

Natural Resources Wales Permitting Decisions

Tata Steel UK Limited (Shotton Works Landfill Site No. 1)

Decision Document

Application for a Normal Variation

The application number is: PAN-023071

The permit variation number is: EPR/GP3030BE/V004

The operator is: Tata Steel UK Limited

The Installation is located at: Shotton Works, Weighbridge Road, Deeside Industrial Park, Clwyd, CH5 2NH

Purpose of this document

This decision document:

- explains how the application has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account
- justifies the specific conditions in the permit other than those in our generic permit template.

Unless the decision document specifies otherwise, we have accepted the applicant's proposals.

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1. Executive summary

1.1. Application summary

Shotton Works Landfill Site No. 1 is operated as an internal waste disposal facility by Tata Steel UK Ltd. It covers an area of approximately 8 hectares and is bound to the north by the Dee estuary salt marsh, to the south-east by a road embankment, and to the south-west by the Dee channel breakwater and the River Dee channel itself. The site is split into 4 cells: Cells 0, 1, 2 and 3/4. Cell 3/4 was formed by the removal of the separating bund between Cells 3 and 4.

Cell 0 is the oldest cell and was completed and capped in March/April 1999 with a 1m thick clay cap. Cell 1 is the next oldest cell, and although tipping at this cell is complete, it has not yet been completed to restoration level. Cell 2 is the current operational cell. Cell 3/4 will become operational on the completion of Cell 2.

The operator initiated permit variation is to make the following changes to the permit;

- Remove boreholes BH3, BH4, BH5, BH6 and BH7 from the permit;
- Remove boreholes BH9 and BH10 from the groundwater trigger level monitoring regime;
- Include a standard set of groundwater trigger levels for all wells through the introduction of the following Emission Limit Values (ELVs): ammonium 224 mg/l, nickel 1.75 mg/l and zinc 3.42 mg/l, applied to boreholes BH1, BH2, BH11, BH12 and BH13;
- To remove dissolved oxygen, magnesium, potassium, calcium, sodium, manganese and Mecoprop from the quarterly monitoring programme for groundwater and leachate. (The removal of Mecoprop was agreed in writing with the Environment Agency Wales (Natural Resources Wales' predecessor body) on 27/01/2009 but was not removed from the permit at the time.);
- To include arsenic, phosphate and phenols in the quarterly monitoring programme for groundwater and leachate;

- Change the frequency of groundwater level monitoring from monthly to quarterly;
- Change the leachate chemical monitoring frequency from quarterly to six-monthly;
- Change the landfill gas monitoring frequency from monthly to quarterly;
- In respect of concentration of gases in landfill gas, change the monitoring requirements for Methane and Carbon Dioxide in boreholes 1, 2, 8, 9 and 10 from limits to action levels; and
- Include the parameters Hydrogen Sulphide and Carbon Dioxide in the list of parameters that require monitoring in landfill gas.

We have also used this variation to update a number of administrative elements of the permit, as follows:

- Change the wording of the reference to the Financial Provision agreement to reflect the fact that a new agreement that has been agreed with Natural Resources Wales;
- Change the company registered office address; and
- Make changes to the monitoring requirements tables as per a previous agreement made by Environment Agency Wales.

We have also used this variation as an opportunity to update the permit to the modern permit format and remove completed Improvement Conditions.

Our decision

We have decided to issue variation for Shotton Works Landfill Site No. 1 operated by Tata Steel UK Limited.

We consider in reaching that decision we have taken into account all relevant considerations and legal requirements and that the permit will ensure that the appropriate level of environmental protection is provided.

2. Receipt of the application

The application was accepted as duly made on 22/08/2023. This means we considered it was in the correct form and contained sufficient information for us to begin our determination, but not that it necessarily contained all the information we would need to complete that determination.

3. Confidential information

The applicant made a claim for no claim for commercial confidentiality, and we have not received information in relation to the application that appears to be confidential in relation to any party.

