

Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2007

Brookhill Landfill Site

A D Waste Limited
Brookhill Way
Pinfold Industrial Estate
Buckley
Flintshire
CH7 3PL

Variation notice number
EA/EPR/BV7273IQ/V005

Permit number
BV7273

Brookhill Landfill Site

Permit Number BV7273

Introductory note

This introductory note does not form a part of the permit

The following notice, which is issued pursuant to regulation 20 and Part 1 of Schedule 5 of the Environmental Permitting (England and Wales) Regulations S.I.2007 No. 3538 (the Regulations), gives notice of the variation of an environmental permit to operate a regulated facility/facilities.

This variation allows the acceptance and treatment of other non-hazardous leachate originating from other landfill sites operated by the holder of this permit. It also seeks to undertake an administrative change to lower the volume of waste to be accepted at the site given that final pre-settlement contours have been reached and the site with final capping and restoration underway.

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions and Schedule 3 lists any conditions that have been added.

The status of the permit sets out the permitting history, including any changes to the permit reference number.

Status Log of the Permit

Detail	Date	Response Date
Application BV7273	Received 08/10/2003	
Response to request for information	17/10/2003 (email)	20/10/2003
Response to request for information	17/10/2003 (letter)	21/10/2003
Response to request for information	27/02/2004	25/03/2004
Revised drawing ESID2	06/02/2004	17/06/2004
Revised drawing ESID11	13/07/2004	13/07/2004
Permit BV7273 determined	17/08/2004	
Compliance with Improvement Condition – replacement of groundwater boreholes GW2 and GW3		31/05/2005
Compliance with Improvement condition – location of gas flare		06/03/2006
Variation application CP3534LE	12/04/2006	Duly made 02/08/2006
Permit varied YP3835MJ	07/03/2007	
Variation CP3534LE determined	14/02/2008	
Variation application PD3633GF	Received 09/07/2008	Duly made 23/07/2008
Variation EA/EPR/BV7273IQ/V005 (DP3633GF) determined	01/05/2009	

Superseded or Partially Superseded Licences/Authorisations/Consents relating to this installation

Holder	Reference Number	Date of Issue	Fully or Partially Superseded
AD Waste Limited	EAWML/37207	07/09/1997	Fully

End of Introductory Note

Notice of variation

Environmental Permitting
(England and Wales) Regulations 2007

Permit number

BV7273

Variation number

EA/EPR/BV7273/V005

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2007 (SI 2000 No 3538) varies the permit as set out below.

A D Waste Limited ("the operator"),

of/ whose registered office (or principal office) is

5/7 Grosvenor Court

Foregate Street

Chester

Cheshire

CH1 1HG

company registration number **2630477**

holds a permit to operate a regulated facility at

Brookhill Landfill Site

Brookhill Way

Pinfold Industrial Estate

Buckley

Flintshire

CH37 3PL

and that permit is varied to the extent set out in Schedules 1 to 3 of this notice.

Name	Date
 Alison Soper – PPC Team Leader	1 st May 2009

Authorised on behalf of the Agency

Schedule 1 – conditions to be deleted

1. None.

Schedule 2 – conditions to be amended

2. The following conditions are amended as follows:

Schedule 1, Table S1.1:

Table S1.1 Activities		
Activity listed in Schedule 1 of the PPC Regulations	Description of specified activity	Limits of specified activity
Section 5.2 Part A(1) (a) , The disposal of waste in a landfill.	Landfill for non-hazardous waste (landfill classification under the Landfill Regulations 2002)	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in condition 2.8, as an integral part of landfilling.
Section 5.3 Part A(1) (c) (i) , The disposal of non-hazardous waste in a facility with a capacity of more than 50 tonnes per day by biological treatment.	The treatment of non-hazardous leachate in a leachate treatment plant >50 t/day capacity	Leachate arising from the permitted landfill, Standard Landfill reference EAWML/37207, and one other landfill facility operated by this Operator at this Installation not exceeding 150m ³ /day.
Directly Associated Activity		
Leachate management	Including the storage of leachate prior to treatment.	Management of leachate storage.
Leachate discharges to foul sewer	Discharge of treated leachate from the leachate treatment facility	From leachate management system to point of entry to the sewer.
Landfill gas utilisation	Utilisation of landfill gas for energy recovery in an appliance <3 MW rated thermal input	Landfill gas arising from the landfill.
Landfill gas flaring	Flaring of landfill gas for disposal in an appliance.	Landfill gas arising from the landfill.
Water discharges to controlled waters.	Discharges of site drainage from the landfill.	From surface water management system to point of entry to controlled waters.

