

Compliance Assessment Report CAR_NRW0040523

Permit being assessed: DB3930AB.

For: Rhayader Highways Depot, held by Powys County Council

At: Station Road, Rhayader, Powys, LD6 5AW .

Type of assessment carried out: Site Inspection, Reason: Routine.

On 16/09/2022 between 14:14 and 15:42.

Parts of permit assessed: Amenity

NRW Lead Officer: Liz Park, accompanied by Jeremy Goddard.

Report sent to: Nigel Hicks, TCM/ Manager on 01/02/2023.

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)	
F1 - Amenity - Odour	C3 Minor	3.3.1
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
1	4

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
F1	Review the contents of this CAR, update OMP and EMS with details of further appropriate measures including timescales for implementation if appropriate and submit for review, or make a written representation as to why no further measures will be taken	31/03/2023
D2	Provide a site notice as detailed in How to comply with your environmental permit.	18/11/2022

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.

You are non-compliant with your permit.

At this time, we are issuing you with a warning for the non-compliance recorded above. Warnings may influence future enforcement response for continued or further non-compliance.

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

Note: Following this site inspection, a Teams meeting was held between Powys County Council (PCC) and Natural Resources Wales (NRW) on Wednesday 28 September 2022. PCC therefore were aware that there would be a delay in issuing the CAR, and that consideration was being given as to whether the odour emission constituted a breach of permit condition 3.3.1. Further advice was sought from NRW's Odour Expert. This is an updated version. Please see below for details.

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Jeremy Goddard (Team Leader - Waste and Enforcement, Mid Wales) and Liz Park (Senior Officer - Waste Regulation) arrived at Rhayader Depot to undertake an unannounced site inspection focusing on storage of waste to prevent odour emissions.

At the time of the inspection the weather was dry with a strong breeze.

Upon arrival at the site in the carpark, both Liz and Jeremy noted an odour similar to green waste.

Jeremy and Liz met with Nigel Hicks (TCM and North Area Manager) and James Motherwell (Site Supervisor) and explained the reason for the site inspection. Jeremy, Liz, Nigel and James then walked round the site together.

Main Transfer Building

Nigel informed Jeremy and Liz that there was approximately 45 tonnes of residual waste on site in the main transfer building. And that this was more than normal for a Friday afternoon as the loader for this waste stream had broken down. Waste was being diverted to other sites. There is normally on average, 25 tonnes of residual waste on site which makes up one artic load.



Residual waste within the main building

The area where the residual waste was stored has been fitted with a misting system to reduce odour emissions. The fans are no longer operating as it was found they were extracting the mist. The system was set to operate for 2 mins every 55 mins.

Whilst Officers were on site, paper was being loaded into an articulated lorry trailer. Due to the size of the building, it is not possible for the trailer to be within the building with the doors closed whilst loading takes place. Therefore, when the paper is being loaded, it is possible for odour emissions from the residual waste to escape the building as there is not full ground to ceiling separation between the waste streams. The Officers detected the odour of residual waste in the yard in front of this building. It was suggested by Jeremy, that building a barrier between the two areas would significantly reduce the chance of an odour emission. A cost benefit analysis and feasibility study would need to be undertaken to assess the overall effectiveness of the barrier.

A misting system may not be considered an appropriate measure as listed in the guidance, H4 Odour Management - How to comply with your Environmental Permit as misting systems can add to the moisture content of the waste which can result in increased odour emissions. However, plain water can be used as a surface barrier to reduce the odours from waste piles and plain water can also be used to increase humidity to reduce evaporation. The most recent version of the Odour Management Plan - V6 November 2022 states that the misting system is '*to dampen down any potential odour which may have built up within the building*'. Water can also be used as an odour treatment within a building or abatement system where effective mixing can take place, such as in an abatement system, though is less effective in ambient air.

You therefore need to provide full details including a methodology/procedure for the application of water in your odour management plan for it to be considered an appropriate measure.

The use of any masking agent is not considered to be an appropriate measure as this can produce an odour emission in itself. There should be no need to use a masking agent

should the waste be handled and processed appropriately.