4. Legislation

The variation will be issued under Regulation 20 of the EPR. The Environmental Permitting regime is a legal vehicle which delivers most of the relevant legal requirements for activities falling within its scope. In particular, the regulated facility is:

- subject to aspects of the Well-Being of Future Generations (Wales) Act 2015 and the Environment (Wales) Act 2016 which also have to be addressed.

We address the legal requirements directly where relevant in the body of this document. NRW is satisfied that the decision on this application is consistent with its general purpose of pursuing the sustainable management of natural resources (SMNR) in relation to Wales and applying the principles of SMNR. In particular, NRW acknowledges that it is a principle of sustainable management to take action to prevent significant damage to ecosystems. We consider that, in issuing the variation a high level of protection will be delivered for the environment and human health through the operation of the Installation in accordance with the permit conditions. NRW is satisfied that this decision is compatible with its general purpose of pursuing the sustainable management of natural resources in relation to Wales and applying the principles of sustainable management of natural resources.

As the EPR regulator in Wales for Part A1 permit applications, NRW are required to determine any duly made Part A1 permit applications. This means that we must decide either to grant, or to refuse the variation based upon an objective assessment of the proposals against the detailed legal requirements of EPR. Our public participation statement¹ gives more information on what can, and cannot, be taken into account when making our permitting decision.

The application, and this decision document, only considers the permitting of the facility under EPR as described throughout the document. We only assess the installation and its impacts and cannot take into consideration indirect impacts which are not as a direct result of activity within the installation boundary.

Any proposed development and wider associated activities will be required to be compliant with all relevant and applicable law, for example, environmental law, health and safety law, planning law. This other legislation acts largely independently of EPR (although they may be inter-related). Such other matters are beyond both the scope of this document, and of our regulatory remit and expertise and are not relevant to our EPR permitting decision. Ensuring compliance with all other regulation and obtaining any required consents (such as planning permission) is the responsibility of those undertaking the development and is regulated by the relevant appropriate authority for each.

5. Consultation

No consultation has been carried out on this application because there is no statutory requirement to consult on variation applications of this type, namely 'normal' variations. This decision was made in accordance the Environment Permitting Regulations (EPR), our statutory Public Participation Statement² and our Regulatory Guidance.

¹ [Natural Resources Wales / Public participation: how you can take part in our permit and licence consultations](#)

² [Natural Resources Wales / Public participation: how you can take part in our permit and licence consultations](#)

6. Requests for information

Further information was requested during determination by way of a Schedule 5 Notice in relation to the submitted report 'Derivation of New Perimeter Gas Emission Criteria, report number 2349v1d0523'. The Notice asked the applicant to confirm whether or not the perimeter monitoring headworks are intact, and, if they are, that this had allowed representative samples to be taken throughout the monitoring reference period referred to the Report. The Schedule 5 Notice was sent on 09/02/2024 with a deadline for response of 23/02/2024.

The applicant's response to the Schedule 5 Notice was provided on 13/02/2024. The additional information supplied satisfied the requirements of the Schedule 5 Notice.

A copy of the information Notice requesting further information were placed on our public register as were the responses when received.

7. The Installation

7.1. The permitted activities

The regulated facility an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations:

- Section 5.2 Part A(1) (a), The disposal of waste in a landfill.

An installation may also comprise 'directly associated activities', which at this installation includes:

- Leachate management;
- Surface water management; and
- Landfill gas management.

Together, these listed and directly associated activities comprise the Installation.

