional Technical Manager
If risks are unacceptable set in place procedures for implementing corrective measures in consultation with or required by the EA.	To be agreed with EA	Site Technical Manager and Regional Technical Manager

And below is table 5 Ground water quality compliance and assessment limits found in the HRA forming part of the original permit application.

**Table 5 - Groundwater quality compliance and assessment limits
for the landfill extension at Pwllfawatkin**

Criterion Objective To detect an unacceptable deterioration in groundwater quality	
Measurement	Ammoniacal nitrogen (Amm-N) as mg/l. Chloride (Cl) as mg/l. Cadmium (Cd) as mg/l. The selected determinands are included in the existing monitoring scheme.
Frequency	See Appendix C of the Conceptual Model Report.
Monitoring points	At boreholes WBH16A, WBH16B, WB5A, WB5B and WB17A in the drift deposits down gradient of the landfill. At boreholes WBH14A, WB23, WBH15A and WBH15B in the drift deposits up gradient and lateral to the landfill.
Compliance limit for down gradient monitoring boreholes¹	Amm-N concentration shall not exceed 100mg/l. Cl concentration shall not exceed 250mg/l. Cd concentration shall not exceed 1×10^{-4} mg/l or natural background concentrations.
Assessment limit for down gradient monitoring boreholes²	Amm-N concentration shall not exceed 10mg/l. Cl concentration shall not show a sustained upward trend in concentrations. Cd shall not exceed the detection limit. The detection limit shall be 1×10^{-4} mg/l or less.
Assessment test	Amm-N - concentration exceeds the assessment limit on 3 consecutive occasions. Cl - an increase of 25% or more on average on 4 consecutive occasions. Cd - concentration exceeds the assessment limit on 3 consecutive occasions.
Contingency action	
Advise the Environment Agency.	1 month
Increase the survey frequency.	1 month
Undertake investigation work to identify the source of the contaminants.	6 months
Report to the Environment Agency on the re-appraisal of risks and options for corrective measures.	12 months
If the risks are acceptable re-evaluate the assessment criteria.	18 months
If the risks are unacceptable implement agreed corrective measures.	18 months

The HRA documents forms part of the sites permitted operating techniques as per condition 2.3.1.

Between the 18/1/17 and 25/1/17 I was provided with further information including laboratory results, email trails and explanations.

This information confirmed that the samples were taken on the 21/9/16. These were received by FCC on the 3/10/16 and reviewed on the 10/10/16.

FCC confirmed that re-test of the results was requested on the 10/10/16 and chased on the 1/11/16 at which point the lab confirmed the re-test request was "lost" in their system and the samples would now be deviant.

On the 11/11/16 NRW were informed of the emission breach via a schedule 6 notification once the results had been validated, that the re-test was not possible, and that re-sampling was programmed in.

The schedule 6 email received 11/11/16 stated that a re-test confirmed the results were *The re-tests did confirm that the original results were incorrect but still did show two parameters that were slightly above the triggers.*

It is now understood that no re-test was undertaken and that this statement was an administrative error due to several sites having emission data submissions simultaneously and information being referenced against the wrong location. In addition this information was not clarified in the updated Schedule 6 notification received on 10/1/17 which would have facilitated the initial emissions monitoring compliance assessment and root cause assessment.

Following conversations with Russell Bromage, Pwllfawatkin Environment manager, it is now understood that there was a catalogue of human errors that resulted in a delay in the re-sampling and that the logistical timeframe of ordering and delivery of bottles and arranging for samplers to get to site to re-sample would be nearing the time of pre-planned sampling (December) The decision was therefore taken to await this pre-scheduled sampling.

Management systems are incorporated into the environmental permit, should any arrangements be desired or undertaken to deviate from accepted procedures this requires written dialogue with NRW prior to implementation (see condition 2.3.1)

Having reviewed the timeframe of events the following is summarised.

21/9/16 – samples taken

3/10/16 results obtained

10/10/16 results assessed. Re-test requested

1/11/16 re-test chased. Laboratory said to have “lost” request re-test not now possible

11/11/16 NRW informed of breach via schedule 6 notification (stating re-test confirmed lab error but 2 parameters breached)

~11/11/16 – FCC decision to wait till December to undertake re-sample.

Dec 16- re-sample.

10/1/17 NRW informed parameters in compliance via schedule 6 part B notification.

