

Variation of a PPC Landfill Permit under the Pollution Prevention and Control (England and Wales) Regulations 2000 (SI 2000 No.1973) and the Landfill (England and Wales) Regulations 2002 (SI 2002 No. 1559)

Amended Decision Document recording the decision-making process

Administrative details

Permit number (the "Permit")	BV7273
Variation number	YP3835MJ
Applicant (the "Applicant")	AD Waste Limited
Address/location of Installation (the "Installation")	Brookhill landfill site Pinfold Industrial Estate Buckley Flintshire CH7 3PL
Name of Account Officer	Miriam Townshend
Signature of Account Officer:	
Name of Authorising Officer	Martin Jenkins
Signature of Authorising Officer:	
Variation issue date	7th March 2007

All relevant documents have been sent to the IPPC Public Registers

The above permit has been varied by the Environment Agency. The original technical decisions summarised in the body of this document have been revisited. Where they have, the explanation is included in Annex 1 to this Decision Document.

The varied permit is based on our standard Landfill PPC Permit template (version dated 19/02/2007). We developed these conditions in consultation with the waste management industry having regard to the legal requirements of the PPC Regulations, the Landfill Regulations and other relevant legislation.

Annex 1 details any changes to the original decisions made. It does not include an explanation for the standard conditions. These have been imposed on the basis that we have considered the application and accepted the details are sufficient and satisfactory to control that aspect of the operation.

The structure of the varied permit is slightly different than the original permit issued. The revised format has been developed on the basis of experience gained since 2000 of permitting landfills under the PPC regime, discussion with industry and the outcome of appeals against permit conditions.

Annex 1

The following parts of the application were reviewed during the variation.

Part C - Operations

Site Protection and Monitoring Programme – condition 2.11

A Site Protection and Monitoring Programme (SPMP) is required for the non-landfill activities where there is a reasonable possibility that they could cause pollution of land. It is considered that the requirement to provide an SPMP was omitted from the permit in error.

Part D – Emissions and Monitoring

D1 Sewers and Surface Water

Emissions to sewer and monitoring

The limits on the emission to sewer have been removed from the variation as the limits set in the permit are a mirror of the Trade Effluent Consent. In order to determine whether emission limits are necessary, the operator is required to carry out an assessment of the impact of the emission on the receiving water in accordance with our H1 guidance. The results of the assessment will determine whether or not emission limits are required. If they are, then a further variation will be necessary to set these limits.

Improvement conditions

Reference in Permit	Requirement	Date	Justification
Table S1.3 Ref 6	The operator shall carry out an assessment of the impact of the emissions from the leachate treatment plant into the sewer on the receiving water in accordance with IPPC H1 Environmental Assessment and Appraisal of BAT, Environment Agency, 2002 and shall submit a written report to the Agency.	30/09/2007	See above.

Emissions to surface water and monitoring

As a result of compliance with an Improvement Condition the table regarding discharge to surface water has been populated with discharge point, parameters, frequency of monitoring and emission limits as agreed with the operator.

Table S4.3 Point source emissions to water (other than sewer) – emission limits and monitoring requirements						
Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
P2 As shown on drawing reference 1742.SWM.06	Ammoniacal nitrogen	Drainage from the site	1.6 mg/l	Spot sample	monthly	To be agreed with the Agency in writing
	COD		100 mg/l			
	Chloride		250 mg/l			
	pH		>6 < 9 pH units			
	Suspended Solids		100 mg/l			

D2 – Groundwater

Emissions to groundwater and monitoring

Trigger levels (table S4.4) have not been set for boreholes GW1, GW5 and GW6 as these are upgradient groundwater monitoring points.

Groundwater monitoring data has shown that there is contamination present in the groundwater. A review of the Hydrogeological Risk Assessment submitted with the application together with discussion with the operator regarding the monitoring facilities has shown that there is concern that the hydrogeological conceptual model used in the HRA does not represent the actual hydrogeological regime. Therefore, further Improvement Conditions have been included within the variation in order to address this discrepancy and to obtain accurate information in order to determine the groundwater conditions. Some of this work is already being progressed by the operator.

Improvement conditions

Reference in Permit	Requirement	Date	Justification
Table S1.3 Ref 1	The operator shall submit a written report to the Agency for approval that details an assessment of the provision of groundwater monitoring boreholes against the requirements of LFTGN02 (Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water, Environment Agency, February 2003) and includes proposals for additional groundwater monitoring boreholes, where appropriate, and time-scales for their construction.	30/06/2007	The operator was required to install additional groundwater monitoring boreholes but this improvement condition was not complied with. The requirement has been amended to review the provision of boreholes against the requirements of our guidance. This review will also require the operator to assess the suitability of the existing boreholes in terms of their construction and the groundwater horizon that is being monitored. Where boreholes are inadequate or are there are not enough of them, the operator is required to submit proposals for additional monitoring boreholes.
Table S1.3 Ref 2	The operator shall submit a report in writing to the Agency for approval that details a review of the groundwater quality monitoring data in all boreholes on site and the trigger levels in the down-gradient boreholes GW2, GW3 and GW4. This should include data from all boreholes since operations commenced, including collation of baseline data. The report shall include revised trigger levels, where appropriate, for boreholes GW2, GW3 and GW4 and any additional boreholes which shall be set in accordance with LFTGN01 Hydrogeological Risk Assessments for Landfills, Environment Agency, March 2003.	30/09/2007	The operator was required to review trigger levels in boreholes, but this was not done. As part of the review of the hydrogeological conditions we are requiring the operator to assess all the groundwater monitoring data and to revise trigger levels in accordance with our guidance. This review, together with the review of the monitoring facilities should provide information from which the hydrogeological conditions can be determined.

D3 Leachate

Leachate levels and monitoring

As part of the review of the hydrogeological regime and the impact of the landfill on the groundwater, a review of leachate management is required to determine how effective the current system is. An improvement condition has been included requiring the operator to review leachate management and to provide a water balance assessment in order to determine the quantity of leachate generated. The operator is also required to determine where the leachate level is in relation to the base of the liner.

Improvement conditions

Reference in Permit	Requirement	Date	Justification
Table S1.3 Ref 3	The operator shall submit a report in writing to the Agency for approval that details a review of the leachate management systems at the site. The report shall include a water balance assessment over the site and identify leachate levels in relation to depth to base of the landfill liner.	30/06/2007	See above.

D4 Landfill Gas

Point source emissions to air and monitoring

The emission limit for carbon monoxide from the flare has been reduced from 100 mg/m³ to 50 mg/m³ (table S4.2) in accordance with our guidance for flares commissioned after 31/12/2003.