Green Waste

Green waste is stored in an open bay on the upper level. At the time of the inspection there was no odour emission in the vicinity of the bay except for freshly mown grass. It seems that odour emissions may be rising vertically, then being transported in the air stream.



Green waste storage area

Food waste

The food waste container lid was opened. Food waste had recently been delivered but the operative hadn't yet closed the lid and was cleaning the yard. The lid must be closed immediately after use. James told the operative to close the lid without any prompting from Liz or Jeremy.

Screen/ wall along upper yard wall

It was suggested on site that Powys County Council consider the feasibility of the installation of a screen/ wall along the upper yard wall to deflect odour emissions and act as a screen so that green and food waste was not visible to occupiers of neighbouring domestic properties. This was further discussed during the meeting.

UPDATE: PCC looked into the feasibility of installing a wall with their Engineering department and found that it was not feasible due to strength of the retaining wall and site drainage.

Daily odour assessment sheets

These were assessed by Liz. These have been completed principally by operational staff but occasionally by office staff and off-site managers. It is noted that neither Nigel nor James was aware of the odour in the vicinity of the carpark so have potentially become desensitised. The assessment of odour can vary greatly between different people so

please ensure that a variety of people undertake the assessments.

The duration and timing of the assessments was discussed during the meeting, particularly as odours can be intermittent. The Assessment form has been amended to include an additional column to record the time taken for the assessment at each monitoring point and a copy provided to NRW. You must ensure that the timing of monitoring is varied and not at the same time each day and is also undertaken when potentially odorous activity is taking place such as the loading of waste.

Odour assessment

An odour assessment was undertaken following this site visit. Normally this would be undertaken prior to the site visit but due operational reasons on the day, it was undertaken after the site visit.

Following the on-site inspection Liz and Jeremy went to Station Road and parked approximately 50m away from the rear entrance gate, and approximately 63m from the permit boundary. Immediately upon leaving the car they noted an odour.

Liz considered the odour to be mainly but not exclusively of green waste. It was similar to that which she had experienced in the carpark for Rhayader Depot. Using the Odour Assessment Matrix in the H4 guidance, Liz assessed the odour as:

Intensity – 3 Distinct Odour

Duration - 5 minutes

Constant in this period

Jeremy was unable to say exactly what waste type was causing the odour. This is not unusual as odour from Waste Transfer Stations can be made up from volatile chemical compounds that mix together producing a diverse range of aromas.

Intensity – 3 Distinct Odour

Duration – 5 minutes

Constant in this period

The odour increased in intensity the closer to the Rhayader Depot Station Road gates Officers got. Liz and Jeremy then visited a residential property next to the site. On initially entry into the property's curtilage, no odour was noticeable at the front of the property. However, when at the rear of the property there was an intermittent odour coming and going with the breeze. Liz considered this odour to be residual in origin as assessed it as below.

Intensity – 3 Distinct Odour

Duration – 10 minutes

Intermittent in this period

Jeremy was unable to confirm what waste type was causing the odour and assessed the odour as below.

Intensity – 3 Distinct Odour

Duration – 10 minutes

Intermittent in this period

Whilst the site could not be seen, vehicle movements could be heard on site, therefore it is possible that the door of the building housing the residual waste was open at this time.

Notice board

There is currently no notice board. Permit condition 2.3.1 referring to Table S1.2 requires you to comply with all section in 'How to comply with your Environment Permit'. On page 36 it details what must be included on a notice and where it must be positioned.

Action - Provide a notice as required - by 18/11/22

Please provide a photograph of the notice board in situ.

The following non-compliance has been identified:

F3 - Amenity - Permit condition 3.3.1 - CCS Cat 3

An odour emission was detected outside the boundary of the permitted site by two authorised NRW officers. The odour was intermittent with the breeze but was noticeable and considered to have a minor affect on amenity in the area.

Permit condition 3.3.1 is as follows:

Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of Natural Resources Wales, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.