7.2. Changes to the installation

The Operator has applied to change the following aspects of the permit, as follows:

1. Remove boreholes BH3, BH4, BH5, BH6 and BH7 from the permit;
2. Remove boreholes BH9 and BH10 from the groundwater trigger level monitoring regime;
3. Include a standard set of groundwater trigger levels for all wells through the introduction of the following Emission Limit Values (ELVs): ammonium 224 mg/l, nickel 1.75 mg/l and zinc 3.42 mg/l, applied to boreholes BH1, BH2, BH11, BH12 and BH13;
4. To remove dissolved oxygen, magnesium, potassium, calcium, sodium, manganese and Mecoprop from the quarterly monitoring programme for groundwater and leachate. The removal of Mecoprop was agreed in writing with the Environment Agency Wales (Natural Resources Wales' predecessor body) on 27/01/2009 but was not removed from the permit at the time;
5. To include arsenic, phosphate and phenols in the quarterly monitoring programme for groundwater and leachate;
6. Change the frequency of groundwater level monitoring from monthly to quarterly;
7. Change the leachate chemical monitoring frequency from quarterly to six-monthly;
8. Change the landfill gas monitoring frequency from monthly to quarterly;
9. In respect of concentration of gases in landfill gas, change the monitoring requirements for Methane and Carbon Dioxide in boreholes 1, 2, 8, 9 and 10 from limits to action levels;
10. Include the parameters Hydrogen Sulphide and Carbon Dioxide in the list of parameters that require monitoring in landfill gas; and
11. Change the wording of the reference to the Financial Provision agreement to reflect the fact that a new agreement that has been agreed with Natural Resources Wales.

It is important to note that these changes are not associated with any change to the activities that are permitted to be carried on at the site. Neither are they associated with any increase in the volumes of permitted waste tipping, or changes to the waste types that are permitted to be tipped. Risk to the environment and human health has therefore not changed as a result of this variation.

The permit, and subsequent variations, have been consolidated into a single document which adopts the modern-style format.

8. Operation of the installation

8.1. Operator competence

The applicant is the sole operator of the Installation. We are satisfied that the applicant is the person who will have control over the operation of the Installation the variation is issued; and that they will be able to operate the Installation so as to comply with the conditions included in the permit. The decision was taken in accordance with EPR RGN 1 Understanding the meaning of operator³.

Financial Provision

The applicant has declared they have no current or past bankruptcy or insolvency proceeding against them.

There is no known reason to consider that the operator will not be financially able to comply with the permit. The decision was taken in accordance with RGN 5 on Operator Competence.

For landfills, applicants are required to show us that they are financially capable of meeting the obligations of closure and aftercare of the site. The operator has a financial provision agreement, dated 28/02/2023, with NRW. This agreement is not affected by this variation although the permit has been updated to reference this most recent performance agreement (see condition 1.2.1).

Technical competence

The variation does not include any changes which require the operator to demonstrate that they have appropriate technical management in place.

8.2. Environmental Management System

³ [RGN 1 Understanding the meaning of 'operator' \(naturalresources.wales\)](#)

The applicant has stated in the application that they will implement an Environmental Management System (EMS) that will meet the requirements for an EMS in our “How to comply with your environmental permit” guidance⁴. The management system is ISO 14001 certified and will continue to be in place following the variation.

We have reviewed the application and are satisfied that appropriate management systems and management structures will be in place for this Installation, and that sufficient resources are available to the Operator to ensure compliance with all the Permit conditions.

8.3. Operating techniques

Installation activities and assessment of Best Available Techniques

Best Available Technique (BAT) does not apply to landfill activities included in EPR.

The applicant has justified the changes to groundwater and monitoring techniques that they have requested in this variation through the submission of a Hydrogeological Risk Assessment (HRA) report (reference ‘Hydrogeological Risk Assessment Review (HRAR) Report Number 2317r1v1d0323’). This report was prepared as a requirement of Condition 3.2.4, which stipulates that the Operator must review the HRA submitted with the original permit application once every six years.

This report has previously been reviewed by NRW’s Geoscience experts and the findings and recommendations contained therein have already been accepted by NRW. For completeness, the report has been reviewed again by NRW’s Geoscience experts and they have confirmed to the Permitting Service that they agreed with its findings.

The landfill gas elements of the variation application (described in the submitted report ‘Derivation of New Perimeter Gas Emission Criteria, report number 2349v1d0523’)

⁴ [Natural Resources Wales / Guidance to help you comply with your environmental permit](#)

have been reviewed by NRW Landfill Gas experts who have indicated that they agree with the Operator's findings. A point of clarification, regarding the perimeter head works, was requested from the Operator and confirmed via the issue of a Notice for Further Information (see Section 6 for more detail).

