

Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2007

Kilsby Landfill Site

Grove Farm
Daventry Road
Kilsby
Northamptonshire
CV23 8XF

Variation notice number
BP3895NX

Permit number
70583

Kilsby Landfill Site Permit Number 70583

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. 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 variation is to introduce the closure requirements of the Landfill Directive by referring to the closure plan dated April 2007 where appropriate, and amending or deleting conditions accordingly.

Status Log of the permit

| Detail | Date | Response Date |
|--|----------|---------------|
| Waste Management Licence issued to Hales Waste Control Limited | 26/07/93 | |
| Modification | 21/04/94 | |
| Modification | 22/08/95 | |
| Modification | 08/06/01 | |
| Modification | 10/10/01 | |
| Transfer to Biffa Waste Services Limited | 11/08/04 | |
| Modification | 18/08/04 | |
| Variation BP3895NX | 04/09/09 | |

Other permits relating to this installation

| Operator | Permit Number | Date of Issue |
|------------------------------------|-------------------------------|---------------|
| RMC Environmental Services Limited | Consent number PRNNF/12671 | 31/03/03 |
| Biffa Waste Services Limited | BX0792IX | 09/01/06 |

End of Introductory Note

**Environmental Permitting
(England and Wales) Regulations 2007**

Permit number
70583

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.

Biffa Waste Services Limited ("the operator"), whose registered office is

Coronation Road, Cressex, High Wycombe, Buckinghamshire, HP12 3TZ

company registration number 00946107

holds a permit to operate a regulated facility at

**Kilsby Landfill Site
Grove Farm
Daventry Road
Kilsby
Northamptonshire
CV23 8XF**

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

The notice shall take effect from 04 September 2009

| Signed | Date |
|---|---------|
|  | 4-09-09 |

Kevin Burton

Authorised to sign on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

1. The following conditions are deleted

1.01, 1.02, 1.03, 1.04, 1.05, 1.06, 1.07, 2.01.1, 2.01.2, 2.02, 2.03, 2.04, 2.05, 2.06, 3.01, 3.02, 3.03, 3.04, 3.05, 3.06, 3.07, 3.08, 3.09, 3.10, 3.11, 3.12, 3.13, 3.14, 3.15, 3.16, 3.17, 3.18, 3.19, 3.20, 3.21, 3.22, 3.23, 3.24, 3.25, 3.26, 3.27, 3.28, 3.29, 3.30, 3.31, 3.32, 3.33, 3.34, 4.01, 4.02, 4.03, 4.04, 4.05,

1.1.1, 1.1.2, 1.2.1, 1.2.2, 1.2.3, 1.2.4, 1.3.1, 1.3.2, 1.3.3, 1.3.4, 1.4.1, 1.4.2, 1.4.3, 1.5.1, 1.6.1, 1.6.2, 1.7.1, 1.7.2, 1.7.3, 1.7.4, 1.7.5, 1.7.6, 1.7.7, 1.7.8, 1.8.1, 1.9, 1.10, 1.11.1, 1.11.2, 2.1.1, 2.1.2, 2.2.1, 2.3.1, 2.3.2, 2.4.1, 2.4.2, 2.4.3, 2.4.4, 2.4.5, 2.4.6, 2.4.7, 2.5.1, 2.5.2, 2.5.3, 2.5.4, 2.5.5, 2.5.6, 2.5.7, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5, 2.6.6, 2.6.7, 2.7.1, 2.7.2, 2.7.3, 2.7.4, 2.7.5, 2.7.6, 2.7.7, 2.8.1, 3.1.1, 3.1.2, 3.1.3, 3.2.1, 4.1.1, 4.1.2, 4.1.3, 4.2.1, 4.2.2, 4.2.3, 4.2.4, 4.3.1, 4.3.2, 4.4.1, 4.4.2, 4.4.3, 4.4.4, 4.5.1, 4.6.1, 4.7.1, 4.8.1, 4.8.2, 4.8.3, 4.8.4, 5.1.1, 5.1.2, 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6, 5.2.7, 5.2.8, 5.2.9, 5.2.10, 5.3.1, 5.3.2, 5.3.3, 5.3.4, 5.3.5, 5.4.1, 5.4.2, 5.4.3, 5.4.4, 5.4.5, 5.4.6, 5.4.7, 5.4.8, 5.4.9, 5.4.10, 5.4.11, 5.5.1, 5.5.2, 5.5.3, 6.1.1, 6.1.2, 6.1.3, 6.2.1, 6.2.2, 6.2.3, 6.3.1, 6.4.1, 6.5.1, 6.5.2, 7.1.1, 7.1.2, 7.2.1, 7.3.1, 7.3.2, 7.4.1, 7.4.2, 7.5.1

