

## Compliance Assessment Report CAR\_NRW0039649

**Permit being assessed:** AB3096CP.

For: Lamby Way Open Windrow Composting Facility, held by Welsh Water Organic Energy (Cardiff) Limited

At: Lamby Way, Rumney, Cardiff, CF3 4EQ.

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

On 29/09/2021 - 31/03/2022.

Parts of permit assessed: Fire Prevention and Mitigation Plan

**NRW Lead Officer:** Geraint Harris.

**Report sent to:** Adrian Thomas, Contract and Relationship Manager on 31/03/2022.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
D2 - Incident Management - Accidents, emergency and incident planning	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
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?

Criteria	Action needed	Complete by
D2	Please review and update your FPMP, taking into account the comments below by 30th April.	30/04/2022

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

Welsh Water Organic Energy (Cardiff) Limited  
AB3096CP

### Fire Prevention and Mitigation Plan

We have assessed your Fire Prevention & Mitigation Plan (version 2) against version 2 of NRW's guidance which was published August 2017. The FPMP guidance sets out what must be in your FPMP, and what should be in your FPMP, this is set out below. For the should, please do these, give alternatives or explain why you do not think they apply.

Please note that "stack" can also mean "pile".

**ACTION: Please review and update your FPMP, taking into account the comments below by 30<sup>th</sup> April.**

#### **Separation distances:**

The current version of your plan states the following:

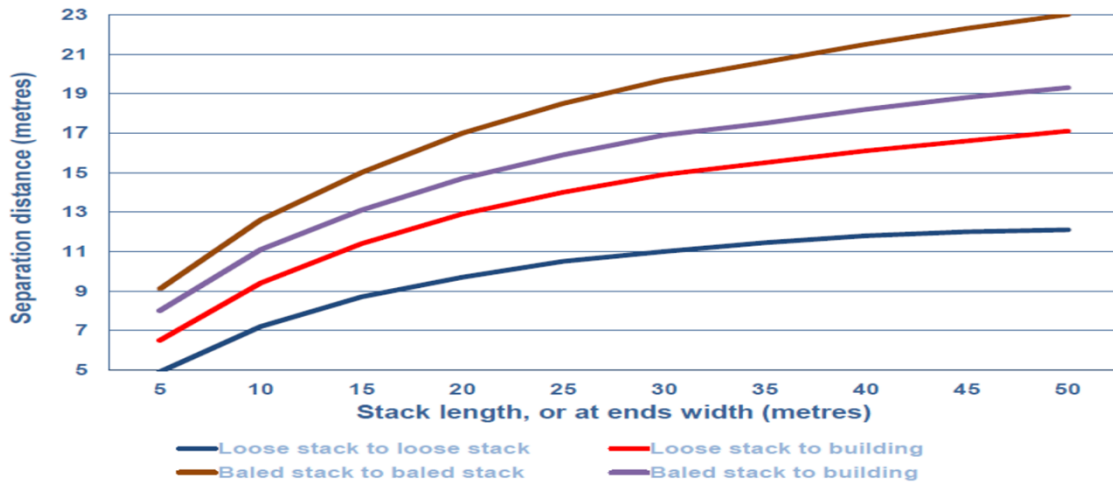
"Suitable separation of stockpiles is calculated using  $4\text{m height} / 1.66 = 2.4\text{m separation}$ ".

Please can you explain where 1.66 has come from?

The Fire Prevention & Mitigation Plan Guidance for Waste Management provides the method for calculating separation distances for loose waste. For composting activities, the maximum pile sizes do not apply when the waste is actively managed and monitored during the composting process. Waste stored before and after active composting must follow the maximum pile sizes in Table 2. This therefore includes oversize material and the plus 40mm Rejects. The guidance on page 14 states that "In order to determine your separation distance, mark your stack length on the horizontal axis of the graph and draw a line up to the relevant graph line depending on the storage method used (stack to stack, to buildings etc.). Next draw a horizontal line across to the vertical axis and read-off separation distance." I have copied the table below.

Therefore, using these methods and the dimensions you have stated in your plan (10m wide, 4m high, 18m long) your stack needs to be approximately 9 meters away from an adjacent loose stack and 7 metres away from an opposite loose stack. Using the site layout diagram, you have provided in Appendix 4, the areas in red should be just over 9 metres wide. If this is not possible then the stacks need to be reduced in size until sufficient separation distances can be met. If due to size constraints of your site you are restricted to separation distances, the graphs can be used in reverse. Therefore, this distance can be marked on the vertical axis and maximum stack length read-off on the horizontal axis. This will give an indication of the maximum stack sizes.

Figure 1: stack lengths and separation distances general wastes (typical max burn 950°C)



**Storage times:**

page 12:

Combustible Waste Type	Maximum Storage Time on Site
Non-shredded or similarly treated wastes (that is wastes whose particle size has not been reduced)	6 Months
Baled and compacted wastes (if kept for longer periods you should consider breaking the bales & re-bale to help reduce risk) <b>Please note that if you intend to do this, you must include this information in your FPMP.</b>	6 Months
Shredded and similarly treated wastes (that is wastes whose particle size has been reduced)	3 Months
Combustible fines/dusts & very small particle size wastes	1 Month

The guidance states (page 12) “Materials that are at risk of self-combustion if stored for more than 3 months are: Green material, compost, wood and wood products”

Therefore, the piles on site, excluding the active composting windrows should not be on site for more than 3 months. If you are storing materials at risk of self-combustion for longer than 3 months you must demonstrate what additional measures you will take, including monitoring the piles to reduce this risk. You must include this information in your FPMP. To help prevent self-combustion taking place you should consider adopting the following general fire prevention principles on page 12 of the guidance. You must explain what indicators you will use in relation to temperature and moisture content and the escalation of actions in relation to these indicators. You must also demonstrate good stock rotation for all stored materials and show how this is monitored and implemented daily.

