

## Environment Agency permitting decisions

### Environment Agency initiated variation

We have decided to issue an Environment Agency initiated variation for Pilsworth South Landfill Site operated by Viridor Waste Management Limited.

The variation number is [EPR/BS7951IB/V011](#)

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.

This Environment Agency has a duty, under the Environmental Permitting (England and Wales) Regulations 2010, regulation 34(1), to periodically review permits. As a result of that review we have identified a number of necessary changes we must make to your permit to reflect current legislation and best practice. These changes principally relate to:

- The addition of a standard condition for landfill gas management at landfills that accept biodegradable waste;
- A change to the hydrogeological risk assessment condition so that reviews are undertaken every 6 years rather than every 4 years;
- Standard leachate and groundwater quality monitoring tables (schedule 3); and
- A standard reporting table (schedule 4)

We also aim:

- Consolidate permits - all variations to your permit will be brought together in to one permit so the requirements will be clearer.
- We will formalise changes to monitoring requirements and compliance limits where we have agreed them in writing, for example as the result of a hydrogeological risk assessment review.
- Waste acceptance rules will reflect the Landfill Directive and governments' waste strategies.
- We will implement the Industrial Emissions Directive (IED) and other regulatory changes.
- We will include permit conditions to implement the statutory requirements of the Waste Framework Directive, for example to reflect the requirements of the waste hierarchy.

Site specific issues which result in a change to the current template will also be addressed, for example incorporating completed improvement conditions into the permit and removing inconsistencies.

Other changes may relate to a specific permit or amendments to monitoring requirements or emission limits which have been agreed with the Environment Agency but not incorporated into the permit.

## Purpose of this document

This decision document:

- explains how the Environment Agency initiated variation has been determined
- provides a record of the decision-making process
- shows how all relevant factors have been taken into account

## Structure of this document

### Annex 1: decision checklist

This document should be read in conjunction with the agreed Environment Agency variation request form and permit/ notice.

Aspect considered	Justification / Detail	Criteria met
		Yes
<b>The facility</b>		
The regulated facility	<p>The extent/nature of the facilities taking place at the site required clarification.</p> <p>The decision on the facility was taken in accordance with RGN2 Understanding the meaning of regulated facility</p> <p>The regulated facility is an installation which comprises the following activities listed in Part 2 of Schedule 1 to the Environmental Permitting Regulations and the following directly associated activities.</p> <ul style="list-style-type: none"> <li>• Section 5.2 Part A(1) (a) , The disposal of waste in a landfill - Landfill for non-hazardous waste and landfill restoration</li> <li>• Section 5.2 Part A(1) (a) , The disposal of waste in a landfill - Landfill for Hazardous Waste (Asbestos)</li> </ul> <p>DAAs</p> <ul style="list-style-type: none"> <li>• Temporary storage of landfill leachate</li> <li>• Flaring of landfill gas for disposal in an appliance.</li> <li>• Discharges of site drainage from the landfill.</li> <li>• Storage of fuel for operation of plant and equipment.</li> </ul> <p>The regulated facility also includes waste operations at which the following recovery and disposal operations will be undertaken.</p> <ul style="list-style-type: none"> <li>• D9: Physico-chemical treatment not specified</li> </ul>	✓

