

Compliance Assessment Report CAR_NRW0037530

Permit being assessed: JP3239ST.

For: Lamby Way Landfill Site EPR/JP3239ST, held by The County Council of the City and County of Cardiff

At: Lamby Way Landfill Site Lamby Way, Cardiff, Cardiff, CF3 8EQ.

Type of assessment carried out: Audit, Reason: Other.

On 23/03/2020.

Parts of permit assessed: Enforcement Notice for LTP Assessed for Compliance

NRW Lead Officer: Andi Kemp.

Report sent to: Martin Williams, Recycling and Permit Manager on 09/02/2021.

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

Part of permitted activity assessed (criteria)	Assessment result	Permit condition
C1 - General Management - Staff competency/training	C2 Significant	1.1.1(b)
B5 - Infrastructure - Plant and equipment	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
1	31

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
C1	Actions taken and now EN is discharged	Already completed

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.

At this time, we are issuing you with a warning for the non-compliance recorded above. Warnings may influence future enforcement response for continued or further non-compliance.

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

Compliance Assessment Report: Lamby Way Landfill (JP3239ST) 25th March 2020

This compliance assessment report (CAR1) covers the following regulatory activities:

- Progress against discharging the EPR r36 enforcement notice concerning leachate levels and treatment
- Including site meetings and site inspections: 11th & 28th Nov. 2019 and 12th Dec. 2019

A separate CAR1 will be drawn up for routine and annual submissions required by the permit, although reference from data re. leachate levels will be made in this CAR1.

Enforcement Notice – Regulation 36 Environmental Permitting Regulations

The previous Regulatory Officer (Ty Ward) served an enforcement notice (under r36 EPR) dated 17th Dec. 2018. This notice was issued in response to non-compliances with regard the specified permit conditions (2.3.1, 2.9.1 and 4.2.2), that had the potential for significant pollution. In summary the leachate treatment plant (LTP) was not operating for a prolonged period, leachate levels exceeded the permitted limits and threatened landfill containment engineering design and for not reporting this as a scheduled notification of potential significant pollution and malfunction, to the regulator.

The notice required three things: i) ensure LTP operating to manage leachate levels; ii) reduce leachate levels to permitted limits; iii) report the volumes of leachate discharged to the sewer in 2018. A complicating factor (which won't be expanded upon here), was an ongoing internal investigation carried out by Cardiff Council (C.C.), which led to key personnel being away from the landfill site operations. This led to a delay in meeting the time limits for the three actions in the enforcement notice. Gareth Ffoulkes (GF, Landfill and Aftercare Manager) was away from active duty at Lamby Way from February 2018 until 23rd September 2019.

From GFs return emails had been exchanged between C.C. and NRW containing leachate level data and landfill gas utilisation. In summary these emails confirm that the LTP was back in full operation since GF returning to post, leachate levels had decreased from 4.61m to 3.95m (emails 1st and 7th Oct. 2019 GF) – the permitted leachate levels are 2m in Lamby Way South and 1m in Lamby Way East, the most recent active part of the site. A further update email from GF on 10th Oct. 2019, showed average daily volume discharged between 22m³ and 330m³ and leachate levels down to 3.65m by 10th Oct. By the 18th Oct. 2019, levels were 3.11m with a fairly consistent average daily discharge of around 300m³ – these updates and figures confirm progress towards discharging the enforcement notice.

On 21st Oct. 2019 GF contacted the gas engine permitted operator to establish how the increased leachate levels had affected landfill gas extraction and utilisation. The operator confirmed some gas extraction uplift

and expected this to continue now that leachate levels are decreasing. A graph was contained in an email from Infinis (gas plant operator) that showed from 17th Oct. onwards, the gas budget in kW was being met at just under 1600kW, compared to previously lower rates.

