

Notice of variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Biffa Waste Services Limited

Kilsby Landfill Phases 1 to 6

Grove Farm

Daventry Road

Kilsby

Northamptonshire

CV23 8XF

Variation application number

EPR/BP3895NX/V004

Permit number

EPR/BP3895NX

Kilsby Landfill Phases 1 to 6

Permit number EPR/BP3895NX

Introductory note

This introductory note does not form a part of the notice.

The following gives notice of the variation of your environmental permit.

The Permit has been varied to ensure compliance with the relevant requirements of the Landfill Directive (1999/31/EC), Article 13 during the aftercare phase. This includes improvement conditions to require further information to meet definite closure. The site cannot go into definite closure until IC1 and IC3 have been fulfilled.

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

Status log of the permit		
Description	Date	Comments
Licence D/73 issued	26/07/93	Waste disposal licence issued by Northamptonshire County Council to Hales Waste Control Limited.
Modification of the licence D/73 issued	21/04/94	Modification of condition 1.02
Modification of the Waste Management Licence EAWML 70583 (previously D/73)	22/08/95	Modification of Conditions 1.01 to 4.05
Modification of the Waste Management Licence EAWML 70583	07/06/01	Deletion of waste category D from Appendix 1.
Modification of the Waste Management Licence EAWML 70583	09/10/01	Deletion of the old conditions 1.01 to 4.05. Addition of new conditions 1.1 to 8.1
Transfer of the Waste Management Licence EAWML 70583	11/08/04	Transfer of licence to Biffa Waste Services Limited
Modification of the Management Licence EAWML 70583 (Now EPR/BP3895NX)	04/09/09	Delete and replacement of all of the conditions
Application EPR/BP3895NX/V004 (variation)	25/08/15	Environment Agency Initiated Variation to add improvement conditions to the permit and vary Tables A1, A2, A3a, A3b & A4
Variation determined EPR/BP3895NX	11/12/15	Varied permit issued.

End of Introductory note

Notice of variation

The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies

Permit number

EPR/BP3895NX

Issued to

Biffa Waste Services Limited (“the operator”)

whose registered office is

Coronation Road

Cressex

High Wycombe

Bucks

HP12 3TZ

company registration number 00946107

to operate a regulated facility at

Kilsby Landfill Phases 1 to 6

Grove Farm

Daventry Road

Kilsby

Northamptonshire

CV23 8XF

to the extent set out in the schedules.

The notice shall take effect from 11/12/2015

Name	Date
Helen Smith	11/12/2015

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

Table A.1 as referenced in condition 9.01

Table A.1 Leachate level limits and monitoring requirements			
Monitoring point reference/ Description	Limit	Monitoring frequency	Monitoring standard and method
Non Operational Cells or Phases (Any cells or phases that have a final engineered cap agreed in accordance with the existing 'landfill engineering' condition)			
Leachate compliance points	The compliance limits below to apply from 1 January 2016 onwards	Quarterly	As specified in Environment Agency Guidance TGN02 (February 2003) or other guidance which supersedes this document as agreed with the Environment Agency. Or as otherwise agreed with the Environment Agency as part of a leachate monitoring plan.
LMP 1 90903100	No limit		
LMP 3/1 90903310	No limit ^{Note 1}		
LMP 3/3 90903330	No limit		
LMP 3/4 90903340	No limit		
LMP 5/1A 90903511	131.00m AOD, and 4 m above cell base		
LMP 5/2A 90903521	131.50m AOD, and 4 m above cell base		
LMP 6/1A 90903611	129.8m AOD, and 9 m above cell base		
LMP 6/1B 90903612	129.8m AOD, and 9 m above cell base		
LMP 7/1 90903710	134.45m AOD, and 3 m above cell base		
LMP 7/2 90903720	135.3m AOD, and 3 m above cell base		
LMP 8/1 90903810	130.85m AOD, and 1 m above cell base		
LMP 8/2 90903820	133.00m AOD, and 1 m above cell base		
LMP 8/3 90903830	133.00m AOD, and 1 m above cell base		
LMP 9/1 90903910	129.87m AOD, and 3 m above cell base		
LMP 9/2 90903920	130.66m AOD, and 3 m above cell base		
LMP 9/3 90903030	130.79m AOD, and 3 m above cell base		
LMP 10/1 90903101	130.10m AOD, and 2 m above cell base		
LMP 10/2 90903102	130.40 m AOD, and 2m above cell base		
LMP 10/3 90903103	130.40m AOD, and 2 m above cell base		
As shown on Plan K3180105 dated 26 March 2015 and subsequent updates			

Note 1: LMP3/1 to be replaced by a single leachate monitoring point in accordance with IC4 by 31 March 2016

Table A.2 as referenced in condition 10.05 b)

