

Compliance Assessment Report

Report ID:
CAR_NRW0036527

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

Site	Cowbridge Compost Ltd	Permit Ref	BP3095SR		
Operator/Permit holder	Cowbridge Compost Ltd				
Regime	Waste Operations				
Date of assessment	20/02/2020	Time in	N/A	Out	N/A
Assessment type	Check Monitoring/Sampling				
Parts of the permit assessed	Monitoring				
Lead officer's name	Tye, Laoni				
Accompanied by	Neil Davies				
Recipient's name/position	John Homfray and Gary Googe/ Director and TCM	Date issued	08/04/2020		

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
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	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	0	Total compliance score (see section 5 for scoring scheme)	0
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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

A review a periodic ambient bioaerosol monitoring report¹, submitted by WRM Limited on behalf of Cowbridge Compost Limited, for the Llwynhelig Farm open windrow composting (OWC) operation, required as part of their permitted A1 activity operating conditions. Monitoring conducted on the 23rd October 2019. The results were in line with the limits specified within the permit and this is therefore considered compliant. Some comments on the report as follows:

1.1 The site is situated in a wider area consisting of commercial properties with open farmland to the east and a wooded area on the steep slopes of a hill coinciding with a section of the south-west boundary. The land to the west of the site is generally more topographically complex than the area to the east. The OWC operation is located at the north west end of the site with green waste storage, shredding and maturation areas to the south west.

1.2 The nearest receptor to the OWC consists of a number of commercial buildings located to the south-south east on the same industrial estate at a distance of approximately 265m from the centre of the composting operation, 160m from the boundary of the nearest composting activity.

1.3 Ambient bioaerosol monitoring was carried out between 13:50 and 14:50 on the 23rd October 2019. Sampling was carried out in triplicate at each location using Institute of Occupational Medicine (IOM) personal samplers with three sample points upwind of the OWC area and a single downwind sample point to the north east of the maturation area in accordance with the requirements of TGN M9.

1.4 The submitted report states that sampling for ambient bioaerosols associated with emissions from the OWC were carried out in accordance with the Environment Agency's Technical Guidance Note M9₃ (TGN M9).

1.5 Measured bioaerosol concentrations at receptors have been compared against guideline threshold values previously recommended by the Environment agency for mesophilic bacteria and *Aspergillus fumigatus* of 1000 cfu/m³ and 500 cfu/m³ respectively.

2 Results

2.1 Sample locations were determined using online weather data and conformed to the "fan like" arrangement specified in TGN M9.

2.2 Reported mean wind speed during the testing period was 2.2 m.s⁻¹ while mean RH was 82% and temperature was 12°C. Mean wind direction was reported as 293° from north during

sampling. No precipitation was reported for the 24 hours prior to sampling.

2.3 Site activities during sampling were recorded and included deliveries, transport of materials on site and "picking". No activities likely to result in the highest airborne bioaerosol concentrations, i.e. turning, shredding and screening, coincided with the sampling period (see also Section 3.5 of this report).

2.4 The maximum downwind concentration of mesophilic bacteria was higher than the upwind concentration although it did not exceed 1000 cfu/m³.

2.5 The maximum downwind concentration of *Aspergillus fumigatus* was equal to the upwind concentration with both measurements below 500 cfu/m³.

3 Comments

3.1 The submitted report indicated that online weather data was used to determine sample locations on the day of testing. The average reported wind direction during sampling was west-northwest on a heading of 293° from north. No details of the online weather data have been included in the submitted report although prevailing weather conditions included in the SSBRA are based on data measured at Cardiff Airport which is located approximately 11 km to the south-east of the site in an area with significantly different local topography to that of the sampling area. As TGN M9 explicitly acknowledges that site topography will have an impact on local wind vector flow (see for example Box 5.2 in Section 5.2.5 of TGN M9), the use of non-local wind measurements may result in unsuitable sample locations relative to local wind flow. There is no indication in the report that wind direction measurements were made on site on the day of testing.

3.2 TGN M9, Section 5.3.1 requires that wind speed and wind direction measurements are taken at one minute intervals and should be representative of the site. In this instance, we are unable to confirm that wind measurements meet the requirements of TGN M9 Section 5.3.1 or are representative of local conditions.

3.3 Temperature and relative humidity (RH) were recorded using a hand-held device although details of associated measurement intervals are not included in the report and it cannot therefore be determined if these meet the requirements of TGN M9, Section 5.3.1, i.e. ten minute intervals.

3.4 Sampling at all four locations can be considered to have occurred concurrently in accordance with the definition in Section 5.2.6 of TGN M9. Sampling duration and flow rate meet the requirements of TGN M9.

3.5 In order to assess bioaerosol impacts at receptors, composting activities such as material shredding, screening and windrow turning are expected to be undertaken during the sampling period. However, none of these activities were recorded in the submitted report during the sampling period. The operator's SSBRA states that composting activity will be reduced and shredding, screening and turning operations will cease for the duration that wind is blowing towards the sensitive receptors. The operator needs to be able to demonstrate that mitigation measures based on restriction of operational processes have been implemented as required e.g. auditable records of site wind direction and site activity logs etc.

3.6 Exposed filters were recovered immediately after sampling on site and stored in an air tight container prior to processing in a suitable laboratory environment within 24 hours. The submitted report does not indicate whether exposed filters were stored at 5°C ± 3°C during transport and prior to processing in accordance with the requirements of TGN M9.

3.7 The submitted report stated that bioaerosol recovery was carried out in accordance with the IOM personal sampler operating instructions. Filters were washed in 5ml of recovery solution before an aliquot was plated onto suitable media. Both the IOM personal sampler operating instructions and TGN M9 indicate a typical plating volume of 0.1 ml. There is no indication of the aliquot volume in the submitted report although the limit of detection (LOD) value indicated in the

submitted results of $<139 \text{ cfu/m}^3$ indicates that a volume of 0.3 ml has been plated, assuming the LOD is based on ≤ 1 colony per plate. While this represents the maximum allowable volume stated in the IOM personal sampler operating instructions where low counts are expected, the maximum aliquot for inoculation of culture media in TGN M9 is 0.25 ml. This may therefore represent a deviation from the requirements of TGN M9. It is expected that any impact on the final results due to this deviation are likely to be minimal.

3.8 TGN M9 requires that for each filter recovered, each dilution (where applicable) should be plated in triplicate for both mesophilic bacteria and *A. fumigatus* species. For the four sampling locations identified in the submitted report, this would result in a total of seventy two plate counts. The reported results indicate that each recovered filter has only been plated once and the results do not therefore meet the criteria specified in TGN M9.

3.9 Microbiological analysis was carried out by the University of Hertfordshire. There is no indication of the date of processing in the enumeration results included in Appendix 2 of the submitted report.

3.10 Although TGN M9 requires the number of colonies to be recorded, there is no explicit requirement to include these values in the report. However, we would typically require these to be included in the submitted report in order to provide an indication of the associated uncertainty in final plate counts. This does not therefore represent a deviation from TGN M9.

If you have any comments or questions please get in touch.

EPR Compliance Assessment Report

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Site	Cowbridge Compost Ltd	Permit Ref	BP3095SR
Operator/Permit holder	Cowbridge Compost Ltd	Date	20/02/2020

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.

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			

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.