Schedule 2 – conditions to be amended

2. The following conditions are amended as follows

None

Schedule 3 – conditions to be added

3. The following conditions are added to the permit

Compliance with the closure plan

- 1.01 The site shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the closure plan dated April 2007 unless otherwise agreed in writing by the Agency.
- 1.02 Within 9 months of the date of issue of this variation the operator shall provide the Agency with:
- A report with proposals for appropriate infrastructure and proposals for managing and monitoring leachate, groundwater and surface water, including plans to identify monitoring infrastructure.
 - A report to demonstrate that infrastructure will be inspected and maintained
- 1.03 Once agreed in writing by the Agency the report shall be incorporated into the closure plan

Availability of permit and closure plan

- 2.01 A copy of this permit and closure plan shall be kept available on site, or at an alternative location agreed in writing with the Agency, for reference when required by all site staff carrying out work under the requirements of the permit.

Understanding of permit and closure plan

- 3.01 All site staff shall be, or shall work under the direct supervision of a member of staff who is, fully conversant with those aspects of the permit conditions and closure plan which are relevant to their specific duties.

Waste acceptance

- 4.01 No waste shall be accepted for disposal at the site. Waste may only be accepted for recovery with the prior written agreement of the Environment Agency.

Site stability

- 5.01 A topographical survey of the site referenced to Ordnance Datum shall be carried out annually.
- 5.02 The topographical survey shall be used to:

- a) Produce a plan of a scale adequate to show the surveyed features of the site.
- b) Record any significant infrastructure movement and uneven surface settlement.

Engineering

- 6.01 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Agency has confirmed that it is satisfied with the construction proposals.
- 6.02 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:
- a) any change to the approved construction proposals would have no impact on the performance on any element of the design; or
 - b) a change has otherwise been agreed in writing by the Agency
- 6.03 The operator shall submit a CQA Validation Report as soon as practicable following the construction of the relevant landfill infrastructure.
- 6.04 For the purposes of condition 6.02, the Agency shall be deemed to be satisfied where it has not, within the period of 4 weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:
- a) confirmed whether or not it is satisfied; or
 - b) informed the operator that it requires further information.

Fugitive emissions of substances

- 7.01 Litter or mud arising from the activities shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been used to prevent or where that is not practicable to minimise the litter and mud.
- 7.02 Litter or mud arising from the activity shall be cleared from affected areas outside the site as soon as practicable.
- 7.03 Fugitive emissions of substances (excluding odour, noise and vibration) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures have been used to prevent or where that is not practicable to minimise those emissions.

8 Odour

8.01 Emissions from the activities shall be free from odour at levels likely to cause annoyance outside the site, as perceived by an authorised officer of the Agency, unless the operator has used appropriate measures to prevent or where that is not practicable to minimise the odours.

Leachate management

9.01 The limits for the level of leachate listed in Table A.1 shall not be exceeded.

Table A.1 Leachate level limits and monitoring requirements

| Monitoring point reference/ Description | Limit | Monitoring frequency | Monitoring method |
|---|-------------------------------------|----------------------|--|
| Leachate monitoring points shown on Drawing 2, Computer Ref K3230700 dated 29.03.07 referenced: | | Monthly | In accordance with Agency Guidance "LFTGN02 - Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water", or as subsequently amended. |
| LMP1, LMP3/1, LMP3/2, LMP3/3, LMP3/4 | No limit | | |
| LMP5/1A, LMP5/2A, LMP7/1, LMP7/2, LMP7/3, LMP8/1, LMP8/2, LMP8/3, LMP9/1, LMP9/2, LMP9/3, LMP10/1, LMP10/2, LMP10/3 | 1 metre above the base of the site | | |
| LMP6/1, LMP6/A, LMP6/1B, LMP61C | 2 metres above the base of the site | | |

Emissions and Monitoring

Emissions to groundwater

10.01 There shall be no emission from the site into groundwater of any substance in List I (as defined by the Groundwater Regulations) contrary to those regulations.

