

Compliance Assessment Report CAR_NRW0038941

Permit being assessed: BU8819IV.

For: Pwllfawatkin Landfill Site EPR/BU8819IV, held by FCC Waste Services (UK) Limited

At: Pwllfawatkin Landfill Site , Pontardawe, SWANSEA, West Glamorgan, SA8 4RX.

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

On 16/11/2021.

Parts of permit assessed: 1.1.1, 3.4

NRW Lead Officer: Ffion Thomas.

Report sent to: Richard Thomas, Site Manager on 17/11/2021.

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)	
C2 - General Management - Management system and operating procedures	Assessed (A)	
F1 - Amenity - Odour	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
0	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?

No action required.

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

Pwllfawatkin Odour management Plan Review CAR form

Ffion Thomas undertook a report review of the "FCC Environment Pwllfawatkin Landfill Site

odour management Plan August 2021” and the associated “Integrated Management System Odour Document number EMS 3-13-10-LNF.”

Background

An Odour Management Plan is linked to an Operators environmental permit and is a way of showing the regulator that appropriate measures are in place to prevent odour pollution or minimise it when prevention is not practicable. It should demonstrate commitment to avoiding odour impact on local sensitive receptors and its content should clearly detail/refer to the measures and procedures within your management system. The OMP will detail methods to assess, reduce and prevent potentially odorous emissions from Pwllfawatkin landfill during normal operation and during potential abnormal events.

The environmental permit issued for the site includes a condition to regulate odour, as follows:

3.4 Odour

3.4.1 Emissions from the activities shall be free from odour at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures to prevent or where that is not practicable to minimise the odour.

FCC Pwllfawatkin must therefore employ the appropriate measures necessary to prevent odour pollution or minimise it where prevention is not practicable. The measures that are appropriate depend on the activities undertaken, the site-specific circumstances of the facility and the costs and benefits associated with different methods for odour control.

We expect any standards of industry good practice to be met along with any recommendations in our guidance. If there is an odour problem at your site, and you have already implemented some measures, there may be a case to justify further measures or restriction of the activity, depending on the severity of the problem and the cost. Even if you are following normal standards and guidance but the impact is unreasonable, then you will have put in place further measures and we will judge with you what is reasonable and to what extent further measures are possible, required or justified.

Pwllfawatkin OMP

The Pwllfawatkin odour management plan follows the principles set out in EA guidance H4 and Natural Resources Wales Guidance: How to Comply with your Environmental Permit.

Horizontal Guidance H4: Odour Management:
[How to comply \(publishing.service.gov.uk\)](https://publishing.service.gov.uk)

Natural Resources Wales Guidance: How to Comply with your Environmental Permit:
[How to comply with your environmental permit \(cyfoethnaturiol.cymru\)](https://cyfoethnaturiol.cymru)

However, there are areas that would benefit from improvements. The following are example points that became apparent during this part review. It remains FCC's

responsibility to ensure that all relevant guidance/regulatory notes are adhered within management plans to ensure that the facility employ appropriate methods, including monitoring and contingencies, to control and minimise odour pollution. Any significant risks must be identified and demonstrated that the risk of pollution or harm will be acceptable by taking the appropriate measures to manage these risks.

General updates

FCC's odour management plan August 2021 includes footnote – the review date of this note needs to be amended to reflect the same date across all pages of the document.

There is a typographical error to figure 1 page 5. The diagram date reads 2021-7-23, the Figure 1 title below reads 2018.

The associated EMS document number EMS 3-13-10 LNF is branded WGR. Please consider if updating branding is required.

The review date of EMS 3-13-10LNF is stated as 18 Dec 08 within the document foot note. Please submit the updated current review document.

Drawing no 479A333 needs updating to reflect the new location of the leachate holding tanks. The drawing should be elaborated to include other locations of potentially odour sources e.g. gas utilisation plant.

References to Cell 5 should be considered and if the site no longer plan on developing this cell reference removed. (if plans alter this cell could be reincluded n future updates)

Objectives of OMP

Appendix 4 of H4 – Odour Management states:

OMPs should be designed to:

- employ appropriate methods, including monitoring and contingencies, to control and minimise odour pollution;*
- prevent unacceptable odour pollution at all times;*
- reduce the risk of odour releasing incidents or accidents by anticipating them and planning accordingly.*

Pwllfawatkin landfill has the potential for odour pollution and as such the OMP needs to be detailed and robust. The objectives/purpose and scope of the OMP have been defined and includes all elements considered essential within H4, however the below comments are made as additional recommendations.

Primary odour control measures

The following headings and extracts in italics can be found in H4 Odour Management.