Schedule 1, Table S1.2:

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application BV7273	The response to questions 1.2, 2.1, 2.2, 2.3, 2.4 and 2.5 in part B of the Application Form	08/10/2003
Letter from Egniol detailing monitoring sections of the application form and amended drawing references	All	21/10/2003
Letter from Egniol detailing clarification on points raised in our letter of 27/02/2004	All	29/03/2004
Revised Drawing ESID 1 1 Revision A Local Hydrogeology and Hydrology – surface water monitoring points added	All	13/07/2004
Revised Drawing ESID 2 Revision B Environmental Site Setting – legend changed to include installation boundary	All	Dated 06/02/2004, received 17/06/2004
Compliance with Improvement Condition – replacement of groundwater boreholes GW2 and GW3	All	31/05/2005
Compliance with Improvement Condition – location of gas flare	All	06/03/2006
Application CP3534LE	All - except drawing reference 1843.SETT.02	12/04/2006
Letter from Egniol with revised drawing reference 2127.SETT.01	All	03/07/2007
Application DP3633GF	All	09/07/08

Schedule 1, Table S1.3:

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
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.	Completed
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.	Completed
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.	Completed
4.	The operator shall submit a written report to the Agency for approval that includes proposals for landfill gas utilisation, including the location and specification of the gas utilisation plant, a report of the impact of emissions from the gas utilisation plant on air quality and the timescale for installation of the gas utilisation plant.	Completed
5.	The operator shall review the results of landfill gas monitoring in boreholes 20 and 21 and shall submit a report to the Agency for approval detailing the results of the review together with proposed trigger levels for methane and carbon dioxide for boreholes 20 and 21.	Completed
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.	Completed
7.	The operator shall carry out an assessment of the pollution prevention measures and secondary containment of the leachate treatment plant delivery area. A written report comparing the current pollution prevention methods and infrastructure of the site to that required by best practice that identifies areas where improvements are required together with timescales for implementation shall be submitted to the Environment Agency for approval.	30/10/09

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
8.	The operator must install adequate leachate monitoring wells in accordance with the requirements of Guidance for the Landfill Sector, Technical Requirements of the Landfill Directive and Integrated Pollution Prevention and Control (IPPC S5.02). On installation these must be monitored on a monthly basis as a minimum in accordance with Table S4.1 of the Permit.	30/10/09

Schedule 1, Table S1.4:

Table S1.4 Annual waste input limits

Category	Limit Tonnes/ Year
Non-hazardous waste	50,000
Inert waste	20,000

Schedule 4, Table S4.5:

Table S4.5 Landfill gas in external monitoring boreholes – limits and monitoring requirements

Monitoring point Ref. /description	Parameter	Limit (including units) *	Monitoring frequency	Monitoring standard or method
BH1, BH3, BH4, BH5, BH6, BH7, BH10, BH11, BH12, BH13, BH14, BH15, BH16, BH17, BH19, BH23, BH24, BH25	Methane	1%	Weekly	To be agreed with the Agency in writing.
	Oxygen	No limit set		
BH8	Methane	32.2%	Weekly	To be agreed with the Agency in writing.
	Carbon dioxide	3.6%		
	Oxygen	No limit set		
BH9	Methane	29.6%	Weekly	To be agreed with the Agency in writing.
	Carbon dioxide	10.4%		
	Oxygen	No limit set		

Table S4.5 Landfill gas in external monitoring boreholes – limits and monitoring requirements