Table A.2 Leachate – other monitoring requirements				
Monitoring point reference or description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Non Operational Cells or Phases (Any cell or phases that have a final engineered cap agreed in accordance with condition 2.6)				
LMP1 90903100 LMP3/1 90903310 Note 2 LMP3/3 90903330 LMP3/4 90903340 LMP5/1A 90903511 LMP6/1A 90903611 LMP7/1 90903710 LMP8/1 90903810 LMP9/1 90903910 LMP10/1 90903101 As shown on the MONITORING & EXTRACTION POINT PLAN Ref: K3180105 dated 26 March 2015 and subsequent updates	pH, EC, total alkalinity, ammoniacal nitrogen, Chloride, COD, BOD, cadmium, chromium, copper, lead, nickel, iron, arsenic, magnesium, potassium, total sulphates, calcium, sodium, zinc, manganese,	Annually		As specified in Environment Agency Guidance TGN02 (February 2003) or other guidance which supersedes this document as agreed with the Environment Agency or as otherwise agreed with the Environment Agency as part of a leachate monitoring plan.
	Hazardous substances suite	Once every four years		None
	Depth to base (mAoD)	Annually		

Note 2: LMP3/1 to be replaced by a single leachate monitoring point in accordance with IC4 by 31 March 2016

Table A.3a Groundwater – emission limits and monitoring requirements

Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
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Table A.3a as reference in condition 10.05 c)

BH02 90902020 BH10S 90902101 BH10L 90902102 BH11 90902110 BH12 90902120 BH14S 90902141 BH14L 90902142 As shown on plan K3180105 dated 26 March 2015 and subsequent updates	Ammoniacal Nitrogen Chloride	6mg/l 600mg/l	Spot Sample	Quarterly	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J, version 2, April 2010) or other guidance which supersedes these documents as agreed with the Environment Agency or as otherwise agreed with the Environment Agency.
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Table A.3b as reference in condition 10.05 c)

Table A.3b Groundwater – other monitoring requirements

Monitoring Point Ref./Description	Parameter	Monitoring frequency	Monitoring standard or method
BH02 90902020 BH03S 90902031 BH03L 90902032 BH04 90902040 BH05 90902050 BH06 90902060 BH07S 90902073 BH07L 90902074 BH08 90902080 BH09 90902090 BH10S 90902101 BH10L 90902102 BH11 90902110 BH12 90902120 BH14S 90902141 BH14L 90902142 As shown on the MONITORING & EXTRACTION POINT PLAN Ref: K3180105 dated 26 March 2015 and subsequent updates	Water level, electrical conductivity, chloride, ammoniacal nitrogen, pH, total alkalinity, magnesium, potassium, total sulphates, calcium, sodium, chromium, copper, iron, lead, nickel, zinc, manganese	Quarterly Annually	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J, version 2, April 2010), or other guidance which supersedes these documents as agreed with the Environment Agency or as otherwise agreed with the Environment Agency.
	Hazardous substances	Annually	
	Base of monitoring point (mAoD)	Annually	
BH35 90902350 BH36 90902360 As shown on the MONITORING & EXTRACTION POINT PLAN Ref: K3180105 dated 26 March 2015 and subsequent updates	Water level, electrical conductivity, chloride, ammoniacal nitrogen, pH, total alkalinitymagnesium, potassium, total sulphates, calcium, sodium, chromium, copper, iron, lead, nickel, zinc, manganese	Monthly Quarterly	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J, version 2, April 2010), or other guidance which supersedes these documents as agreed with the Environment Agency or as otherwise agreed with the Environment Agency.
	Hazardous substances	Annually	
	Base of monitoring point (mAoD)	Annually	

Table A.4 as reference in condition 10.05 d)

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
Boreholes: BHOM ie BHM 90901070, BHOT ie BH12 90901010 BHOA ie BHA 90901020 BHOC ie BHC 90901030 BHOD ie BHD 90901040 BHOE ie BHE 90901050 NRD ie BHN 90901081 NYW ie BHN 90901082 NGN ie BHN 90901083 PRD ie BHP 90901091 PYW, ie BHP 90901092 PGN, ie BHP 90901093 PBR, ie BHP 90901094 QRD ie BHQ 90901101 QYW, ie BHQ 90901102 RRD, ie BHR 90901111 RYW, ie BHR 90901112 RGN, ie BHR 90901113 RBR, ie BHR 90901114 RARD, ie BHRA 90901121 RAYW, ie BHRA 90901122 BHOS, ie BHS 90901131 SARD, ie BHSA 90901143 SAYW ie BHSA 90901144 V ie BHV 90901151 As identified on Plan K3180105 dated 26 March 2015 and subsequent updates	Methane	1 %v/v	Monthly	As per LFTGN03 (published Sept 2004) or other guidance which supersedes this document as agreed with the Environment Agency or as otherwise agreed with the Environment Agency. Record whether the ground is: <ul style="list-style-type: none"> • waterlogged • frozen • snow covered
	Oxygen	[no limit]		
	Atmospheric pressure	[no limit]		
	Differential Pressure	[no limit]		
	Temperature	[no limit]		
Meteorological data	[no limit]			

