

Compliance Assessment Report CAR_NRW0044645

Permit being assessed: GP3030BE.

For: Shotton Works Landfill Site No 1 , **held by:** Tata Steel UK Limited

At: Shotton Works Weighbridge Road , Deeside Industrial Park, Clwyd, CH5 2NH.

Type of assessment: Site Inspection,

Reason: Routine.

On: 13/06/2024 between 10:45 and 15:00.

Parts of permit assessed: SEE NOTES (Section 4).

NRW Lead Officer: Victoria Griffin, accompanied by Stuart Ross, Susan Francis, Mostyn Wall.

Report sent to: Senior Energy and Environment Officer (QSHE), Senior Energy and Environment Officer (QSHE), on 28/08/2024.

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

Part of permitted activity assessed (compliance criteria)	Assessment result	Permit condition
IR1A - Installations - Management - General Management	Action only (X)	
IR2G - Installations - Operations - Landfill engineering (only applicable to landfill)	Action only (X)	
IR2I - Installations - Operations - Leachate levels (only applicable to landfill)	Assessed (A)	
IR4A - Installations - Information - Records	Action only (X)	

Result types are explained in more detail in the 'Important Information' section below.

Total 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
IR1A	See Actions below regarding provision of documentation.	31/12/2024
IR2G	See Action 4 below regarding operational /tipping plan	31/12/2024

Criteria	Action needed	Complete by
IR4A	See Actions below	31/12/2024

Compliance 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 was a pre-arranged familiarisation visit to review and understand the status of the landfill and undertake a Gazomat survey. This CAR should be read in conjunction with the associated Gazomat Report, dated 12 June 2024.

A walkover of the landfill was undertaken to establish the location of the monitoring wells specified in the Permit and to provide an understanding of the status of the landfill and its general layout. The NRW officers, were accompanied for the duration of the visit by the Senior Energy and Environment Officer (QSHE) and supporting Environment Officer (QSHE).

Background and Current Status to Landfill

The landfill comprises 4 Cells, namely Cell 0, Cell 1, Cell 2 and Cell 3 /4.

There are no available records of the initial construction of the landfill, but the cell base is expected to be 4.5 to 5mAOD and it is likely that the cell walls were constructed from materials not specifically design for landfill containment, e.g., slag and sandy earth.

Cell 0 is the oldest cell and not clay lined. It is not known if clay bunds exists in the cell or between Cell 1 and Cell 0. Cell 0 was completed and capped with a geotechnical clay (low permeability 10-9m/s) in two phases in October /November 1998 and March /April 1999. The capping covered the outer bunds and sea wall to ground level and the marsh.

Cell 1 is the next oldest cell and is not clay lined, again it is not known if clay bunds exist within the cell.

Cells 2 and 3 /4 comprises internal bunds, approx. 40m wide by 80-100m long, constructed from homogenous sandy materials. Cell 2 was lined with a 1m thick clay base and sides in 1996.

Cell 3 /4 was made into one cell by removal of the internal bund. A 1m thick geotechnical clay basal layer was only applied to the Cell 3 area

Two phases of capping in Cell 1 (August /October 1997 & August 1998) and a single phase of capping in Cell 2 (June 2001) have been reported to NRW. The capping comprised 1.0m of clay, overlain with 1.0m of soil on landfill and 0.3m of soil on battered sides.

However, the Parsons Brinckernhoff Drawing Ref: Landfill Location Showing Monitoring Boreholes, (Figure 2 of HRA) dated September 2015 shows that Cell 0 is the only cell to have been finished and restored.

A CQA lining report for Cell 3 /4, dated December 1998, reports the placement of a 1.0m compacted clay basal liner covered by a 0.3m sacrificial clay protection layer (to minimise desiccation of liner) in the Cell 3 area. Extension of the lining works to the Cell 4 area are proposed but not included in the CQA report. No further engineering construction details are provided. **Cell 3 /4 should not be used until the integrity of the can be confirmed and a CQA validation has been accepted by NRW.**

Based on annual void space returns the proposed finished level of the landfill is expected to be 12.5mAOD. The 2023 annual return, based on a May 2023 survey, reported available void space in Cells, 1 & 2 (combined) and 3 /4, to be 19,102m³ and 45.938m³ respectively. The report confirms that the waste deposited the previous year was all inert construction waste. General waste has not been deposited at the landfill since 2018.