Consideration has been given as to whether or not PCC have used appropriate measures to prevent or where that is not practicable to minimise the odour with reference to the guidance document H4 Odour Monitoring - How to Comply with your environmental permit and the Rhayader Depot Odour Management Plan v5 April 2022.

The measures that are appropriate for this site are those considered appropriate for a waste operation and the site's specific circumstances, and do take costs and benefits into account.

As part of the assessment process, the degree of pollution is also taken into account. There is currently known to be one confirmed sensitive receptor.

Taking the above into account it is considered that the permit condition has been breached.

The Odour Management Plan has not been fully complied with and there are appropriate measures that PCC could consider. PCC need to refer to the H4 Odour Monitoring guidance for further information and review the information provided below.

Compliance with Odour Management Plan (OMP)

OMP – Version 5 April 2022 Section 3.6 stated that the loading of mixed municipal waste is undertaken within the bulking shed. However, it is understood that this was being undertaken with the doors to the shed open as it is not possible to be wholly done within the building. Therefore, the loading is not within the building with containment.

Similarly with regards to the loading of paper/ cardboard which is stored within the main building, this is undertaken with the doors open. As there is no physical separation between the residual waste and the other bays within the building the loading of other waste types which do not have their own odour also allows the escape of residual waste odour through the open door(s).

This section was required to be rewritten to clearly state how each waste stream is loaded and detail what measures have been put in place to reduce odour emissions. This will then be assessed.

The OMP also needed to be updated to include the misting system.

An updated OMP - V6 November 2022 was submitted for assessment. The OMP now clearly states that the loading and unloading of waste is **not undertaken in the building with the doors closed**. However, a key strategy for the prevention of odour emissions is the containment of odorous material within a building, with appropriate management for building door operation, loading/ unloading within the building and abatement if required. Please see details below on appropriate containment measures.

The receipt and management of odorous waste

Odour emissions can be reduced by keeping odorous waste on site for the minimum duration. Currently the maximum storage times (under normal operating conditions) are as follows:

Green Waste - Four days

Residual Waste - Four days

Food waste - Three days

Consideration should be given to reducing these storage times. You should aim to be storing the odorous wastes for less than the maximum storage times stated, and to the

minimum in terms of volume.

It is noted that the OMP states that food waste is collected daily under normal working practises. Please confirm whether this is still the case.

Appropriate measures

The following are appropriate measures that NRW believe are applicable and appropriate for Rhayader Depot to prevent, or where that is not practicable to minimise the odour. Appropriate measures to manage odour emissions must be specified in an approved OMP. However, the use of appropriate measure is not limited to those specified in an approved OMP.

Please note that the measures listed below are not prescriptive, nor exhaustive. You need to consider all available techniques to prevent odour emissions.

If you consider that the use of any other further measures is not appropriate, then you must explain in writing why you believe this is the case.

Materials Management

Age of waste – You must provide details of the age of the waste you store and odour characteristics in the OMP. It is known that the mixed municipal waste can be up to three weeks old before it arrives on site. Please provide details for all waste streams.

Storage duration – this must be kept to a minimum.

Process control – Consider how to manage First In First Out (FIFO). At the time of the inspection there was more than one artic load of waste on site, however there was no clear distinction over which waste was first in, so that it can be first out.

Putrescible waste arrives in covered/ closed vehicles – mixed municipal waste, food waste and recyclates are known to arrive in covered/ closed vehicles (Refuge Collection Vehicles/ Recycling Collection Vehicles). Please confirm if green waste also arrives covered/ enclosed and provide details in the OMP.

Site reaching capacity – Monitor the daily tonnage received and keep records

Site reaching capacity – Document daily and annual storage limits. Details should be in the EMS.

Site reaching capacity – As residential properties are less than 300m away from the site, you should consider the feasibility of removing putrescible waste by the end of the working day.

Site reaching capacity – Use 'lego' blocks to ensure FIFO.

Checking waste for odour when accepted – Space should be available to check loads for

odour before being mixed with piles. For waste stored within the building there should be space to tip inside building with door closed (see additional comments below). Any particularly odorous waste can then be kept separate and removed from site.