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

Boreholes:				
BHOT ie BH12 90901010	Carbon Dioxide	16.5% v/v		
BHOA ie BHA 90901020	Carbon Dioxide	6% v/v		
BHOC ie BHC 90901030	Carbon Dioxide	5.5% v/v		
BHOD ie BHD 90901040	Carbon Dioxide	6.5% v/v		
BHOF ie BH02 90901050	Carbon Dioxide	6.5% v/v		
NRD ie BHN 90901081	Carbon Dioxide	6.5% v/v		
NYW ie BHN 90901082	Carbon Dioxide	5% v/v		
NGN ie BHN 90901083	Carbon Dioxide	1.5% v/v		
PRD ie BHP 90901091	Carbon Dioxide	7.5% v/v		
PYW, ie BHP 90901092	Carbon Dioxide	4.5% v/v		
PGN, ie BHP 90901093	Carbon Dioxide	5.5% v/v		
PBR, ie BHP 90901094	Carbon Dioxide	2% v/v		
QRD ie BHQ 90901101	Carbon Dioxide	7% v/v		
QYW, ie BHQ 90901102	Carbon Dioxide	5.5% v/v		
RRD, ie BHR 90901111	Carbon Dioxide	2.5% v/v		
RYW, ie BHR 90901112	Carbon Dioxide	5.5% v/v		
RGN, ie BHR 90901113	Carbon Dioxide	2% v/v		
RBR, ie BHR 90901114	Carbon Dioxide	1.5% v/v		
RARD, ie BHRA 90901121	Carbon Dioxide	10.5% v/v		
RAYW, ie BHRA 90901122	Carbon Dioxide	5% v/v		
BHOS, ie BHS 90901131	Carbon Dioxide	9.5% v/v		
SARD, ie BHSA 90901143	Carbon Dioxide	3.5% v/v		
SAYW ie BHSA 90901144	Carbon Dioxide	2.5% v/v		
V ie BHV 90901151	Carbon Dioxide	5% v/v		
as identified on Plan K3180105 dated 26 March 2015 and subsequent updates				

Schedule 3 – conditions to be added

The following conditions are added following an Environment Agency initiated variation

- 12 The operator shall complete the improvements specified in table 1 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.

Closure Report Improvement condition requirements as detailed Table 1

Table 1 Closure Report Improvement condition requirements		
Reference	Requirement	Date
IC1	The operator shall update and resubmit their closure report to the Environment Agency in writing for approval. The closure report shall be written in accordance with Environment Agency guidance document 'Interim guidance for Landfill' (EPR 5.02): How to comply with your environmental permit - Closing Your Landfill (Environment Agency, 2013). The updated closure report shall include or reference the most recent Hydrogeological Risk Assessment, Landfill Gas Risk Assessments, and Leachate Management Plan, together with supporting reports and drawings, as have been agreed with the Environment Agency.	31/12/2015
IC2	The operator shall submit for approval a report proposing Compliance and Assessment Limits for Ammoniacal Nitrogen and Chloride in groundwater monitored at the two new perimeter groundwater wells BH35 and BH36. The limits shall be based on analytical data from a minimum of 12 monthly samples acquired in accordance with Condition 10.05C and Table A3b of the permit.	31/07/2016
IC3	The operator shall amend the site Leachate Management Plan to specify : (a) The routine monitoring of leachate levels in designated monitoring points in Cells 5, 6, 7, 8, 9, and 10 to be undertaken following a period of pump suspension. (b) The period of time for which pumping must be suspended in order for leachate to recover to rest levels prior to level monitoring taking place shall be established via pump suspension trials and specified in the Leachate Management Plan for each monitoring point. (c) In order to ensure variations in well performance are accounted for, pump suspension trials to establish level recovery rates must be repeated annually, or at a frequency otherwise agreed in writing with the Environment Agency. (d) The Leachate Management Plan shall be updated using the results of each pump suspension trial.	31/12/2015
IC4	a) The Operator shall commission a leachate monitoring well to replace the defunct monitoring point LMP3/1. This monitoring well shall be located near to the defunct well, and shall be fit for the purpose of monitoring leachate level and quality at this location. The replacement well must comprise one of the following two Options: 1. A new retro-drilled monitoring well designed and installed in accordance with Environment Agency document LFTGN02 Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water. The well to be installed to a depth suitable to obtain samples of leachate for analysis. 2. The in-waste gas monitoring point KL02B300, re-commissioned as a leachate monitoring point and adapted for this purpose as necessary to allow dipping and leachate sample recovery. In the event that Option 2 is preferred, the operator must submit to the Agency for approval a review of leachate quality in order to demonstrate that the well is a suitable replacement for LMP 3/1. This review shall comprise a minimum of 3 sample analyses for non-hazardous substances per Table A.2 of the Permit. The leachate quality data obtained shall be compared with the 2010 - 2014 data for LMP3/1. If leachate samples are	31/03/2016

not recoverable from the gas well, or if the Agency deems the leachate quality review does not support the use of this gas well to replace LMP 3/1, then a new drilled well shall be installed in accordance with Option 1.

- b) The replacement monitoring well once approved shall be incorporated into the site monitoring programme and monitored in accordance with Table A.2 of the Permit. The site monitoring plan showing the location of infrastructure shall be updated to show the new monitoring well.
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