Anecdotal information provided by the Operator, suggests that proposals to utilise Cell 3 /4 have been suspended. It is also reported that the Cell historically retained surface water, however more recently the ability of the Cell to hold water has ceased suggesting the integrity of the clay layer in Cell 3 has been compromised.

Inspection Observations

It was difficult to differentiate between Cell 1 and Cell 2 during the survey as there was no apparent demarcation between the cells. Waste deposited in Cell 1 and Cell 2 appears to be uncovered, with evidence of waste material, including but not limited to circuit board fragments, plastics and masonry materials visible across the surface. There were a number of areas with evidence of apparent vegetation stress. There were a number of areas with evidence of apparent vegetation stress. Deposition of waste appears ad-hoc with no apparent capping in place.

Observations suggest that tipping is active immediately to the east of the access track onto Cell 1. However, an operational plan of where waste is to be deposited was not available during the survey.

Away from monitoring wells and leachate chimneys, fugitive emissions were not picked up during the survey. Please refer to the Gazomat Survey for further detail.

A reporting system and /or accurate plan of detailing well nomenclature and the monitoring requirements such a frequency and type of monitoring/sampling and reporting could not be provided during the visit.

Element /Initial are contracted to provide external support for some elements of the required monitoring and sampling. However, there was uncertainty regarding roles and responsibilities for management and day to day landfill monitoring requirements. Whilst it is acknowledged that current operatives are likely to be aware of the well locations and sampling requirements, a change in personnel and /or third-party contractors may result in errors in monitoring and reporting.

Actions:

1. All wells /monitoring locations on site to be clearly labelled and readily identifiable. Photographic evidence to be provided to NRW by **31 December 2024**.
2. The operator should ensure that waste is capped as soon as practicable to minimise leachate generation and associated environmental impacts. An up to date plan of capping to date which includes the current extent of capping should be provided to NRW by **31 December 2024**.
3. The accessibility, integrity and construction of the wells should be suitable for the monitoring and sampling requirements as stated on the permit. An assessment of each location should be undertaken and where necessary improvements made by **31 December 2024**.
4. Operator to provide NRW with an up to date and comprehensive plan of well locations, the documented monitoring programme and monitoring procedure including a clear definition of roles and responsibilities by **31 December 2024**.
5. A tipping /operational plan, which includes proposal for capping in accordance with the requirements of the permit is to be to be provided to NRW by **31 December 2024**.

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.

If your assessment result in Section 1 is suspended, what does this mean?

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 compliance criteria (used in section 1 and 2):

1. Management

- IR1A – General management
- IR1B – Finance (only applicable to Landfill)
- IR1C – Energy efficiency
- IR1D - Efficient use of raw materials
- IR1E - Avoidance, recovery and disposal of wastes produced by the activities
- IR1F - Multiple operator installations

2. Operations

- IR2A – Permitted activities
- IR2B – The site
- IR2C – Operating techniques
- IR2D – Technical requirements
- IR2E – Improvement programme
- IR2F – Pre-operational conditions
- IR2G – Landfill engineering (only applicable to Landfill)
- IR2H – Waste acceptance (only applicable to Landfill)
- IR2I – Leachate levels (only applicable to Landfill)
- IR2J – Closure and aftercare (only applicable to Landfill)
- IR2K – Landfill gas management (only applicable to Landfill)

3. Emission and Monitoring

- IR3A – Emissions to water, air or land
- IR3B – Emissions of substances not controlled by emission limits
- IR3C – Odour
- IR3D – Noise and vibration
- IR3E – Monitoring
- IR3F – Pests
- IR3G – Air quality management plans
- IR3H – Monitoring for the purposes of the Industrial Emissions Directive (this heading includes Large Combustion Plants)
- IR3I – Fire

4. Information

- IR4A – Records
- IR4B – Reporting
- IR4C – Notification

Enforcement response

Any non-compliance with a permit condition 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 twenty 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 to 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.