Condition 4.3.1 of the permit required notification of emission breaches, schedule 6 states notification will be made within 24 hours. Whilst the original breach was identified on 10th October 2016, FCC confirmed that notification is undertaken once results are validated. Which was received on the 1/11/16. NRW informed on the 11/11/16 by schedule 6 notification.

It is understood that FCC's internal auditing takes account of the number of notifications a site makes and whilst it is understood FCC wished to undertake further investigation, this should not be to the contrary of permit conditions. Receipt of a part A notification would not automatically result in CCS scoring, on the understanding that further information is required to complete an assessment. The notification brings an issue to the attention of NRW, and allows discussions to be held in a timely manner. Scoring against a part A notification would be considered if the reporting timeframe had not been complied with.

It is recognised that the amount of monitoring required at landfills is extensive, and the logistic of reviewing and arranging re-test and re-sampling can be extensive. It is recommended that sufficient resource is provided to undertake these tasks in a manner that meets the management systems requirements to ensure permit compliance.

Pwllfawtkin is recognised as being a good performing site. This has been taken into consideration when determining site compliance.

I have removed the 2 x CCS3 scores for the GW emission breaches following this re-assessment due to the follow up investigation and evidence demonstrating that the emissions were found to be compliant.

The failure to follow the management system (HRA contingency plan Table 5 forming part of the original permit application) is a permit non-compliance and a 1 X CCS3 has been scored under condition 2.3.1, Schedule 1 table S1.2

Actions FCC

Ensure management systems are followed, and any deviations discussed with NRW prior to implementation.

Consider resource support and logistical arrangements to ensure management systems are met.

Ensure reporting undertaken within permit timeframe.

END

~~Condition 3.6.1 of the permit states, the operator shall, unless otherwise agreed in writing by the~~

Agency (NRW), undertake the monitoring specified in the following tables in schedule 4 of this permit, 3.6.1(c) groundwater specified in table S4.5, S4.6 and S4.7 Condition 3.1.2 states that the limits in the relevant tables within schedule 4 shall not be exceeded.

Condition 4.3.1 requires the operator to notify the regulator of (a) any malfunction, breakdown, or failure of equipment or techniques, accidents or fugitive emissions which has caused, is causing or may cause significant pollution. (b) the breach of a limit specified in that schedule.

§ 3.2 states the information under 4.3.1 shall be confirmed by sending the information listed in schedule 6 of the permit within the time period specified in that schedule.

A schedule 6 part A notification reference PW045'65'10 was received on the 11th November 2016 via email as per condition 4.3.1 (b) concerning groundwater emission limit breaches at borehole BH11B and BH19 for sampling in September.

The email stated "*The reason the results and the S5 were a bit slow getting to you was that the original results were so high across the whole range of ammoniacal nitrogen and phenol with no other elevated parameters that it was clearly a lab error. I asked for a re-sample and this got lost in the system with the results only getting back to me today. The re-tests did confirm that the original results were incorrect but still did show two parameters that were slightly above the triggers. I still believe these are not a true reflection of the quality but sampling in December will confirm this.*"

No details of the original sample results were provided. The S6 does not detail the date of the original sampling which is said to have included ammonical and phenol breaches across the whole range nor the levels of these results.

The results submitted via email on 11th November in the Schedule 6 showed:

BH 19 — 1.5mg/l ammoniacal nitrogen Trigger Level 1mg/l

BH11B — 0.0008mg/l phenol Trigger Level 0.0005mg/l

Sampled on 21/09/2016.

Against Permitted limits of 1 mg/l Ammonical nitrogen and 0.005mg/l phenol.

A part B Schedule 6 notification was received on 10 January 2017 confirming the resampling had taken place in December 2016 (no specific date provided) and showed the parameters at both boreholes were now within compliance limits.

*Sampling in December returned Ammoniacal nitrogen within BH19 at 0.2mg/l and phenol within BH17B**

~~<0.0005mg/l.~~

~~-~~

~~*It is believed BH17 is a typographical error and should read BH11.~~

~~-~~

~~It is unclear how long the emission limits have been over the compliance (trigger) levels due to the lack of original sampling information and delay in re-sampling of 3 months. Whilst the email received on 11th November stated it is felt the results were not a true reflection of the ground water quality, with the delay in re-sampling and historical trends of breaches at BH11, it was subject to remediation works during 2015/16 with the borehole being purged, the information provided does not provide sufficient evidence to confirm if the results are not a true reflection of the quality at the time of sampling.~~

