

Compliance Assessment Report CAR_NRW0043536

Permit being assessed: TP3698FA.

For: St Davids Landfill, held by Pembrokeshire County Council

At: St Davids, Pembrokeshire, SA62 6XE.

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

On 17/01/2024 between 11:00 and 13:00.

Parts of permit assessed: General Site inspection

NRW Lead Officer: Sally Wakeford.

Report sent to: Rachel Thomas, Environmental Services Project Manager on 21/02/2024.

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	Action only (X)	
G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment	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
C2	Provide timescale for CSM and HRA required for the site	29/03/2024
G1	Provide timescale for actions to locate and recommission boreholes and update monitoring plan	29/03/2024

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

A site inspection was undertaken by NRW Officers Sally Wakeford and Katie Lewis-davies on 17 January 2024 and accompanied on site by Rachel Thomas of Pembrokeshire County Council (PCC). The weather was dry and cold.

The purpose of the site inspection was to familiarise the officers with the site and attempt to locate the monitoring boreholes.

We entered the site through the NW corner, where the site is secured from the HWRC by a large locked gate. A track had been created down the western flank of the site. After following this and finding a few areas where waste was visible, we proceeded back up the track to the middle of the site, where we gained access to the Northern part of the site over areas of very undulating, unburied large rocks and aggregates. The central borehole (BH4) was at approximately this location but could not be located due to the dense vegetation.

We proceeded across the northern part of the site to attempt to locate the borehole at the North-eastern corner (BH1). No borehole was located. We proceeded down the eastern side of the landfill area. There was a small track leading mostly along this edge, with some areas of exposed waste visible along this edge. The fencing along this side of the site is broken and would require repairing and moving in places to ensure it is not on top of the waste mass if livestock were to be placed outside this boundary. The southern edge of the site is fenced, however the area around the gate is broken. The lower areas of the site are not secure however show no signs of damage through unauthorised entry onto site or through livestock.

We were unable to locate the Southernmost borehole (BH3) due to the amount of water on the marshy area. This area forms part of the SSSI which lies to the south of the landfill. This borehole is potentially accessible via other footpaths or via the airfield to the South.

The area to the South of the landfill had visible waste on the surface of the landfill where trees have disturbed the soil covering.

Photograph showing area of disturbed soil covering due to vegetation growth in Southernmost area.



During the walkover survey, it appeared that there is no extensive capping layer throughout the site. Soil cover is a few inches in the majority of places and waste can be seen and felt underfoot. The site is generally covered in bramble and trees. There is one area which is mostly grass on the northern extent of the site. Much of the site was inaccessible.

Photograph showing waste underfoot and minimal capping layer:



Burrowing animals appeared to be making tracks throughout the waste mass. Where trees have grown, the waste is escaping the surface of the landfill.

Photograph showing waste around the base of trees:



The borehole (BH2) located within the HWRC was located.



Capping/exposed waste

There are a number of exposed areas of waste on site, it appears that the site was never sufficiently capped to ensure waste would not escape the surface if disturbed. Due to the sensitive setting of the site, consideration should be taken on any plans made regarding maintenance of the site surface. The site restoration plan states:

“2.7 site completion final landform:

The current landform is to be retained since any extensive reforming would cause excessive disturbance of an established ecosystem. However minor adjustments may be made to bury any surface refuse or rubble.”

“Minor surface deposits will be collected and buried as part of the tip restoration. Any burial of material shall be undertaken in such a manner as to not cause any risk of pollution to the surrounding land or to any surface water or ground water.”

“The site for burial of any collected surface deposits shall have any capping layer removed and set aside for reuse. The collected material shall be deposited in the resultant hole and covered with the capping material. If insufficient capping material is available clay subsoil shall be imported and spread over the deposit.”

ACTION: action should be considered on collection and burial of surface wastes to ensure they do not leave the boundary of the site.

ACTION: an ecological survey of the site could help inform the situation on site and the required actions to bury and maintain the landfill surface.

Conceptual Site Model and Hydrogeological Risk Assessment (HRA).

The site restoration plan states: *"2.16 A risk Assessment of the site's potential impact on surface water and a specific programme of surface water monitoring are required."*

A conceptual site model will form the basis for your risk assessments and help you successfully evaluate the environmental risks the site poses.

NRW currently does not have a Conceptual Site Model (CSM) or Hydrogeological Risk Assessment (HRA) on file for St David's Landfill. Provision of an appropriate risk assessment is important to determine the risk your site poses.

ACTION: if available please provide a conceptual site model for St Davids Landfill, or provide a timeframe for when this could be developed.

ACTION: Please provide anything you have on file and also provide an update as to when an up-to-date Hydrogeological Risk Assessment could be provided for this site.

The CSM and HRA will also help provide a basis for the development of a suitable monitoring programme.

Monitoring:

The site restoration plan states: *"Monitoring of both the surrounding water and samples from boreholes will continue until the site license is surrendered"*

And: *"Surface water sampling will be undertaken on a three-monthly cycle. This will collect water from representative bodies of surface water surrounding the tip including those which are uphill of the site so that any airborne contamination can be identified and accounted for in the reporting of the analysis results."*

"Four boreholes with gas and water monitoring wells in each have been installed to monitor groundwater and landfill gasses. Three are on the perimeter of the tipped area and the fourth is in the approximate centre of the tip mound."

ACTION: Provide an action plan for locating and bringing back into operation the 4 boreholes on site.

Borehole monitoring data and surface water data will be required to be able to surrender this permit in the future.

Although there is mention of a monitoring programme within the Site Restoration Plan, a formalised monitoring programme is required for the landfill.

ACTION: Provide an updated monitoring programme for review by NRW.

Previous Surrender advice provided:

In 2013 advice was provided to PCC regarding progression to surrender of the permit.

"In order to surrender the licence it is necessary that further monitoring of the site is

required. Our Geoscience team have only looked at the file very briefly. However they have indicated that our records show monitoring results since 2006 only and those on file are only for a few parameters with Chloride and ammoniacal nitrogen are noticeably absent. There are a number of other things that will need to be addressed in the report such as:

- *what waste is the landfill.*
- *how much waste is deposited, thickness of waste mass and where it was deposited relative to the site boundaries.*
- *There is currently not enough data to inform ground water flow directions and therefore whether there is sufficient upgradient and downgradient monitoring*
- *hydrogeological relationship between waste, groundwater within the glacial till and underlying bedrock is not clear.”*

This advice would still be considered relevant to site, the actions here have been picked up in previous sections to provide an updated HRA, and monitoring programme.

Summary of Actions:

1. Collection and re-burying of wastes, and possible ecological survey to inform restoration.
2. CSM and HRA required
3. Locate and recommission boreholes
4. Update monitoring plan
5. begin GW and gas monitoring at boreholes & surface water monitoring

Please provide an estimated timeline for these actions.

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 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.