Monitoring point Ref. /description	Parameter	Limit (including units) *	Monitoring frequency	Monitoring standard or method
BH18A	Methane	3.5%	Weekly	To be agreed with the Agency in writing.
	Carbon dioxide	10%		
	Oxygen	No limit set		
BH1	Carbon dioxide	8.8%	Weekly	To be agreed with the Agency in writing.
BH3	Carbon dioxide	3.1%	Weekly	To be agreed with the Agency in writing.
BH4	Carbon dioxide	5.1%	Weekly	To be agreed with the Agency in writing.
BH5	Carbon dioxide	1.5%	Weekly	To be agreed with the Agency in writing.
BH6	Carbon dioxide	1.5%	Weekly	To be agreed with the Agency in writing.
BH7	Carbon dioxide	10%	Weekly	To be agreed with the Agency in writing.
BH10	Carbon dioxide	3.9 %	Weekly	To be agreed with the Agency in writing.
BH11	Carbon dioxide	6.5%	Weekly	To be agreed with the Agency in writing.
BH12	Carbon dioxide	6.6%	Weekly	To be agreed with the Agency in writing.
BH13	Carbon dioxide	9.4%	Weekly	To be agreed with the Agency in writing.
BH14	Carbon dioxide	3.5%	Weekly	To be agreed with the Agency in writing.
BH15	Carbon dioxide	17.6%	Weekly	To be agreed with the Agency in writing.
BH16	Carbon dioxide	11.4%	Weekly	To be agreed with the Agency in writing.
BH17	Carbon dioxide	12.9%	Weekly	To be agreed with the Agency in writing.
BH19	Carbon dioxide	11.2%	Weekly	To be agreed with the Agency in writing.
BH23	Carbon dioxide	7.3%	Weekly	To be agreed with the Agency in writing.
BH24	Carbon dioxide	1.5%	Weekly	To be agreed with the Agency in writing.
BH25	Carbon dioxide	9.9%	Weekly	To be agreed with the Agency in writing.

* - The limits specified take account of the agreed background concentrations as detailed in section 3 of the Landfill Gas Risk Assessment.

Schedule 4, Table S4.7:

Table S4.7 Landfill gas – other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
In waste monitoring boreholes	Methane	Monthly	To be agreed with the Agency in writing.	Where the Oxygen level exceeds 5% v/v or where the addition of the Carbon Dioxide and Methane percentages is less than 80% an assessment of air ingress into the system shall be undertaken. Where the concentration of Carbon Monoxide exceeds 100ppm further investigation shall be undertaken.
	Carbon Dioxide			
	Oxygen			
	Carbon Monoxide			
	Differential Pressure			
	Gas Flow Rate or Suction			
	Meteorological Data			
Input to flare	Trace gas analysis	Annually	In accordance with LFTGN04 Guidance for monitoring trace components in landfill gas, Environment Agency, September 2004	None
	Parameters in accordance with LFTGN04 Guidance for monitoring trace components in landfill gas, Environment Agency, September 2004			

Schedule 4, Table S4.9:

Table S4.9 Groundwater – other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
GW1, GW2, GW3, GW4, GW5, GW6, GW7, GW8	pH, dissolved oxygen, ammoniacal nitrogen, electrical conductivity, chloride	Monthly	To be agreed with the Agency in writing	None
GW1, GW2, GW3, GW4, GW5, GW6, GW7, GW8	Calcium, cadmium, chromium, copper, iron, magnesium, manganese, nickel, lead, zinc, COD, sulphate, TON, potassium, sodium, TOC, alkalinity	Quarterly	To be agreed with the Agency in writing	None
GW1, GW2, GW3, GW4, GW5, GW6, GW7, GW8	List 1 Suite	Annually	In accordance with Appendix 6 of LFTGN01 Hydrogeological Risk Assessments for Landfills, Environment Agency, March 2003	None

Schedule 4, Table S4.10:

Table S4.10 Particulate matter in ambient air - limits and monitoring requirements					
Monitoring Point Ref. /Description	Parameter	Limit (Including Unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Dust 1 – mobile (location determined by operations), Dust 2 – Oak Cottages/Oaks Farm Dust 3- Catteralls/Pinfold Industrial Estates	Gross dust deposition rate	200 mg/m ² /day	monthly average	Quarterly	To be agreed with the Agency in writing

Condition 3.1.1:

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 4 tables S4.2, S4.3, and S4.11.

Schedule 3 – conditions to be added

3. All the following permit conditions and schedules are added to the permit.

Schedule 4, Table S4.11:

Table S4.11 Point source emission to sewer			
Emission point description	reference	or Source	Sewer
S1 Effluent discharge of treated leachate		Leachate treatment plant	Welsh Water public sewer