

Compliance Assessment Report CAR_NRW0036913

Permit being assessed: MP3036SS.

For: Whitehall Landfill, held by Cemex U K Materials Ltd

At: Old Port Road, Cardiff, Glamorgan, CF5 6AW.

Type of assessment carried out: Report/Data Review, Reason: Routine.

On 10/09/2020.

Parts of permit assessed: 2.7.4, 2.7.5, 2.7.8

NRW Lead Officer: Richard Taylor.

Report sent to: Helen Vonka, Principle Consultant on 10/09/2020.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
B1 - Infrastructure - Engineering for prevention and control of emissions	Assessed (A)	

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?

No action required.

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

Whitehall Quarry CQA Hold an environmental permit for their inert landfill at Whitehall quarry. The site reached capacity on 31st Oct 2018 and site are pushing for closure status before progressing to aftercare status.

In preparation for closure status, site have submitted a CQA plan and specification to place 11 gas

wells into the waste mass. The documents have now been assessed against EA Technical guidance document 'Guidance on drilling into waste on landfill sites V0.1 May 2014, and against the permitting requirements listed below. The CQA plan has therefore been accepted by NRW as the regulator, with comments as below. The plan was also found to meet the permit requirements.

Cemex submitted 2 documents on 24th Aug 2020 for the retro drilling of the gas wells. Both are to be read in conjunction with the other. The document 'Whitehall Landfill: Specification for the drilling of in-waste gas monitoring wells' is referred to as 'the specification' in the following assessment. The document 'Whitehall Landfill: CQA Plan for the installation of in-waste gas monitoring wells' is referred to as 'The CQA plan'.

The relevant permit conditions for the CQA plan are;

2.7.4 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 the Agency has confirmed that it is satisfied with the construction proposals.

2.7.5 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 the Agency.

2.7.8 For the purposes of conditions 2.7.1, 2.7.3 and 2.7.4, the Agency shall be deemed to be satisfied where it has not, within the period of 4 weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:

(a) confirmed whether it is satisfied; or

(b) informed the operator that it requires further information

Note – Whitehall Quarry occupies a void created by the extraction of limestone which has subsequently filled in with inert material, mainly rubble. There is no base liner, but there is an engineered clay base under part of cell 2A and the whole of 2B where an artificial engineered geological barrier (AEGB) has been placed. It is assumed that a top liner is not necessary under Article 14 of the Landfill Directive, where a top liner is not necessary to protect soil and water where the addition of a liner would add little or no benefit. As the site has only used inert material, no leachate collection was deemed necessary under EPR permitting regs. Therefore, the EA guidance is limited in its scope in this case due to the absence of liners.

Points to consider (From EA guidance) Note - al accepted with comments.

1. Environmental risks of penetration of the liner. [Not applicable.](#)

2. Accuracy of construction records and survey data. [Photographic records and drilling records will be taken. \(Sect 8 of Specification\). The CQA contractor in the capacity of CQA Geologist and principle contractor is responsible for records. Substantial record keeping will be in place for the boreholes.](#)

3. Heterogenous and unpredictable nature of the waste. [Inert waste has only been used in this landfill operation. Site will use BS5930:2015 for investigating the waste mix for construction of the](#)

wells. This is acceptable due to the history of the site.

4. Saturation by leachate towards the base of the cell. Not anticipated for this site.

5. Likely perched leachate levels. Not thought to be relevant at this site because the base of the landfill is above the groundwater level, however, provision is made for encountering possible leachate / saturated zones at section 4.4 in the CQA plan, where drilling will terminate 1m above the base if a saturated zone is encountered. This is acceptable with the CQA Manager's approval and subsequent CQA report.

6. Potential contamination potential of wastes and leachate from the borehole. Contamination is not planned for. Instead, any unexpected leachate and saturated zones will be monitored. There is a 2 stream waste operation for drill arisings and other site generated wastes, but excess unplanned leachate is not planned for. **We recommend that the plan be updated to include the contingency of excess leachate to surface. In the unlikely occurrence of leachate to surface, that excess is captured and tankered off to a licensed site for disposal with waste transfer noted kept for record. Alternatively, as the drilling operation is carried out by sub-contractors on behalf of the permit operators, Cemex remain the site permit holder, and thus the permit conditions at 3.3 will be defaulted to.**

7. Landfill gas and odour emissions. There are no plans listed for dealing with excess odour arising from drilling operations in place, or for dealing with any complaints from members of the public in the proposed plan. **We recommend odour and complaint provision is placed within the plan. Alternatively, site permit condition 3.4 will be defaulted to for any odour arisings with Cemex as the permit holder.**

8. Remedial actions from liner damage and other infrastructure. Suitable measures are in place to prevent any damage to the AEGM.

9. Use of competent persons and resources. The work will be tendered to existing contractors who meet the required qualifications, and expertise.

9. Design and specification. Site is using current recognised UK standards, codes, technology and practices.

- Site is using BS5930 for soil investigations.
- Wells are to be constructed of HDPE not PVC.
- Wells will be threaded, or butt fused to ISO9001:2015 standard. Note, this standard is a generic quality assurance standard for the management system to ensure quality and consistency.

10. Zonal drilling. This has not been specified in the specification document (section 4 'drilling specification on page 10'). Instead, there is a reference to the final 1.5m of the drill where 'slow drilling' will be made under direct supervision of the CQA inspector. This corresponds loosely to the EA guidance where 'zone 2 refers to the intermediate depth above the target of between 1-2m.

Zone 2 drilling also requires the inspection of waste arisings at each increment. The plan covers this requirement at 4.2 where the arisings will be inspected every 1m.

Ideally the EA guidance on zonal drilling should be cited within the plan. The plan is however accepted with the looser terms identified above.

11. Calculations and technical data. No calculations have been included within the report regarding

stresses on the well casings due to the age, nature, and depth of waste. There are no perforation specifications listed, or lengths of non-perforated sections. However, guidance states that we will accept open hole drilling to completion for cases where the waste is sufficiently stable to allow this. The boreholes are expected to be stable, but provision for inserting steel lengths to supplement the borehole may have to be made for completion if unexpected saturated zones are encountered.

Conclusion

This assessment against EA technical guidance has found no issues which could prevent the plan from progressing. The issues discussed above are minor in nature. Points 6 and 7 can be managed through existing permit conditions. as the default position. Point 10 has been accepted as being close to the methods described in the EA TGN without using the same phrasing. Point 11 is a technical omission. However, the specification of the infrastructure meets the requirements and will be followed up under the forthcoming CQA report post drilling operation.

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.