

Natural Resources Wales permitting decisions

Biffa Waste Services Limited Trecatti Landfill

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Variation

The permit is: EPR/RP3733PC/V012

The operator is: Biffa Waste Services Limited, the application was submitted by Sirius Environmental Limited on behalf of Biffa Waste Services Limited.

The Installation is located at: Trecatti Landfill Site, Fochriw Road, Merthyr Tydfil CF48 4AB

We have decided to issue the variation for Trecatti Landfill Site Permit, operated by Biffa Waste Services 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.

Biffa Waste Services Limited operates a landfill site at Merthy Tydfil, Glamorgan, CF48 4AB.

Landfilling at Trecatti commenced in 1986 and was originally operated by Merthyr Tydfil Borough Council until 1992 when the management transferred to Biffa Waste Services Limited. The site has been operating under the Environmental Permit EPR/RP3733PC since 9th March 2005.

The site is currently authorised to accept up to 625,000 tonnes per annum of non-hazardous solid wastes, 50,000 tonnes per annum of stable non-reactive hazardous waste including asbestos containing waste, and 30,000 tonnes per annum of wastes for the Multipurpose Waste Treatments and Remediation Pad Facility. The permit also includes a Standard Rules set (SR2012 No8) allowing for the composting of less than 75,000 tonnes per annum of green waste. The permitted total waste input of the site, that incorporates all permitted waste types, is not to exceed 675,000 tonnes per annum.

Biffa Waste Services Limited has applied for a variation to the permit to extent the waste codes to allow a wider range of stable hazardous non-reactive waste to be accepted in the monocell that is currently reserved for asbestos waste. The application has four parts that were assessed for the variation:

- The extension of Schedule 2 Table S2.4 of the permit to include additional waste codes that are classified as Stable Non-Reactive Hazardous Wastes (SNRHW).
- Extend the hazardous characteristics displayed by wastes imported under waste codes 17 05 03 and 19 13 01, limited to inorganic substances only.
- The discharge of treated waters/leachate from the SNRHW monocell to sewer following initial treatment in the on-site Leachate Treatment Plant (LTP).
- Removal of the requirement to install, maintain and monitor inclinometers within the separation bund constructed around the edges of the asbestos/SNRHW monocell.

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.

Key issues of the decision

Receipt of application

The application was initially received on 22/06/2020 as a minor technical variation. On the initial review during the duly making progress we assessed that the application constituted a normal variation. The application was made not duly made 09/12/2020 and the applicant was asked to submit a stability risk assessment and to review their hydrogeological risk assessment and financial provision. The application was subsequently duly made on 19/02/2021.

Confidential information

No claim for commercial or industrial confidentiality has been made.

Identifying confidential information

We have not identified information provided as part of the application that we consider to be confidential. The decision was taken in accordance with our guidance on commercial confidentiality.

Consultation

There was no formal consultation required for this variation. The decision was taken in accordance with RGN 6 High Profile Sites, our Public Participation Statement and our Working Together Agreements.

The facility

The regulated facility is an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations 2016 and the following directly associated activities:

- S5.2 A(1)(a) The disposal of waste in a landfill. Landfill for non-hazardous and stable non-reactive hazardous waste (SNRHW) including asbestos containing waste;
- S5.4 A(1)(a)(i) Disposal of non-hazardous waste in a facility with a capacity exceeding 50 tonnes per day by biological treatment;
- Section 5.3, Part A(1)(a)(ii) Recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico chemical treatment; and
- Section 5.6, Part A(1)(a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.

The following are listed as directly associated activities:

- Burning of waste as a fuel: Combustion of landfill gas for the purpose of electricity generation;
- Landfill gas flaring: Flaring of landfill gas for disposal in an appliance;
- Effluent discharge to sewer: Discharge of treated leachate to sewer;
- Water discharges to controlled waters: Discharges of site drainage from the landfill;
- Fuel storage: Storage of fuel for operation of plant and equipment;
- Storage of other raw materials including lubricating oils and antifreeze;
- Production and storage of waste oils: Production of waste oil during the operation of the listed activity and subsequent storage; and

- Landfill.

The following Schedule 1 activities are listed as directly associated activity for the waste remediation pad:

- Multipurpose waste treatment and remediation pad: Waste treatment facility;
- S5.3 A(1)(a)(i): Recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment;
- S5.4 A(1)(b)(i): Recovery of non-hazardous waste soils with a capacity exceeding 75 tonnes per day involving biological treatment;
- S5.6 A(1)(a): Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.

Legislation

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.