- 10.02 There shall be no emission from the site into groundwater of any substance in List II (as defined in the Groundwater Regulations) so as to cause pollution (as defined in those Regulations).
- 10.03 The trigger levels for emissions into groundwater for the parameter(s) and monitoring point(s) set out in table A.3 below shall not be exceeded.
- 10.04 A review of the Hydrogeological Risk Assessment shall be submitted to the Agency between 9 and 6 months prior to every fourth anniversary of the granting of the permit.

Monitoring

- 10.05 Unless otherwise agreed in writing by the Agency, monitoring as specified in the following tables shall be undertaken. Where specified, limits shall not be exceeded.
- a) Surface water specified in table A.7;
 - b) Leachate specified in Tables A.2;
 - c) Groundwater specified in Tables A.3;
 - d) Landfill gas specified in Tables A.4, A.5 and A.6;
- 10.06 Records shall be maintained of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

Table A.2 Leachate – other monitoring requirements

| Emission point reference or source or description of point of measurement | Parameter | Monitoring frequency | Monitoring standard or method | Other specifications |
|---|--|----------------------|--|----------------------|
| Leachate monitoring points shown on Drawing 2, Computer Ref K3230700 dated 29.03.07 referenced LMP1, LMP3/1, LMP3/2, LMP3/3, LMP3/4, LMP5/1A, LMP6/1, LMP7/1, LMP8/1, LMP9/1, LMP10/1 | pH, Electrical Conductivity, temperature, ammoniacal nitrogen, chloride, total alkalinity, magnesium, potassium, sulphate, calcium, sodium, BOD, COD, TOC, TON, monohydric phenols, Mg, Na, K, Alkalinity, monitoring point base | 6 monthly | In accordance with Agency Guidance "LFTGN02 - Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water", or as subsequently amended. | |
| Leachate monitoring points shown on Drawing 2, Computer Ref K3230700 dated 29.03.07 referenced LMP1, LMP3/1, LMP3/2, LMP3/3, LMP3/4, LMP5/1A, LMP6/1, LMP7/1, LMP8/1, LMP9/1, LMP10/1 | Manganese, Iron, Chromium, Copper, Lead Zinc, Nickel, Cadmium, arsenic, cyanide (total), Beryllium, selenium, sulphide, List 1 screen | Annually | In accordance with Agency Guidance "LFTGN02 - Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water", or as subsequently amended. | |

Table A.3 Trigger levels for emissions into groundwater and monitoring requirements

| Monitoring point reference | Parameter | Limit (including unit) | Monitoring frequency | Monitoring standard or method |
|--|---|---|----------------------|--|
| Groundwater monitoring points shown on Drawing 2, Computer Ref K3230700 dated 29.03.07 referenced BH02, BH3L, BH3S, BH04, BHM/05, BHQ/06, BH7L, BH7S, BHS/08, BH09, BH10L, BH10S, BH11, BH12, BH14L, BH14S | Level, pH, electrical Conductivity, DO Ammoniacal nitrogen, Chloride, Nitrate, TON, TOC, COD, BOD, Sulphate, Total Alkalinity (as CaCO ₃ at pH4.5), Na, K, Ca, Mg, Fe, Mn, Pb, Ni, Cu, Cr, Cd, Zn, As, Phosphate, Monohydric Phenols | In accordance with Table 5 of the Closure plan "Groundwater Control and Trigger Levels" | Quarterly | In accordance with Agency Guidance "LFTGN02 - Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water", or as subsequently amended. |
| Groundwater monitoring points shown on Drawing 2, Computer Ref K3230700 dated 29.03.07 referenced BH02, BH3L, BH3S, BH04, BHM/05, BHQ/06, BH7L, BH7S, BHS/08, BH09, BH10L, BH10S, BH11, BH12, BH14L, BH14S | List 1 | | Annually | In accordance with Agency Guidance "LFTGN02 - Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water", or as subsequently amended. |

Table A.4 Landfill gas in external monitoring boreholes – limits and monitoring requirements

| Monitoring point Ref. /description | Parameter | Limit (including units) | Monitoring frequency | Monitoring standard or method |
|--|-----------------------|---|----------------------|---|
| Gas monitoring points shown on Drawing 2, Computer Ref K3230700 dated 29.03.07 referenced BH02, BH3L, BH3S, BHM/05 (90901070, 90902050), BHN, BHP (90901091, 90901092, 90901093, 90901094) BHQ/06 (90901101, 90901102, 90902060), BHR (90901111, 90901112, 90901113, 90901114), BHRA (90901121, 90901122), BHS/08 (90901131, 90902080), BHSA (90901141, 90901142), BHV, BHT, BHA, BHC, BHD | Methane | 1 %v/v | Monthly | In accordance with Agency Guidance "LFTGN03- Guidance on the management of landfill gas" or as subsequently amended |
| | Carbon Dioxide | 1.5%v/v above background levels which shall be agreed in writing with the Agency within 12 months of the date of this variation | | |
| | Oxygen | no limit | | |
| | Atmospheric pressure | no limit | | |
| | Differential Pressure | no limit | | |
| | Temperature | no limit | | |
| | Meteorological data | no limit | | |