Aspect considered	Justification / Detail	Criteria met Yes
	<p>elsewhere in Annex IIA which results in final compounds or mixtures which are discarded by means of any of the operations numbered D1 to D8 and D10 to D12</p> <ul style="list-style-type: none"> <li>• D14: Repackaging prior to submission to any of the operations numbered D1 to D13</li> <li>• D15: Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)</li> <li>• R3: Recycling / reclamation of organic substances which are not used as solvents</li> <li>• R4s: Recycling / reclamation of metals and metal compounds</li> <li>• R5s: Recycling / reclamation of other inorganic compounds</li> <li>• R13s: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)</li> </ul> <p>Note: A9 activity (Incinerator Bottom Ash and Hardcore Waste Storage and Treatment operation) is now limited to the treatment capacity of less than 75 tonnes/day in order to comply with the revised EPR2010 for treatment of slags and ashes. The activity will become a listed activity if treatment capacity exceeds 75 tonnes per day.</p> <p>A7 activity (Temporary Green Waste Shredding Facility) – the operator had requested that this activity was removed from the permit because of the time limitation imposed under the limit of activities. However we are unable to do so as part of this permit review because a partial surrender application is required to remove the activity from the permit.</p>	
<b>European Directives</b>		
Applicable directives	All applicable European directives have been considered in the determination of the Environment Agency initiated variation.	✓
<b>The permit conditions</b>		
Updating permit	We have updated previous permit conditions to those in the new generic permit template as part of permit	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
<p>conditions during consolidation.</p>	<p>consolidation. The new conditions have the same meaning as those in the previous permit(s).</p> <p>The operator has agreed that the new conditions are acceptable.</p> <p>Certain template conditions have been amended to reflect current best practice. These changes have been developed in consultation with industry having regard to the relevant legislation as follows:</p> <p>Condition 1.5 Generic condition added to reflect the requirements of the Waste Framework Directive</p> <p>2.7.1(a). We have added reference to a specific table to clarify what wastes are permitted at which permitted activity.</p> <p>2.7.2. Added to allow the receipt of liquid waste for treatment in a leachate treatment plant (a separate activity or DAA), where necessary.</p> <p>2.7.3. Added to separately identify the waste types and quantities that can be accepted for restoration. While part of the landfill activity, the waste types and quantities need to be separately identified to confirm they are appropriate for use.</p> <p>2.10. Revised gas management condition imposed for all landfills that accept biodegradable to ensure compliance with the relevant requirements of the Landfill Directive.</p> <p>3.1.1. Generic condition imposed on all activities to simplify the sub-conditions. This avoids the need for additional sub-conditions that refer to compliance limits in individual tables in schedule 3</p> <p>3.1.4 – 3.1.5. Revised conditions to reflect the terminology used by the Groundwater Directive and to require hydrogeological risk assessment reviews every 6 years rather than every 4 years.</p> <p>Two sub-conditions that referred to limits in specific tables</p>	

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>in schedule 3 deleted as they are now covered by 3.1.1.</p> <p>3.6 Revised generic pests condition imposed on all activities.</p> <p>4.2.2. Amended to ensure that information on ‘annual production/ treatment’ (Schedule 4, Table S4.2) is provided in February each year where annual reports may be submitted at other times of the year. This includes data on landfill gas collection that must be reported to government by April each year.</p> <p>4.2.2(a) Text expanded to clarify the details we require in an annual report.</p> <p>4.2.2(h) New condition requiring annual submission of a plan of monitoring and extraction locations with reference to monitoring tables in Schedule 3.</p> <p>Schedule 1, table S1.1. Amended description to the landfill activity to clarify that this includes restoration. Activity references amended to reflect changes introduced by Industrial Emissions Directive (2010/75/EU).</p> <p>Leachate storage moved from a specified activity to a Directly Associated Activity.</p> <p>Table S1.3. Amended to clarify that restoration is a separate part of the landfill activity unrelated to landfill cover.</p> <p>Schedule 2. Template list of appropriate waste added for landfills for hazardous and non-hazardous waste. Waste types prohibited by the Landfill Directive have been removed for clarity.</p> <p>Schedule 3. Monitoring and compliance tables have been re-ordered so that those with compliance limits appear first. Standard monitoring frequency and parameters have been included for certain routine monitoring requirements.</p>	