The application to accept stable non-reactive hazardous waste with asbestos waste in the same cell was considered to satisfy the Landfill Directive when read with the Environmental Permitting Regulation (2016) interpretation of the directive (schedule 10 paragraph 7(h)).

All applicable European directives have been considered in the determination of the application.

The site

There are no changes to the site boundary as a result of this variation. The new waste types will be deposited within an existing monocell that was previously used for asbestos waste only.

Stability Risk Assessment (SRA)

Due to the acceptance of the new waste types into the monocell that had previously been for asbestos only and the unusual height of the walls at Treactti (38 meters), the applicant was asked to submitted a revised SRA as part of the variation in order to assess the impact in wall stability as a result of accepting new wastes to the cell.

The SRA also outlined the operator's reasons for why they believe that the inclinometers are no longer required, and their proposal for an alternative method of surveying the wall stability, and outlined the method of the technique in sections 5.3 and 5.4.

The SRA was reviewed by NRW's Geoscience team. The Geoscience team noted a few points with regards to SRA which mostly involve the removal of the inclinometers which would help confirm the modelling predictions of adding new waste types to the cell.

While the inclinometers are recommended they are not essential as the applicant has proposed an alternative monitoring system that will be able to assess wall stability (but would not be able to observe what is occurring lower down in the wall) and has been considered satisfactory enough to use instead of the inclinometers.

A copy of the SRA can be found on the public register.

Biodiversity, Heritage, Landscape and Nature Conservation

As there are no expected changes to emissions to air or water and no changes to emission limit values, we conclude that there should be no changes to impacts to the designated sites.

Environmental Risk Assessment

Air

There are no changes to the permit that would result in a change to emission to air at the site as a result of this variation.

Emission limits

There are no changes to emissions limits to air on the permit as a result of this variation.

Water

This variation will change the discharge of leachate from the asbestos (SNRHW) monocell. The leachate from the SNRHW which had previously been discharged to surface water will now be treated at the leachate treatment plant prior to discharge to sewer.

The review of the leachate had predicted, using the highest predicted concentration, that there could be an increase in copper, zinc and sulphur, that could lead to a potential exceedance over the consent limit in the trade effluent consent prior to treatment. However the leachate from the monocell will be diluted with water extracted from the non-hazardous monocell, This would be enough dilution to lower the concentration of copper, zinc and sulphur to below the sewer discharge limits and thereby meet the requirements of that consent.

We have assessed this and agree that it is satisfactory to meet the limits for leachate set out in the landfill directory and the limits set in the sewer undertakers consent for discharge to sewer.

Based upon the information in the application, we are satisfied that the appropriate measures will be in place to prevent pollution of ground and surface water.

The operator maintains CCTV of the pipe to observe for any leakage that may occur and have measures in place to inform DCWW of any leakage that occurs.

Emission Limits

We have decided that emission limits should be set for the parameters listed in the permit.

The discharge to sewer is under the consent between the operator (Biffa Waste Services Limited) and the sewer undertaker (Dwr Cymru Welsh Water). The applicant has stated that the operator will be able to meet the emission limits that are already present in the sewer consent.

Odour

The applicant and operator had stated that the variation for the new activity would not lead to an increase in odour from the site. We have agreed with this statement.

Noise

The applicant and operator had stated that the variation for the new activity would not make any changes to the noise impact from the site. We have agreed with this statement.

Fugitive Emissions

Based upon the information in the application we are satisfied that the appropriate measures will be in place to prevent or where that is not practicable to minimise fugitive emissions and to prevent pollution from fugitive emissions.

Monitoring

We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods detailed and to the frequencies specified.

Due to the new waste types increasing the metal loadings and other hazardous substances, the leachate from the monocell will be treated at the leachate treatment plant prior to discharge to sewer. The leachate from this cell will no longer be discharged to surface water. As such we have removed the discharge point 81702014 from Table S3.3 as water and leachate from this cell will be treated at the leachate treatment plant.

We have also amended table S3.4 to include the spot sample monitoring for discharge to sewer. This was to ensure that the operator monitors for any asbestos fibres going to sewer. All other parameters Chemical oxygen demand, metal limits and pH have limits set under the operators trade effluent consent with Dŵr Cymru, TE456.

We have allowed the removal of inclinometers as part of the permit variation. The applicant had requested their removal when request for information was made during duly making stage. The applicant had stated that the monitoring for the inclinometers were not a requirement and at least one of the original 3 that were used is no longer working due to damage and that only inclinometers 2 remains operational. A proposal for an alternative monitoring to assess the monocell wall deformation was proposed in the revised HRA (Sections 5.3 and 5.4) and supporting statement.