As it stands your plan states that “1.5 metre wireless temperature probes will monitor oversize stockpiles 24/7. with a probe in each oversize stockpile”. The guidance, (page 31) states “The equipment you use to detect temperature and moisture content should be capable of operating at any depth throughout the pile. Therefore, if you are proposing to have a stack 4m deep, your thermal monitoring equipment should be capable of operating through the depth of the proposed stack. This is also emphasised on page 12 of the guidance where it states: “monitor and control sub-surface temperature and moisture content with a suitable thermal device (thermal probe/thermal camera) and ensure that this is capable of reaching all parts of a stack.”

Since this probe won't reach all areas of the 10metre wide stack you will need to either reduce the stacks dimensions to suite the probes length or employ additional measures as stated on page 12 of the guidance. Please amend your plan to address this.

#### **Seasonal variation:**

If the materials on your site are subject to seasonal variation in demand and/or supply, you should demonstrate how you intend to manage these variations. You should be able to demonstrate how you will follow the principle of “first in, first out” so that wastes are stored for no longer periods than indicated in Table 1 page 12. Please update your plan to include seasonal variation.

Is there always water in the lagoon or is it seasonal? Alternative water supplies also need to be reliable: Relying on a lagoon which is only half full or empty for part of the year may result in water shortage issues.

#### **During and after an incident:**

Does the quarantine area have a separation distance of at least 6 metres around the quarantined waste? (this can be decreased if concrete bunkers/walls will be used).

Do you have a plan to divert incoming wastes to alternative sites during a fire? Please state in your plan.

Since fire water runoff will enter the sewer system you will need to provide evidence of a written agreement from the sewerage undertaker as part of this FPMP.

Also please state in your plan the contact details of sensitive receptors within 1km of your site. To protect sensitive receptors, does the plan include measures that will be used to raise the alarm and to inform local residents, e.g. local school, nursing home etc. sensitive receptors include both Human receptors and environmental receptors. The site currently sits within the Gwent Levels site of special scientific interest (SSSI). This Will need mentioning in the plan along with methods of protecting the area.

Do you have any contractors that might be used to assist with additional plant for firefighting techniques, removal of waste material, containment, and removal of excess water run-off? If so please update your plan to include them.

Please state in your plan how you will clear and decontaminate the site after a fire.

Please state in your plan the steps you must take before the site can become operational again.

Please can you state where the Standpipe, hoses and water mains are located and also add them to the site diagram.

The plan states “the site comprises of a hard standing with sealed drainage. A holding tank able to accommodate approximately 1000 litres is in place before the water is discharged to the sewer. A hose could be connected to this tank and the run-off water reused to reduce the water requirements and risk of run off”. Such a system may require a filter before the fire department can you it, do you have such equipment onsite?

Please can you add the following details to the plan:

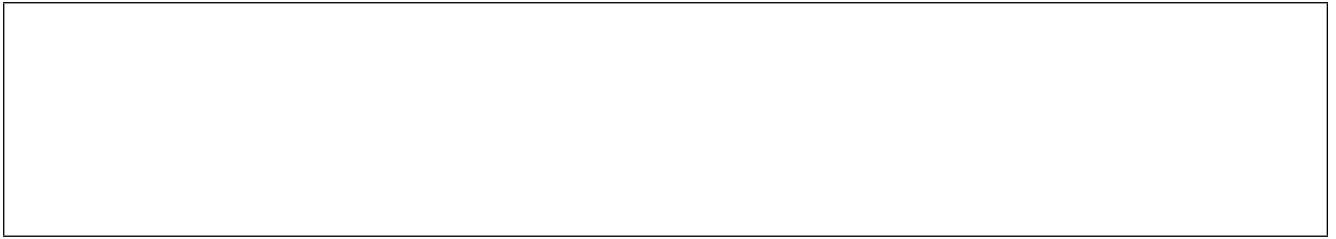
- Date and version of assessment:
- Assessment carried out by:
- Date FPMP submitted:
- FPMP document reference

Please add the NRW incidents communication centre phone number to the plan so that in the event of a fire NRW can be informed. 03000 65 3000

In addressing the points raised above it should not be relied upon to mean that the measures are considered to represent appropriate measures covering every eventuality through operation of the permit. Your FPMP should be kept under constant review to ensure measures remain effective. You must also ensure that the plan is fully implemented on site at all times. The plan should be revised where necessary in accordance with Section 24 - Reviewing and Monitoring your Fire Prevention & Mitigation Plan of the guidance.

In a future compliance assessment visit, we will undertake an assessment of your compliance with your FPMP.

End.



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](mailto: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](mailto: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.