9. The site

9.1 Site Plan

The applicant has provided an updated plan which we consider is satisfactory, showing the extent of the site of the facility and boreholes and wells.

The updated plan will be included in the permit and the operator will be required to carry on the permitted activities within the site boundary.

9.2 Site Condition Report

The proposal does not include the addition of any land and so a Site Condition Report was not required to support this application.

10. Technical assessment of the proposed changes

As part of the determination, we have consulted internal experts on the proposed changes with regard to (i) groundwater, leachate and extraction boreholes and wells, and (ii) landfill gas monitoring.

11.1 Changes to groundwater monitoring, leachate monitoring, extraction wells and boreholes

Changes to sampling frequencies

The applicant requested that the monitoring frequency at the following groundwater monitoring sites listed in Table S3.2 of the permit (boreholes BH1, BH2, BH8, BH9, BH10, BH11, BH12, BH13, BH14 and BH15) be changed from **monthly** to **quarterly**. This request applies to water level measurements and water quality sampling.

The applicant also requested that the monitoring frequency at the following groundwater monitoring sites listed in Table S3.6 of the permit (all leachate monitoring points) be changed from **monthly** to **six-monthly**. This request applies to water level measurements and water quality sampling.

The applicant also requested that boreholes BH3, BH4, BH5, BH6 and BH7 be removed from Tables S3.2 and S3.6 of the permit.

We have reviewed the Operator's Hydrogeological Risk Assessment Review (HRAR) and agree with the Operator's conclusions that these changes are sufficiently protective of human health and the environment. We therefore have no objection to these proposals.

Changes to sampling parameters

The Operator requested that the following sampling parameters be removed from Tables S3.2 and S3.6 of the permit:

- dissolved oxygen;
- magnesium;
- potassium;
- calcium;
- sodium; and
- manganese.

And to include:

- arsenic;
- phosphate; and
- phenols.

The Operator also requested that Mecoprop be removed from Table S3.2 as this action was agreed in writing with the Environment Agency Wales (Natural Resources Wales' predecessor body) on 27/01/2009 but was not removed from the permit at the time.

We have reviewed the Operator's HRAR and agree with the Operator's conclusion that the removal of the parameters is appropriate given that monitoring the concentrations of them in groundwater is no longer required to inform on environmental risk. We also agree that the inclusion of arsenic, phosphate and phenols is appropriate.

We therefore consider that these changes are sufficiently protective of human health and the environment and have no objection to these proposals.

Changes to compliance limits

The Operator requested that a standard set of groundwater trigger levels for boreholes BH1, BH2, BH11, BH12 and BH13 be included in the permit, in Table S3.2. The new triggers levels are as follows:

- ammonium - 224 mg/l;
- nickel - 1.75 mg/l; and
- zinc - 3.42 mg/l.

This approach was included in the previous HRAR (dated April 2016), which NRW reviewed and agreed with at the time of submission.

Given that NRW has agreed with previous HRARs, and again, that we have again reviewed the current, submitted HRAR as part of this variation determination, we accept the use of dilution to set new compliance limits for ammoniacal nitrogen, zinc and nickel, as set out above. These have not changed since the previous HRA, we have no objection to the changes to the permit.

We therefore consider that these changes are sufficiently protective of human health and the environment and have no objection to these proposals.

11.2 Changes to landfill gas monitoring

Monitoring of landfill gas in external boreholes

The Operator requested to change the landfill gas monitoring frequency from monthly to quarterly. NRW landfill gas experts have reviewed the Landfill Gas monitoring report and agree with Operator's justification for this request and their findings. We have therefore amended the monitoring frequency for all landfill gas monitoring points from monthly to quarterly.