In Oct. 2019, due to internal team boundary changes, Andi Kemp (AK), NRW Regulatory Officer, took over the regulation of the landfill operation and gas plant at Lamby Way. AK, by way of an email, (re)introduced himself to GF on 25th Oct. 2019, outlining the intention to inspect the landfill and in particular address the following:

- Operation of the LTP and forecast to compliant leachate head levels
- Review discharges to sewer and assess risk to Welsh Water (DCWW)
- High leachate heads and effect on landfill gas management, including odour
- Potential damage to landfill engineering containment barriers

A meeting was arranged for 11th Nov. 2019, but GF and AK had a telephone call on 25th Oct. During this it was established that leachate levels continued to drop and that GF was working on supplying missing monitoring data (GW, SW, gas). Following the meeting, on 11th Nov., AK emailed GF with a summary of the discussion and future actions, these included:

- A summary of the work that had been carried out in GF's absence and when GF returned
- Details of the LTP maintenance and inspection regime
- 2019 monitoring data
- DCWW weekly testing data of sewer discharge
- Weekly leachate level updates to AK

In this email AK also recommended that C.C. consider speaking to specialists on whether, after prolonged excessive leachate heads, any model predictions about migration of leachate into groundwater, need to be revisited.

A brief site inspection was arranged for 28th Nov. 2019 of areas of the landfill where previous leachate outbreaks have occurred and the LTP itself. The LTP was indeed in operation and the data panel was looked at to see actual live flow data. There was no visible breach of the capping tying into the basal engineering components.

On the 11th Dec. GF sent another update email confirming leachate levels of just under 2.5m, with steady leachate discharge to sewer, although the daily average is decreasing and this may be expected as the levels decrease. A total of 9893m³ has been discharged to sewer since the 1st Oct. 2019. Another site meeting was arranged for 12th Dec. 2019, where AK chased some of the outstanding points from the 11th Nov. meeting. Here GF announced that the maintenance of the LTP contract was going out to tender and will be based on a refined specification from C.C. – and although the details were not seen by AK, NRW was assured that the refinements and retendering were partly to prevent future plant failure. A forecast of compliance with leachate levels was given as late January. There is a diminishing return on pumped volumes as the level drops. GF also stated that the hydrogeological risk assessment (HRA) is also being retendered for its periodic review and that prolonged excessive leachate levels will be considered then – Q1 2020.

On 19th Dec. 2019 GF sent another update and closed out actions from Nov. A summary report of what had happened with the LTP since the notice issue in Dec. 2018 and GF return and latest leachate figures were included. The leachate levels were now at 2.31m. In this update GF described that during his absence two field pumps were replaced in an effort to keep leachate pumping, but because of the absence of staff and

therefore technical knowledge in this area, it was not understood that the pump logic level controllers were not set correctly, so leachate was not being pumped. GF rectified this on his return. GF advised that the leachate level where catastrophic failure could occur was 5m, and that the leachate levels did not reach this level during this period. The site has a trade effluent consent with DCWW to ensure ammonia and dissolved methane especially do not adversely affect their system and treatment works. AK requested a recent DCWW analysis of leachate and GF forwarded one from 15th Oct. 2019. All results were compliant except a slight exceedance of dissolved methane: 0.16mg/l result against a limit of 0.14mg/l. The comment on the DCWW analysis acknowledges this as *“Apart from dissolved methane slightly over, satisfactory.”* NRW doesn't consider this a risk, at these levels, to DCWW assets.

In an update on 10th Jan 2020 from GF the levels were now just below 2m. No odour complaints had been reported. By the 9th Mar. 2020, levels were down to 1.76m and a new contract had been about to be awarded (subject to internal checks) to an engineering company. A brief look at the website of the contractor showed them to be an experienced company in landfill, contaminated land, monitoring and maintenance operations.

On the basis of this progress, the enforcement notice has now been discharged, but a warning letter was issued for the failure to address the issues by the timescales and to point out that maintenance and staff resources must be maintained during the life of the permit. This letter was sent out on the 23rd Mar. 2020. As a warning, for failure to comply with the notice by the due date, has been issued, this must be recorded as a non-compliance. Usually non-compliance with an enforcement notice, would lead to further enforcement action. However, in this case, partly due to C.C. internal investigations, and the belated compliance with the notice, the warning letter and Category 2 non-compliance is deemed appropriate.

Non-compliance: *For failure to have sufficient technically competent people to manage the leachate treatment plant, which led to a delay in complying with the enforcement notice.* **Non-compliance score – CCS2**

In the near future NRW may have / or resume discussions about the landfill moving into definitive closure and being managed in accordance with its closure plan. Part of these conversations may involve the leachate level limit of 2m in Lamby Way East – but at this stage, any outcome is uncertain.

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.