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~~A breach of the permit condition 3.6.1(c) table S4.4 has been recorded. A non-compliance of 2X CCS3 (2 parameters at 2 separate boreholes) has been recorded on this CAR form.~~

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ACTIONS

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- ~~• Ensure re-sampling is undertaken in a timely manner.~~
- ~~• Monitor and assess emission trends at these Borehole locations.~~

EPR Compliance Assessment Report

**Report ID:
CAR_NRW0026904**

This form will report compliance with your permit as determined by an NRW officer

Site	Pwllfawatkin Landfill Site EPR/BU8819IV	Permit Ref	BU8819IV
Operator/Permit holder	FCC Waste Services (UK) Limited	Date	11/11/2016

Section 3 – Enforcement Response

You must take immediate action to rectify any non-compliance and prevent repetition.

Non-compliance with your permit conditions constitutes an offence and can result in criminal prosecutions and/or suspension or revocation of a permit. Please read the detailed assessment in Section 2 and the steps you need to take in Section 4 below.

In respect of the above non-compliance you have been issued with a warning. At present we do not intend to take further enforcement action. This does not preclude us from taking additional enforcement action if further relevant information comes to light or offences continue.

Section 4 – Action(s)

This section summarises the actions identified during the assessment along with the timescales for when they will need to be completed.

Criteria Ref.	CCS Category	Action required/advised	Due Date
See Section 1 above			
C2	C3	Ensure management systems are followed, and any deviations discussed with NRW prior to implementation. Consider resource support and logistical arrangements to ensure management systems are met.	28/02/2017

Section 5 – Compliance notes for the Operator

To ensure you correct actual or potential non-compliance we may

- Advise on corrective actions verbally or in writing
- Require you to take specific actions verbally or in writing
- Issue a notice
- Require you to review your procedures or management system
- Change some of the conditions of your permit
- Decide to undertake a full review of your permit

Any breach of a permit condition is an offence and we may take legal action against you

- We will normally provide advice and guidance to assist you to come back into compliance either after an offence is committed or where we consider that an offence is likely to be committed. This is without prejudice to any other enforcement response that we consider may be required.
- Enforcement action can include the issue of a formal caution, prosecution, the service of a notice and/or suspension or revocation of the permit.

See our Enforcement and Civil Sanctions guidance for further information

This report does not relieve the site operator of the responsibility to

- Ensure you comply with the conditions of the permit at all times and prevent pollution of the environment
- Ensure you comply with other legislative provisions which may apply

Non-compliance scores and categories

CCS category	Description	Score
C1	A non-compliance that could have a major environmental effect	60
C2	A non-compliance which could have a significant environmental effect	31
C3	A non-compliance which could have a minor environmental effect	4
C4	A non-compliance which has no potential environmental effect	0.1

Operational Risk Appraisal (Opra) - Compliance assessment findings may affect your Opra score and/or your charges. This score influences the resource we use to assess permit compliance.

Section 6 – General information

Data protection notice

The information on this form will be processed by the Natural Resources Wales (NRW) to fulfil its regulatory and monitoring functions and to maintain the relevant public register(s). The NRW may also use and/or disclose it in connection with:

- Offering/providing you with its literature/services relating to environmental matters
- Consulting with the public, public bodies and other organisations (eg. 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 its service
- Freedom of Information Act/Environmental Regulations request

The NRW may pass it on to its agents/representatives to do these things on its behalf. You should ensure that any persons named on this form are informed of the contents of this data protection notice.

Disclosure of information

The NRW will provide a copy of this report to the public register(s). However, if you consider that any information contained in this report should not be released to the public register(s) on the grounds of commercial confidentiality, you must write to your local area office within fifteen working days of receipt of this form indicating which information it concerns and why it should not be released, giving your reasons in full.

Customer charter

What can I do if I disagree with this compliance assessment report?

If you are unable to resolve the issue with your site officer, you should firstly discuss the matter with officer's line managers using the informal appeals procedure. If you wish to raise your dispute further through our official Complaints and Commendations procedure, phone our general enquiry number 0300 065 3000 (Mon to Fri 08.00 – 18.00) and ask for the Customer Contact team or send an email to enquiries@naturalresourceswales.gov.uk. If you are still dissatisfied you can make a complaint to the Public Services Ombudsman for Wales. For advice on how to complain to the Ombudsman phone their helpline on 0845 607 0987.

Welsh Language

If you would like this form in Welsh please contact your Regulatory Officer.