We have also included new Landfill Gas monitoring requirements for methane and carbon dioxide in relation to boreholes 1, 2, 8, 9 and 10 only, as follows:

- A concentration of 1 % v/v methane shall only apply if the calculated gas flux is >0.7 l/h. If the gas flux exceeds 0.7 l/h, the operator shall instigate their Methane Action Plan; and
- If the measured concentration of carbon dioxide exceeds 5 % v/v, the operator shall instigate their Carbon Dioxide Management Plan.

Finally, we have also included Hydrogen Sulphide and Carbon Dioxide as new landfill gas monitoring parameters for all external monitoring boreholes.

These changes are in line with recommendations included in the Industry Code of Practice entitled Perimeter Soil Gas Emission Criteria. The method for deriving gas flux included in Table S3.3 follows that set out in BS 8485:2015 Code of Practice for the Design of Protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings.

Monitoring of landfill gas at in-waste monitoring locations

We have changed the monitoring frequency for in-waste landfill gas monitoring to quarterly, from monthly. The Operator has assessed past monitoring data from the in-waste boreholes and concluded that there is no environmental risk associated with this reduction in monitoring frequency. We agree with this conclusion.

We have removed in-waste monitoring boreholes L1, L2, L3, L4, L5 and L6 from Table S3.4 due to concerns around their condition and suitability for providing accurate monitoring data. We have included a new Improvement Condition, IC2, requiring the Operator to investigate the suitability of these wells for this purpose and to report the findings to Natural Resources Wales (see Section 15.7 for more information).

We have included three new in-waste monitoring boreholes, C0, C1 and C2 in Table S3.4. These boreholes were installed by the Operator in 2017 but have never been formally included in the permit.

11.3 Change the wording of the reference to the Financial Provision agreement

We have accepted the submitted new Financial Provision agreement and have changed the wording of the related condition accordingly (see Section 10.1 for more detail).

12. Environmental Risk Assessment

Regulated activities can present different types of risk to the environment, these include odour, noise and vibration; accidents, fugitive emissions to air and water; as well as point source releases to air, water, sewer and discharges to ground or groundwater, global warming potential and generation of waste. All these factors have been considered during our determination and the relevant risks from this proposal are discussed in this and other sections of this document.

The next sections of this document explain how we have approached the critical issue of assessing the likely impact of emissions from the Installation on human health and the environment and what measures we are requiring ensuring a high level of protection.

In line with our guidance, the applicant has provided an environmental risk assessment with the application which identifies and the sources of key risks from the variation,

possible pathways and receptors. This risk assessment and further assessments provided by the applicant and/or completed by NRW will be discussed in further detail below.

Emission limits

We have included new emission limits for the following parameters:

- Ammoniacal nitrogen – 224 mg/l;
- Nickel – 1.75 mg/l; and
- Zinc – 3.42 mg/l,

in respect of groundwater monitoring at boreholes BH1, BH2, BH11, BH12 and BH13 (Table S3.2).

We have also included new Landfill Gas monitoring requirements for methane and carbon dioxide in relation to boreholes 1, 2, 8, 9 and 10 only (see Table S3.3), as follows:

- A concentration of 1 % v/v methane shall only apply if the calculated gas flux is >0.7 l/h. If the gas flux exceeds 0.7 l/h, the operator shall instigate their Methane Action Plan; and
- If the measured concentration of carbon dioxide exceeds 5 % v/v, the operator shall instigate their Carbon Dioxide Management Plan.

11.1. Assessment of impact to surface and ground water

The proposal includes no changes to surface water emissions.

A Water Framework Directive Compliance Assessment has been completed and it has been concluded that the activity is considered as having no risk of causing deterioration or preventing any water body or WFD Protected Area from reaching its objectives. This assessment is available on the public register to view, see [here](#).

