

Compliance Assessment Report CAR_NRW0036950

Permit being assessed: PP3139GB.

For: Hafod Quarry Landfill Site, held by Enovert North Limited

At: Hafod Quarry Landfill Bangor Road, Johnstown, Wrexham, LL14 6ET.

Type of assessment carried out: Site Inspection, Reason: Incident Response (Incident number 2003682).

On 28/05/2020 between 12:20 and 15:40.

Parts of permit assessed: Hafod Landfill fire, cell 4 slope, mid-site 27 - 30 May 2020 and subsequent site visits in June.

NRW Lead Officer: Ian Oakes, accompanied by Julia Frost, Stuart Ross, Lara Cubley.

Report sent to: Dave Leonard / Ian Craven, Site Manager / Area Manager on 25/03/2021.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
C2 - General Management - Management system and operating procedures	C2 Significant	1.1
B1 - Infrastructure - Engineering for prevention and control of emissions	C3 Minor	2.5

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

Total number of non-compliances recorded	Total non-compliance score
2	35

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	Refer to text and Corrective actions 1 & 2.	31/03/2021
B1	Refer to text and Corrective action 3.	31/03/2021

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.

You are non-compliant with your permit.

We are currently considering taking enforcement action against you for the non-compliance recorded above. We will contact you in due course.

4. Details of our assessment

1. Background

Natural Resources Wales responded to the fire at Enovert North Limited Hafod Quarry Landfill on the evening of Wednesday 27 May 2020 as part of a multi-agency tactical coordination group / air quality cell response comprising Natural Resources Wales (NRW), North Wales Fire and Rescue Service (NWFRS), Public Health Wales (PHW), Wrexham County Borough Council (WCBC) and North Wales Police (NWP). The fire was situated on the north facing slope of Cell 4 (mid-site).

The NRW air quality monitoring team was in attendance in the community of Johnstown from the evening of Thursday 28 until the evening of Friday 29. NRW attended site on Thursday 28 May.

Air quality monitoring indicated that generally air pollution concentrations were below health-based air quality standards. However, there were periods where particulate matter concentrations were elevated due to smoke including the evening of Thursday 28 May. The community was advised to stay inside and close windows as a precaution and this advice was withdrawn on Saturday 30 May.

NWFRS stood down from active firefighting at 12:00 Saturday 30 May as the fire was considered effectively out and appeared to have been restricted to the surface of the waste (pending further investigation and extensive gas well monitoring).

Following the fire Enovert was required to provide an action plan detailing additional monitoring requirements, replacement of fire damaged infrastructure and extra measures to ensure the fire risk was minimised including covering with a suitable layer of approximately 300mm of low permeability mineral cover such as clay / soils to reduce air ingress.

Enovert were served with an Environmental Permitting (England and Wales) Regulations 2016 Regulation 61(1) Notice of powers to require the provision of information with responses due by 26 June relating to the fire and associated matters. Site inspections were carried out by NRW officers (subject to Covid -19 restrictions) on the 2, 10, 17 and 24 June.

A thorough investigation by NRW concluded that it was not the result of a deep seated fire and though it is not possible to determine the exact cause of the fire. However, the investigation did identify environmental permit non-compliances and associated actions, as follows (abstracts in *italics* from the Notice responses):

2. Non - compliance

The landfill sector has not historically been subject to the European Best Available Techniques (BAT) Reference and BAT Conclusions review processes and The Fire Prevention and Mitigation Plan (FPMP) Guidance Note states that “this guidance does not apply to landfill sites”.

‘Environment Agency LFE6 – Guidance on using landfill cover’ materials states that “This document is not prescriptive”, “We recommend a move away from fixed landfill cover conditions to objective led requirements.” and “In many cases, combining cover techniques is required to deal with the range of weather conditions, waste types and the degree of exposure encountered during a sites life.” Though the section on Fire does say “You should

strongly consider using soil-based covers where there is a significant risk of fires on a landfill's surface." and in Waste Materials "The foam element of some fragmentiser waste has resulted in surface fires spreading further than expected."

Enovert's environmental permit EPR/PP3139GB v009 (consolidated) does not have any specific conditions relating to fire nor for the application and maintenance of cover materials excepting that of site restoration.

2.1 Condition 1.1 General management and the fire:

1.1.1 The operator shall manage and operate the activities:

- a. in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
- b. using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

There is no evidence to suggest negligence on the part of Enovert and the cause of the fire is considered indeterminate.