Waste on site

Reducing fugitive emissions through good practice – Use of FIFO or alternative bay (AB) system with a recording system.

Reducing fugitive emissions through good practice - Make smaller piles to increase the ability for natural aeration.

Reducing fugitive emissions through good practice – Consider avoiding loading/ unloading during periods of poor dispersion

Reducing fugitive emissions through good practice – Record weather conditions in order to manage operations to reduce odour emissions.

Reducing fugitive emissions through good practice – Have contingencies in place for equipment failure, these must be recorded in the EMS.

Reducing fugitive emissions through good practice - Clean empty bays

Reducing fugitive emissions through good practice – Jet wash areas that have contained odorous waste on a regular basis.

Reducing fugitive emissions through good practice - Clean and disinfect machinery/ equipment one a week

Reducing fugitive emissions through good practice – Treat drainage systems with bacteria inhibiting solutions (you may need to discuss this with Hafren Dyfrdwy)

Reducing fugitive emissions through good practice – Ensure concrete surfaces are sealed to prevent absorption of odour producing residues

Reducing fugitive emissions through good practice – Remove particulates from water drainage systems by using mesh/ screens which are regularly cleaned.

Reducing fugitive emissions through good practice – Ensure any pooling of leachate/ dirty water is removed

Odour arising from stored waste on site - keep materials on high biomass content out of direct sunlight inside a building

Odour arising from stored waste on site – Carry out daily audit checks to ensure storage times are complied with

Odour arising from stored waste on site - As residential properties are less than 300m away from the site, you should remove putrescible waste by the end of the working day.

Odour arising from stored waste on site – reduce the rate of evaporation and therefore release of odour i.e., by reducing air flow over waste.

Containment of contaminated air

As written in the OMP, the bulking shed building is being used to contain odours. The OMP now clearly states that the loading and unloading, whilst is within the building, is undertaken with the roller shutters doors open throughout the process. It is understood that it is not possible for vehicles to enter the transfer building and the roller shutter doors to be closed. There is no negative pressure system or an 'enclosed vestibule' for the entry of vehicles.

The enclosure of odorous waste within a building can be an appropriate measure, however, certain processes/ controls need to be in place for it to be considered containment, otherwise it would act as a shelter.

Therefore, further consideration must be given as to how the bulking shed can be operated to provide containment of odours particularly when loading/ unloading all wastes stored within the building. For example, by providing segregation in the building, reducing the door opening frequency/ time, reducing time for loading/ unloading etc. The OMP must then be updated accordingly. If you are unable to make any changes then you will need to provide a written response as to why.

A fully enclosed building will need a ventilation system and abatement system designed by a named qualified engineer.

Abatement

The extraction fans are not currently in use.

If the use of the extraction fans is recommenced, appropriate end of pipe treatment would be needed. Any abatement system must be designed by a named engineer. Details on how the system will be monitored would need to be in the EMS and monitoring results be available to NRW to demonstrate performance of the system.

The H4 guidance states that 'If appropriate measures are being used, then the odour will have to be tolerated by the community', that is unless the residual odour is at such a level that it is unreasonable. In this instance, the site would have to take further measures or reduce/ cease operations.

At present

- NRW do not consider that all appropriate measures are being used
- Nor do they consider that the odour is at a level that would require the site to reduce/ cease operations

This will be continually reviewed.

The original actions are below:

ACTION - Update the OMP and submit a copy to NRW for review - 16/11/2022 - Completed

ACTION - Use appropriate measures to prevent odour emissions - 02/12/2022 – Not completed

The updated action is below. It is acknowledged that no further reports have been received since September 2022. However, as weather conditions play a significant part in odour emissions, and green waste is not currently being stored on the site, it cannot be taken that the matter has been resolved.

ACTION – Review the contents of this CAR, update the OMP (and EMS if appropriate) with details of further appropriate measures including timescales for implementation if appropriate and submit for review, or make a written representation as to why no further measures will be taken – 31/03/2023

In this document 'Natural Resources Wales' means the Natural Resources Body for Wales established by Article 3 of the Natural Resources Body for Wales (Establishment) order 2012.

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.