13. Impact on National Site Network Sites, SSSIs and non-statutory sites

13.1 The National Site Network

The following National Network sites are located within 10km of the site:

- Halkyn Mountain / Mynydd Helygain SAC (UK0030163)
- Deeside and Buckley Newt sites SAC (UK0030132)
- Dee Estuary / Aber Dyfrdwy (Wales) SAC (UK0030131)
- Dee Estuary / Aber Dyfrdwy (England) SAC (UK0030131)
- River Dee and Bala Lake / Afon Dyfrdwy a Llyn Tegid (Wales) SAC (UK0030252)
- The Dee Estuary (England) SPA (UK9013011)
- The Dee Estuary (Wales) SPA (UK9013011)
- The Dee Estuary (England) Ramsar (UK11082)
- The Dee Estuary (Wales) Ramsar (UK11082)

The changes requested by the Operator are related to changes to groundwater, leachate and landfill gas monitoring requirements and have been thoroughly risk assessed. They are not associated with any change to the activities that are permitted to be carried on at the site. Neither are they associated with any increase in the volumes of permitted waste tipping, or changes to the waste types that are permitted to be tipped.

Risk to the environment and human health as a has therefore not changed as a result of this variation. Therefore, we have concluded that Habitats Regulations Assessment (HRA) is not required because there is no change to the impact pathway to any National Network Site (i.e., Special Area of Conservation, Special Protection Area or Ramsar Site). This decision is taken in accordance with our guidance on HRA.

13.2 Sites of Special Scientific Interest (SSSI)

The following SSSIs are located within 10km of the site:

- Afon Dyfrdwy (River Dee) (31WDW)
- Dee Estuary / Aber Afon Dyfrdwy (31WHJ)
- Shotton Lagoons and Reedbeds (31WBU)

The changes requested by the Operator are related to changes to groundwater, leachate and landfill gas monitoring requirements and have been thoroughly risk assessed. They are not associated with any change to the activities that are permitted to be carried on at the site. Neither are they associated with any increase in the volumes of permitted waste tipping, or changes to the waste types that are permitted to be tipped.

Risk to the environment and human health as a has therefore not changed as a result of this variation. Therefore, we have concluded that the proposed permission is not likely to damage any of the flora, fauna or geological or physiological features which are of special interest of any SSSI as the pathways to the features are not affected. This decision is taken in accordance with our guidance on the CRoW Act.

13.3 Non-statutory conservation sites

There are a number of non-statutory conservation sites located with 10km of the site.

The changes requested by the Operator are related to changes to groundwater, leachate and landfill gas monitoring requirements and have been thoroughly risk assessed. They are not associated with any change to the activities that are permitted to be carried on at the site. Neither are they associated with any increase in the volumes of permitted waste tipping, or changes to the waste types that are permitted to be tipped.

Risk to the environment and human health as a has therefore not changed as a result of this variation. Therefore, we have concluded that the proposed variation is not

anticipated to cause significant pollution to any surrounding non-statutory sites due to there being no change to the impact pathways from the changes proposed.

14. The Permit Conditions

14.1 Updating permit conditions during consolidation

The original permit had three variations without consolidation. The Operator applied to consolidate and modernise the permit as part of this variation. We have updated previous permit conditions to those in the landfill permit template as part of the permit consolidation.

14.2 Incorporating the variation

Section 10 discusses how we have considered the Operator's proposed changes to the permits limits and monitoring and reporting requirements.

We have specified that the applicant must operate the permit in accordance with descriptions in the application. We have incorporated Sections 5.2.2 and Sections 5.4 of the report Derivation of New Perimeter Gas Criteria (reference 2349r1v1d0523) to incorporate the new landfill gas Methane Action Plan and Carbon Dioxide Action Plan.

14.3 Emission Limits

We have included new emission limits for the following parameters:

- Ammoniacal nitrogen – 224 mg/l;
- Nickel – 1.75 mg/l; and
- Zinc – 3.42 mg/l,

in respect of groundwater monitoring at boreholes BH1, BH2, BH11, BH12 and BH13 (Table S3.2).

These limits have been derived following the six-yearly HRAR review and are based on worst-case risk assessment procedures. The HRAR risk assessment has been scrutinised by NRW Hydrogeological experts who agree with the methodology and process contained therein. We are therefore satisfied that these new limits are sufficiently protective of human health and the environment.