However, procedural deficiencies are evident in the application of landfill cover:

The application of daily cover materials is an aspect we monitor and inspect via our daily site inspection, see attached SHE-OP-06 Site Daily Inspections, which specifically includes checking the application of cover materials to the relevant operating areas to ensure cover is sufficient. We recognise the EA Guidance LFE 6 – "Guidance on using landfill cover materials" and follow the principles within that along with good industry practice for the selection and application of daily cover.

Whilst we do use frag at the site this is used mixed with soils, to prevent the application of a single layer of combustible material. Equally in normal operational circumstances, we do not consider the site to have any high risk sources of ignition. Since the fire we have reviewed our use of frag as a component of daily cover materials and removed its use from flanks and areas of site which are not within the main active tipping area.

SHE-OP-06 Site Daily Inspections refers in 3.2 General, 3.2.9 B. Site operations, only refers to 'Has sufficient cover material been added today?'. The procedure should be amended to give clarity as to what cover should be applied underpinned by a suitable risk assessment.

It is considered that inadequate cover was provided by the in place frag / soils; and the high density of plastic and other combustible materials present on the surface of Cell 4 'fire affected area' including frag contributed to the fire taking hold and was responsible for the significant escalation thereafter and the resultant atmospheric pollution. All procedures should be reviewed as they apply to cover and the environmental management system (EMS) updated accordingly.

It is believed that Enovert has thus failed to identify and minimise risks of pollution and therefore in breach of condition 1.1 General Management as they relate to EMS

procedures and cover. A CCS2 score is considered appropriate.

Corrective action 1: Enovert shall review all relevant procedures and operational instructions in order to specify their approach to the application of daily and intermediate cover materials and update the EMS accordingly. Enovert shall submit a written report to NRW detailing the changes made to the EMS by 31 March 2021.

2.2 With respect to waste acceptance and the receipt of fire damaged waste, Enovert has stated that:

An informal method whereby the customer provides notification in the event of any fire damaged material coming to the site is undertaken. Enovert will amend the Waste Acceptance Procedure to include a procedure for the receipt of any fire damaged material coming to sites and inform our customers of this change.

SHE-OP-01 Waste Acceptance & Control needs to be amended specifically in the case of fire damaged waste where quarantine and additional measures may be required.

It was noted that in practice efforts had been taken on the ground by Enovert staff to minimise any impacts and that the fire affected wastes accepted on to site have not been implicated in the fire of 27 May.

However, the lack of an adequate waste acceptance procedures could lead to fires in the future and as such is considered a CCS3 breach of Condition 1.1 General Management (to be consolidated with the CSS2 score).

Corrective action 2: Enovert shall review all relevant procedures and operational instructions in order to specify their approach to waste acceptance including fire damaged waste and potential sources of ignition and update the EMS accordingly. Enovert shall submit a written report to NRW detailing the changes made to the EMS by 31 March 2021.

2.3 In relation to June 2020 inspections:

At the base of Cell 4 east (New Hall Road end) there was a temporary lagoon 'emergency containment area' being drained of leachate to Davyhulme WwTW with a mild leachate odour. Cell 4 bund is intact to the west but starts to disappear to the east. Informed that the lagoon is just outside basal engineering but on clay. Enovert to drain and re-engineer bund to suit requirements.

The loss of Cell 4 bund integrity and to stray outside the basal engineering is considered a breach of permit condition 2.5.6 The construction of the landfill infrastructure....., even if still on clay. The defence afforded by 2.5.8 Where pollution controls are immediately necessary....., is not considered appropriate as the loss of bund integrity was extensive (predating the fire) and likely contributed to the formation of the temporary lagoon 'emergency containment area'.

Condition 2.5 Landfill Engineering

2.5.5 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and Natural Resources Wales has confirmed that it is satisfied with the

construction proposals.

2.5.6 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:

(a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or

(b) a change has otherwise been agreed in writing by Natural Resources Wales.

2.5.7 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the relevant landfill infrastructure.

2.5.8 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.5.5 and 2.5.6 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to Natural Resources Wales as soon as practicable.

A CCS3 score is considered appropriate. To be revisited should groundwater monitoring indicate any negative impacts.

Corrective action 3: Enovert shall make good Cell 4 basal / bund engineering, decommission the temporary lagoon 'emergency containment area', remove any leachate contaminated ground and make good with suitable clay material. Enovert shall submit to NRW a CQA plan / validation report for the remedial works to ensure that Cell 4 bund has been restored to a satisfactory state in line with original CQA plan by 31 March 2021.

N.B. Enovert are addressing these issues and the corrective actions are to ensure that this is adequately documented to NRW for the public register and will be subject to audit.

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.