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>Table S3.7 Specific requirements for monitoring asbestos fibres added, where necessary.</p> <p>Schedule 4, table S4.1. Amended to only require regular reports of information that relate to compliance limits.</p> <p>Table S4.2 Additional details of landfill gas extracted required to improve climate change data quality.</p> <p>Table S4.3. Amended to include natural gas as an energy source for consistency with other sectors.</p> <p>Schedule 6. Definitions added to clarify meaning of:</p> <ul style="list-style-type: none"> <li>• Inert waste</li> <li>• Exceeded</li> <li>• Hazardous substance</li> <li>• Medicinal product</li> <li>• Previous year</li> <li>• Waste acceptance criteria</li> <li>• Waste acceptance procedure</li> </ul> <p>See also Schedule 1 in the reviewed permit.</p>	
Waste types	<p>We have specified the permitted waste types, descriptions and quantities, which can be accepted at the regulated facility.</p> <p>We are satisfied that the operator can accept these waste for the following reasons:</p> <p>The permitted waste codes are standard list of wastes for non-hazardous landfill and asbestos cell.</p> <p>The following waste codes have been excluded from table S2.1 as part of Agency Initiated Variation:</p> <ul style="list-style-type: none"> <li>• EWC codes 16 05 09, 16 06 04, 16 06 05 and 20 01 34.</li> </ul> <p>We have excluded the wastes for the following reasons:</p> <ul style="list-style-type: none"> <li>• To comply with the requirements of Landfill Directive on explosive, corrosive, oxidising, highly flammable and flammable wastes – 16 05 09.</li> <li>• landfill is not the best option as there is a readily</li> </ul>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>available alternative management route (16 06 04, 16 06 05 and 20 01 34).</p> <p>We made these decisions with respect to waste types in accordance with Landfill Directive and Waste Framework Directive.</p>	
Pre-operational conditions	<p>We consider that we need to impose pre-operational conditions.</p> <p>We have not imposed additional pre-operational conditions as part of this permit review. However we have removed PO4 from the permit as this condition has been completed.</p> <p>The operator submitted a report (PS-PLFG-2014) to the Environment Agency to discharge PO1 on 16 May 2014. This condition required the operator to review and provide control and emission limits for Methane and Carbon Dioxide. However, the report was produced to comply with the Industry Code of Practice on the management of landfill gas ('ICoP') and the appropriate fee was not submitted for this work to be completed. Hence PO1 has been retained in the permit.</p>	✓
Improvement conditions	<p>We consider that we need to impose improvement conditions.</p> <p>We have imposed improvement condition, IP4, to ensure that an approved restoration plan is in place for the site.</p> <p>IP1 has been reworded to require 'as built' drawings of all completed landfill infrastructure. This is because the permit already requires that any engineering work is agreed with the EA prior to construction. The amended condition will ensure that updated plans of new leachate extraction and monitoring points are submitted to Environment Agency.</p> <p>The existing improvement conditions IP3 &amp; IP4 are renumbered to IP2 &amp; IP3 respectively. Other improvement conditions imposed in previous variations have been completed and removed from the permit.</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>We have retained IP2 &amp; IP3 in the permit because there is no evidence that they have been fully complied with. The Compliance Assessment Form, PA/021109/50437/PB17, provided by the operator showed that a report submitted in relation to IP2 was assessed by the Environment Agency. Control level and compliance limit for methane was accepted. However, control level and compliance limit for carbon dioxide was not accepted. It was noted in the CAR form that <i>“the proposed CO2 control and trigger figures exceed the maximum figures prior to landfill of 8.2%, further comment is sought on whether this is believed to be influenced by gas migration occurring in the PS009GM area and influencing PS008GM.”</i> There is no evidence to suggest that this requirement has been met. Hence we have retained IP2 and IP3 in the permit until fully discharged. IP2 is amended to require only control and emission limit for carbon dioxide and control and compliance limit for methane have been agreed for PS008GM.</p> <p>The operator submitted a report (PS-PLFG-2014) to the Environment Agency to discharge IP2 and IP3 on 16 May 2014. These conditions required the operator to review and provide control and emission limits for Methane and Carbon Dioxide. However, the report was produced to comply with the Industry Code of Practice on the management of landfill gas(‘ICoP’) and the appropriate fee was not submitted for this work to be completed. Hence IP2 and IP3 have been retained in the permit.</p>	
Operating techniques	<p>We have specified that the operator must operate the permit in accordance with referenced operating techniques.</p> <p>The operating techniques for the facility have not been revised as a result of this variation application.</p>	✓
Emission limits	<p>We have decided that emission limits should be set for the parameters listed in the permit.</p> <p>The emission limits for the facility have not been revised as a result of this variation application.</p>	✓
Monitoring	<p>We have decided that monitoring should be carried out for the parameters listed in the permit, using the methods</p>	✓

Aspect considered	Justification / Detail	Criteria met
		Yes
	<p>detailed and to the frequencies specified.</p> <p>Standard monitoring tables for groundwater, leachate and surface water have been added as a result of Environment Agency initiated variation.</p> <p>These monitoring requirements have been imposed in order to simplify the monitoring requirements for the operator in line with our regulatory position statement on landfill monitoring and reporting standards.</p> <p>Groundwater Monitoring requirement, Table S3.9 – It was identified during the review that table S3.9 has reduced monitoring parameters for Coal Measures Aquifer. This was found to be the result of the HRA review in 2009 (see decision document for EPR/BS7951IB/V006) which indicated that the aquifer of concern is the superficial Sands and Gravels Aquifer rather than the underlying Coal Measures.</p>	
Reporting	<p>We have specified reporting in the permit.</p> <p>Standard table S4.1 has been added as a result of the permit review.</p> <p>Groundwater reporting frequency has been changed from monthly to quarterly.</p> <p>In Schedule 5 of the permit, we specified 5 days notification period for leachate level breaches. It was agreed that all Viridor landfill permits should have 5 days to report high leachate heads rather than the normal 1 day.</p>	✓
<b>Operator Competence</b>		
Environment management system	<p>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.</p>	✓