We have also included new Landfill Gas monitoring requirements for methane and carbon dioxide in relation to boreholes 1, 2, 8, 9 and 10 only, as follows:

- A concentration of 1 % v/v methane shall only apply if the calculated gas flux is >0.7 l/h. If the gas flux exceeds 0.7 l/h, the operator shall instigate their Methane Action Plan; and
- If the measured concentration of carbon dioxide exceeds 5 % v/v, the operator shall instigate their Carbon Dioxide Management Plan.

These changes are in line with recommendations included in the Industry Code of Practice entitled Perimeter Soil Gas Emission Criteria. The method for deriving gas flux included in Table S3.3 follows that set out in BS 8485:2015 Code of Practice for the Design of Protective Measures for Methane and Carbon Dioxide Ground Gases for New Buildings.

14.4 Monitoring

We have decided that monitoring should be carried out for the parameters listed in Schedule 3 of the permit using the methods and to the frequencies specified in those tables. These monitoring requirements have been imposed in order to demonstrate compliance with the emissions limits in the permit.

For emissions to groundwater, and leachate and landfill gas monitoring, the methods for periodic monitoring are in accordance with TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003) and LFTGN 03 (v1 2004).

14.5 Reporting

We have specified the reporting requirements in Schedule 4 of the Permit to ensure data is reported to enable timely review by Natural Resources Wales to ensure compliance with permit conditions and to monitor the efficiency of material use and waste recovery at the installation. No changes to the reporting requirements have been made as a result of this variation.

14.6 Waste Types

We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility in the consolidated permit in Tables S2.1. No new waste types have been added as part of this variation.

15.7 Improvement programme

We have removed all but one of the Improvement Conditions from Table S1.3. This is because the Operator has satisfied the requirements of these conditions. IC3 remains (renumbered as IC1), as we have not received an updated Landfill Gas Management Plan from the Operator.

We have also included three new Improvement Conditions: ICs 2, 3 and 4. Table S1.3 now reads as follows:

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1	The Operator shall submit to Natural Resources Wales, for its agreement in writing, an assessment of the suitability of existing in-waste and perimeter boreholes to be used for the purpose of monitoring landfill gas concentrations. This assessment should be completed in accordance with the requirements of the Environment Agency's document, "Guidance on the Management of Landfill Gas" (LFTGN03), dated September 2004. Where, following the completion of this suitability assessment, boreholes are found to be not fit for purpose, the Operator shall provide to Natural Resources Wales for agreement in writing, a plan for the replacement, installation and commissioning of boreholes in accordance with "Guidance on the Management of Landfill Gas" (LFTGN03), dated September 2004.	21/08/25
IC2	The Operator shall submit to Natural Resources Wales, for its agreement in writing, a revised Landfill Gas Management Plan, which will include a review of the perimeter gas monitoring	21/08/25

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
	data. The review shall include refined control and trigger levels, based upon 6 monthly monitoring results, for gas monitoring in accordance with the Environment Agency's document, "Guidance on the Management of Landfill Gas" (LFTGN03), dated September 2004. The Operator shall undertake any measures or recommendations approved in writing by Natural Resources Wales within the timescales indicated in the approval.	
IC3	The Operator shall submit to Natural Resources Wales, for its agreement in writing, a suitable Surface Water Inspection Programme for the site. This programme should be completed in accordance with the requirements of the Environment Agency's document, "Guidance on monitoring of landfill leachate, groundwater and surface water" (LFTGN02) dated June 2014.	21/08/25
IC4	The Operator shall implement the Surface Water Inspection Programme described in Condition 2.4.1 IC3.	21/08/25

15. Other Changes to the permit

We have changed the Registered Office address for the company to reflect the current address listed on the Companies House website. The Company Name and Company Number have not changed.

16. OPRA

The OPRA score has not been changed as a result of this variation and remains as 66. This will form the basis for ongoing subsistence fees.