Dispersion

Meteorological monitoring can identify when dispersion conditions are poor or help to interpret exposure or impact monitoring data. Particular attention should be paid to the location of instruments. Knowing when dispersion conditions are poor can also inform decisions to implement additional short-term odour control contingency measures. The OMP should demonstrate that poor dispersion conditions can be identified and dealt with.

FFC OMP states:

7.0 Weather Conditions

Weather data is continuously recorded by the Site Weather Station. Weather data is also recorded

by the Site Manager and on the Daily Odour Inspection Form. All records are kept on file in the Site office

9.0 Abnormal Meteorological Conditions

Certain meteorological conditions can promote the generation of odour and inhibit its effective dispersion. Factors affecting this include high temperatures and stable conditions making the air somewhat stagnant and hence preventing dispersion and mixing. Certain contingency measures are in place to deal with such events as and when they occur. Responsive and preventative actions are as follows:

- *Re-balancing the gas field as required;*
- *Continuous download of weather data using on-site meteorological station;*
- *Monitoring of wind direction;*
- *More frequent application of daily cover as and when required;*
- *Minimising deposition area should the need arise;*
- *Increasing depth of daily cover should the need arise; and*
- *Using odour suppression units to aid in odour neutralisation.*

The relevant EMS document states:

Monitoring of Meteorological Conditions

Meteorological forecasts and weather conditions (including atmospheric pressure, and wind speed and direction) will be monitored routinely to enable potential odour problems to be predicted and necessary remedial action, such as modifications to the method of working or the use of deodorising sprays, to be implemented.

Recommendation

Monitoring of real-time and forecasted meteorological data can be an effective tool in the management of odorous emissions from industrial facilities. Certain meteorological conditions, such as temperature inversions, can result in poor dispersion of odorous point source emissions and can potentially lead to an increased risk of odour annoyance at sensitive receptors.

We requested details of the capabilities of the onsite data logger and how the technology could assist FCC to manage potentially odorous activities.

Thank you for confirming the ability to review data is available and therefore EMS and OMP compliance. Cross referencing historic meteorological data against complaint records could help identify when any abnormal meteorological conditions promote odour.

If not yet being done, we recommend FCC undertake interpretation of historic meteorological data to inform decisions on predictability and implement contingency measures.

Exposure / impact

While complaints are never a substitute for comprehensive process and emissions monitoring, they are a valuable indicator of offsite odour impact. Procedures should be in place to receive comments from the community and act upon them. The receipt of a complaint may be an appropriate trigger for an internal investigation into the efficacy of current control measures.

Undertaking additional odour observations in the community may be useful, but this must be well planned and its limitations need to be recognised. People who work on odorous sites may be uniquely unqualified to undertake this assessment, either because of adaptation or personal assessments of offensiveness. Also, odours can be highly local and transient. They may have passed by the time an investigator arrives so the mere failure to confirm the observation would not alone justify a decision to take no further action.

For sites with ongoing odour problems, it may be beneficial to recruit individuals in the community to undertake periodic offsite odour surveys or to keep odour diaries. This can be done either on a voluntary or paid basis.

It is not possible to use instruments to measure odour in ambient air directly. However, very occasionally it may be possible to undertake surrogate measurements which are indicative of odours. This may be through direct measurement of chemicals which are themselves odorous, such as hydrogen sulphide. In other cases, odourless chemicals such as methane may be associated with odorous emissions of landfill gas.

In addendum to the above the following is an extract from How to comply with your environmental permit:

You must have a line of communication between you, your neighbours and any complainants who may be affected by your activities. Providing feedback once the problem has been resolved will help complainants feel they can report problems directly to you as the operator and get them resolved rather than reporting it to us. Following the theme of continual improvement you must reflect the outcome of any investigation in your management system and improved operations.

Section 11 of the OMP states:

11.1 Liaison

FCC will ensure that established clearly defined and accessible communication channels are set up for residents to report odour issues. These include:

- Contact details (telephone number and address), displayed on the main Site notice board (positioned at entrance to Site); and*
- Website giving relevant contact details: e-mail, telephone, postal address etc.*

Local residents and the NRW will be informed of any imminent events (resulting from planned or unplanned activities) that pose a risk of off-site odour impact at off-site locations, including an explanation of why the occurrence is unavoidable. A commitment will be made to residents that any increase in odour will be of a temporary nature, their inconvenience will be minimised and an apology given in advance for any discomfort that may be caused.

Where routine complaints are received, local residents may be asked to complete odour diaries (Appendix D), the results of which will be reviewed to identify trends such as key odour exposure times and locations. Any trends identified will be used to focus the daily Site inspections and weekly sniffing exercises, and the Site operations/meteorological conditions at these times reviewed. FCC is committed to ensuring any issues identified by the community are promptly acted upon to ensure the ongoing co-operation between the two parties.

