

## Compliance Assessment Report CAR\_NRW0037850

**Permit being assessed:** AP3739KS.

For: Brookhill Landfill Site EPR/AP3739KS, held by Flintshire County Council

At: BROOK HILL LFS PINFOLD INDUSTRIAL ESTATE , BUCKLEY, BUCKLEY, CLWYD, CH7 3PL.

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

On 09/04/2021 between 09:50 and 12:55.

Parts of permit assessed: Various

**NRW Lead Officer:** Rebecca Harwood.

**Report sent to:** Ruth Cartwright / Paul Murphy, Regulatory Services Manager / FCC Landfill Manager on 19/04/2021.

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

| Part of permitted activity assessed (criteria)                                                          | Assessment result | Permit condition |
|---------------------------------------------------------------------------------------------------------|-------------------|------------------|
| G2 - Monitoring and Records, Maintenance and Reporting - Records of activity, site diary/journal/events | Action only (X)   |                  |
| B5 - Infrastructure - Plant and equipment                                                               | Action only (X)   |                  |
| G1 - Monitoring and Records, Maintenance and Reporting - Monitoring of emissions and environment        | Action only (X)   |                  |
| B1 - Infrastructure - Engineering for prevention and control of emissions                               | 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 |
|----------|------------------------------|-------------|
| G2       | See Action 1 below           | 31/05/2021  |
| B5       | See Action 2 below           | 31/05/2021  |
| G1       | See Action 3, 6, 8 & 9 below | 30/06/2021  |
| B1       | See Actions 4, 5 & 7 below   | 31/05/2021  |

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

This Compliance Assessment Report follows a site inspection of Brookhill Landfill, Permit No. AP3739KS, on 9 April 2021 undertaken by Rebecca Harwood, accompanied by Ian Jones - NRW Geoscience. Three representatives from Flintshire County Council accompanied us on site.

#### **Leachate**

The Leachate Treatment Plant (LTP) was operational at the time of the visit. Leachate is pumped either directly from the leachate wells and gas wells to the LTP, or to tanks where it is mixed with dewatered gully liquor before being pumped to the LTP. Leachate is also imported from Standard Landfill to the site. Approximately 60m<sup>3</sup> of leachate is treated per day and discharge to foul sewer under a Welsh Water discharge consent. The LTP compound was secured and locked.

It was confirmed that the previous erroneous results from the discharge point (September monitoring and raised in CAR\_NRW0037498) was due to a mix up of sample identification. Welsh Water sample the discharge every 6 weeks to 2 months and have not raised any concerns.

The Operator stated that sludge is removed from the leachate tanks approximately every 6 months and taken off site.

**Action 1:** Confirm when sludge was last removed, where it was taken and supply the Waste Transfer Note.

Both electric and pneumatic pumps are installed in the leachate and gas wells. Electric pumps are on timer to stop the wells running dry and damaging the pump. The pneumatic pumps run 24 hours. There are still elevated levels of leachate across the site. The counters often stick on the leachate wells and therefore they do not always provide an accurate reflection of the volume of leachate from individual wells. There is a flow meter that measures the flow into the tanks and additionally there is a flow meter measuring the volume of leachate discharged to sewer.

**Action 2:** Supply details of which pumps (electric / pneumatic) are in which wells.

**Action 3:** Dip gas and leachate wells to level and base.

**Advice and guidance:** Check the level at which the pumps are situated within the wells to assess whether they can be lowered in order to help achieve leachate compliance across

the site.

### **Gas**

The Gas Utilisation Plant (GUP) engine is a 400kw engine. The Operator stated that the engine is optimised to run at around 300kw with a flow rate of approximately 200m<sup>3</sup> per hour. The gas field balancing is undertaken by Ylem, the engine manufacturers.

A loose connection on one of the gas wells (GV24) was tightened on the visit as gas was seen bubbling from the connection. The Operator confirmed that contractors had been on site undertaking some remedial works.

Odour was detected in the vicinity of LC1B, on the north east flank of the site.

**Action 4:** Check seals around new gas wells / leachate wells for odour.

**Action 5:** Check knock out pots and condensate pipework for blockages.

**Action 6:** As previous advised, Helium samples to be taken from BH8 and BH9 to identify the source of elevated gas detected in these boreholes.

### **Groundwater**

As part of working towards definite closure, NRW require additional boreholes to be drilled to the north of the site to better understand groundwater flow and any potential contamination of groundwater from Brookhill Landfill. Access to the field and agreement with the landowner will need to be sought to be able to complete these works.

**Advice and guidance:** To establish whether the new boreholes would fall within the historic landfill it would be advisable to conduct some preliminary groundworks, such as, geophysical survey / invasive investigation / trial pits to ensure that this is not the case.

It was noted that borehole GW4 was flush with the ground and had no bung to prevent mud and water from entering the well. Mud was observed falling into the well when opened by Flintshire CC staff; this could impact on water quality of groundwater samples.

A number of gas and groundwater boreholes located in the former railway cutting along the north eastern boundary were sitting in water and were noted to have groundwater elevations near the ground surface. The tops of the currently used boreholes were a few centimetres above the surface water at the time of the site visit but could easily become submerged during heavy rain.

**Action 7:** Ensure all boreholes are properly sealed and have adequate bungs/caps in place. Consideration should be given to raising these wells to ensure they are protected and sealed.

### **Surface water**

There was a spring and stream running along the old railway siding between boreholes GW2a and GW3. It was agreed that this would be sampled in order to assist with reviewing groundwater quality and any off site pollution impacts from the landfill (particularly leachate

contamination).

**Action 8:** Sample to be taken from surface water for quarterly groundwater suite.

It was confirmed that the North East Pond is lined (not connected to groundwater) and feeds into Pond 2. Pond 2 is only sampled when it is likely to overflow to the discharge point.

There is an additional unlined pond in the north west corner of the site, which is independent and is not connected to the sites surface water system or ponds. It does not fall within the monitoring regime of the site.

**Action 9:** Sample the unlined pond for quarterly groundwater suite.

**Advice and guidance:** Install deep water signs at all surface water ponds and ensure lifebuoys are in working order.

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.