Table A.5 Landfill gas – in waste monitoring requirements

| Monitoring point Ref. /description | Parameter | Monitoring frequency | Monitoring Standard or method |
|--|-------------------------------------|-------------------------------------|---|
| In waste monitoring points as specified on Drawing 3, computer ref K3230600 dated 29.03.07 | Methane Carbon Dioxide Oxygen | In accordance with the closure plan | In accordance with Agency Guidance "LFTGN03- Guidance on the management of landfill gas" or as subsequently amended |

Table A.6 Landfill gas from capped surfaces - monitoring requirements

| Monitoring point Ref./description | Parameter | Monitoring frequency | Other specifications | Monitoring standard or method |
|-----------------------------------|----------------------|----------------------|---|---|
| Permanently capped zone | Average methane flux | Annually | Where a rate of 0.001mg/m ² /second is exceeded appropriate measures must be taken to reduce the rate. | Flame ionisation detector walkover, flux box or as otherwise agreed in writing by the Agency* |

Footnote* If a cap has previously been shown compliant and there have been no significant physical changes in the gas management during the year, a detailed walkover survey with a FID can be used to demonstrate that the surface emissions are under control. If this survey shows no change in the pattern of methane emission, it may be used as the annual survey. The values for flux and total methane emissions measured in the previous year may be reported and a fresh flux box survey is not necessary. If the zone remains stable, the results of a dull walkover survey may be accepted as the site report for a period of four years before a further quantitative flux box survey is required.

Table A.7 Surface water – monitoring requirements

| Emission point reference or source or description of point of measurement | Parameter | Monitoring frequency | Monitoring standard or method | Other specifications |
|--|--|----------------------|--|----------------------|
| SW1, SW8, SW2, SW4, SW5 and SW6 shown on Drawing 2, Computer Ref K3230700 dated 29.03.07 | pH, Electrical conductivity, Ammoniacal Nitrogen, chloride, Nitrate, BOD, DO, Chemical Oxygen Demand, Suspended solids | Quarterly | In accordance with Agency Guidance "LFTGN02 - Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water", or as subsequently amended. | |
| SW1, SW8, SW2, SW4, SW5 and SW6 shown on Drawing 2, Computer Ref K3230700 dated 29.03.07 | TON, TOC, alkalinity, sulphate, phosphate, Fe, Na, K, Ca, Mg, Mn, Cu, Pb, Ni, Zn, Cr, Cd | Annually | In accordance with Agency Guidance "LFTGN02 - Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water", or as subsequently amended. | |

Information

Reporting

11.01 A report or reports on the performance of the site over the previous year shall be submitted to the Agency by 31 January (or other date agreed in writing by the Agency) each year. The report(s) shall include as a minimum:

- (a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments in the closure plan;
- (b) details of any contamination or decontamination of the site which has occurred;

- (c) the topographical surveys required by condition 5.01 other than those submitted as part of a CQA validation report;
- (d) an assessment of the settlement behavior of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;

Notifications

11.02 The Agency shall be notified without delay following the detection of:

- (a) any malfunction, breakdown or failure of equipment or techniques, accident, or fugitive emission which has caused, is causing or may cause significant pollution;
- (b) the breach of a limit specified in the permit;
- (c) any significant adverse environmental effects.

11.03 Any information provided under condition 11.02 above shall be confirmed in writing within 24 hours.

11.04 Where the Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Agency when the relevant monitoring is to take place. The operator shall provide this information to the Agency at least 14 days before the date the monitoring is to be undertaken.

11.05 The Agency shall be notified within 7 days of any changes in technically competent management and the name of any incoming person together with evidence that such person has the required technical competence.

11.06 The Agency shall be provided, within 14 days of the operator or any relevant person being convicted of a relevant offence, (unless such information has already been notified to the Agency), with details of the nature of the offence, the place and date of conviction, and the sentence imposed.