The applicant in the revised SRA report have proposed an alternative, surveillance based method of monitoring the wall stability during each bund lift to replace the use of inclinometers.

While it is preferred that the inclinometers to be included in order to monitor the wall for any bulging, their presence are not required in order to maintain the standard requirements for a landfill. The operator has proposed an alternative survey based monitoring which has been considered satisfactory. As such we have removed the requirements for inclinometers from the permit at the request of the operator on the basis that they continue to report the survey based method as outlined in their proposal every 6 months and/or when a new bund is present.

Reporting

We have specified reporting in the permit.

We have removed the requirements to report the inclinometer data at the request of the operator. The operator will continue to report wall stability using alternative methods outlined. The operator are to continue to report the wall stability using the survey methods proposed.

Operating techniques

The application has been integrated into the operating techniques as discussed in the section incorporating the application of this document.

The applicant has also submitted, as part of a schedule 5 request, a copy of the site specific work instruction for the waste acceptance at the site including pre-acceptance

procedure and waste acceptance procedure for both asbestos and stable non-reactive hazardous waste. This has been integrated into the operating technique Table S1.2. There are no other changes to operating techniques at the site.

The permit conditions

Amendment to permit

We have amended table S4.1 which previously referenced the wrong condition (3.5.1) with regards to monitoring but now amended to 3.3.1. Condition 3.5.1 been the condition for monitoring for permit version V008 but the condition was renumbered 3.3.1 in V009 but Table S4.1 was not amended and still referenced condition 3.5.1 (which is now for noise and vibration). As such we have amended Table S4.1 to now reference the correct condition for monitoring (3.3.1).

We have also added new conditions into the permit. 2.3.3 and 2.3.4. following the implantation of the circular economy. The conditions are shown below:

- 2.3.3 Waste paper, metal, plastic or glass that has been separately collected for the purpose of preparing for re-use or recycling shall not be accepted. Waste from the treatment of these separately collected wastes shall only be accepted if landfilling delivers the best environmental outcome in accordance with regulation 12 of the Waste (England and Wales) Regulations 2011.
- 2.3.4 Separately collected fractions other than those listed in condition 2.3.3 shall not be accepted unless they are unsuitable for recovery by recycling.

The operator has agreed to these amendments.

Raw materials

There are no changes to the raw material and fuel used.

Waste types

We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.

This will include the new waste types which are classified as stable non-reactive hazardous wastes (SNRHW) that parallel the wastes acetated in the non-hazardous waste cell. These are to be added to the SNRHW monocell that had been previously designated for asbestos only waste. The operator will continue accept asbestos containing waste to the monocell as confirmed by the applicant.

We are satisfied that the operator can accept these wastes for the following reasons:

- Site will meet the waste acceptance criteria for stable non-reactive hazardous waste;
- The leachate will now be treated at the on-site leachate treatment plant prior to discharge to sewer and will no longer be discharge to surface water;
- Wastes are of a similar type already accepted for the non-hazardous monocell;
- Filling of the waste cell shall continue as already outlined in the operating manual for the site;
- No biodegradable waste is to put into the SNRHW / asbestos monocell;
- The Biffa Waste Services Limited operates another site, Redhill landfill in England (permit number EPR/BU8126IY/V018) which contains a SNRHW cell that also accepts the asbestos waste codes that are present in Table S2.4 and 35 of the 47 proposed new waste code for Trecatti;
- Activity is allowed under the Landfill Directive when read in conjunction with Environmental Permitting Regulation 2016 schedule 10 paragraph 7(h); and
- The Technical Competent Manager has appropriate WAMITAB qualifications to handle hazardous Waste.

We made these decisions with respect to waste types in accordance with the Landfill Directive.

Incorporating the application

We have specified that the applicant must operate the permit in accordance with descriptions in the application, including all additional information received as part of the determination process.

These descriptions are specified in the Operating Techniques table S1.2 in the permit. The sections that have been incorporated are the treatment techniques for the leachate from the SNRHW monocell and the proposed alternative monitoring methods outlined in both the supporting statement and SRA that will be implanted in place of the inclinometer monitoring.

Environment management system

There is no known reason to consider that the operator will not have the management systems to enable it to comply with the permit conditions. The decision was taken in accordance with RGN 5 on Operator Competence.

Technical competence

The operator is a member of an agreed scheme.

Financial provision

As part of the variation the applicant had assessed the implications of the new waste of financial provisions.

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

The financial provision arrangements satisfy the financial provisions criteria.

OPRA

The OPRA score at permit issue is 262.