Recommendation

Methods of encouraging the community to directly report instances of odour are clearly stated within FCC's OMP along with the facilities community engagement plan.

Whilst it is understood previous community liaison meetings required under planning

consent are no longer held, FCC are encouraged to proactively engage with their local community.

Relaying information regarding the process, what they are smelling, dispersion factors, efforts undertaken to control odour and what is being done in response to complaints could reduce the number of complaints received.

The current levels of actual community engagement, and therefore compliance with the OMP, will be assessed during future routine site regulation.

Through site discussion we are also aware of FCC's commitment to address the exposure issues that can be experienced related to "*adaptation or personal assessments of offensiveness.*" *Pwllfawatkin employ third part odour auditors to undertake off site odour assessment on their behalf.*

We recommend the non-financial details of this service agreement, third party odour assessment, should be included within the OMP to illustrate operator's commitment to continual improvement.

Contingency control measures

Where trigger values have been exceeded or observations indicate odour pollution an operator will be required to take appropriate contingency measures. These measures may be aimed at:

- *investigating the pollution incident and its cause(s);*
- *bringing the process back under control;*
- *temporary or permanent establishment or reinstatement of emissions controls; and/or*
- *minimising exposure or annoyance effects.*

There are several key factors in preparing for effective contingency management

- *anticipate what might go wrong;*
- *consider how problems might be revealed in monitoring;*
- *decide how incidents should be managed; and Annexes Environment Agency – How to comply with your permit – H4 Odour Management 38*
- *make appropriate preparations in advance.*

In many cases it is reasonable to expect that the site will experience times when there are poor dispersion conditions and/or where the community is likely to be more sensitive. Under these conditions, contingency measures may be used to enhance the performance of existing controls and additional short-term measures can be used to further control odour pollution. Contingencies will need to build upon an understanding of your process, emissions and dispersion, as already discussed. Where appropriate, we will also expect to see an escalation of contingency measures where more moderate methods are not successful. This may involve the use of a backstop contingency measure which results in the temporarily cessation of relevant activities, such as waste acceptance, until the process and emissions can be brought back under control. There should also be a method of determining when contingency measures are no longer needed. Repeated or long-term problems will need to be dealt with through more permanent changes to process controls or abatement measures.

Section 8.3 of FCC's OMP states:

Situations which May Give Rise to Odours at Site Boundary

The NRW H4 Guidance document states contingency plans have been necessary to react to situations where 'monitoring indicates that a potential odour source is not completely under control, meteorological conditions are unfavourable or that adverse impact has occurred'.

This encompasses events which would result in the loss of control of odorous substances and have the potential to cause a short-term impact on the local community, but are not considered an emergency situation. These situations have been defined below and related to operations at Pwllfawatkin Landfill Site.

Recommendation

The "situations...defined below" within section 8.3 refers to those situations documented under section 9 of the OMP.

Whilst not in of itself an abnormal event we recommend that engineering works such as capping that could give rise to odour during construction be included, build on your understanding of the process and will include additional short-term measures that could be used to control odour, including any meteorological considerations e.g. time of year works are undertaken

Section 10 details incident plans. Given the recent events of the pandemic it is recommended you also consider how odorous emissions will be handled during emergencies or accidents e.g. staff illness.

It should also include an escalation of contingency measures should the problem worsen. As mentioned above the OMP objective is to reduce the risk of odour releasing incidents or accidents by anticipating them and planning accordingly.

Conclusion

Following review of the OMP it does not appear to meet the full requirements of H4 – Odour Management / How to Comply with your Environmental Permit.

Activities at Pwllfawatkin have the potential to give rise to odour pollution beyond the permitted boundary and a robust OMP is essential for environmental permit compliance.

The proposed OMP recommendations:

- Section 9 FCC undertake interpretation of historic meteorological data to inform decisions on predictability and implement contingency measures.
- Section 11. FCC are encouraged to proactively engage with their local community.
- *Section 11 - Third party odour assessment, should be included within the OMP to illustrate operator's commitment to continual improvement*
- Section 9 - Engineering works such as capping that could give rise to odour during construction be included, build on your understanding of the process and will include additional short-term measures that could be used to control odour, including any meteorological considerations.
- Section 10 - How odorous emissions will be handled during emergencies or accidents e.g. staff illness.

On submission of your updated OMP we can evaluate the scope and suitability of key measures, but this should not be taken as confirmation that the details of equipment specification design, operation and maintenance are suitable and sufficient. That remains your responsibility.

An agreed timeframe for review can be confirmed but 24th December is suggested, with subsequent submissions to be assessed for approval.

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.