Notice of variation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Biffa Waste Services Limited

Risley Landfill Site
Silver Lane
Risley
Warrington
Cheshire
WA3 6BY

Variation application number

EPR/BV7877IR/V007

Permit number

EPR/BV7877IR

Risley Landfill Site
Permit number EPR/BV7877IR

Introductory note

This introductory note does not form a part of the notice

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

This variation is to allow the installation and operation of a PpTek Siloxane removal system and vent air burner (enclosed flare), to pre-treat landfill gas produced at Risley Landfill prior to its combustion in the existing gas utilisation plant (GUP).

The Siloxane removal system and flare will be located in the south west corner of the existing landfill installation; within the Secondary GUP Compound. The enclosed flare is included as an additional point source emission to air from the installation.

This variation also incorporates the changes required by the Industrial Emissions Directive. This includes the amendment of the wording of several permit conditions relating to notifications, and also includes the addition of a condition relating to a requirement for the periodic monitoring of groundwater and soil.

The schedules specify the changes made to the original permit.

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**
Application received	03/12/2003	
Request for information Schedule 4 notice	10/05/2004	
Additional information received	09/06/2004 & 21/06/2004	
Request for information Schedule 4 notice	08/12/2004	
Additional information received	22/12/2004	
Permit determined BV7877IR	21/04/2005	
Variation determined EPR/BV7877IR/V002 (Billing ref. TP3434LX)	26/06/2008	
Application EPR/BV7877IR/V003 (variation)	01/07/2010	
Variation determined EPR/BV7877IR/V003 (Billing ref. UP3932KC)	15/07/2010	
Agency variation determined EPR/BV7877IR/V004 (Billing ref. FP3235NV)	14/05/2013	Agency variation to implement the changes introduced by IED.
Application EPR/BV7877IR/V005 (variation)	Duly made 15/07/2013	

Status log of the permit		
Description	**Date**	**Comments**
Variation determined EPR/BV7877IR/V005 (Billing ref. RP3538NV)	13/09/2013	
Application EPR/BV7877IR/V006 (variation)	Duly made 08/01/2016	An application was submitted on 03/12/2015 prior to this application dated 08/01/2016. As the earlier application was not determined at the time of this permit variation issue, we have logged correspondence for this application dated 08/01/2016 as V007 and correspondence for the earlier application dated 03/12/2015 as V006.
Variation determined EPR/BV7877IR/V006 (Billing ref. WP3936RU)	01/04/2016	Varied permit issued.
Application EPR/BV7877IR/V007 (variation)	Duly made 26/02/2016	Application for the installation and operation of Siloxane gas treatment plant. Another variation application was submitted on 08/01/2016 after this application, which was submitted on 03/12/2015. As this application was submitted before the other permit variation application, we have logged correspondence for this application using the permit reference number suffix V006 and correspondence for the later application using suffix V007. The issued permit reference numbers, as shown in the status log, have been updated so that they are in numerical order.
Additional information	Received 23/03/2016 and 04/04/2016	Additional information regarding the operation and maintenance of the Siloxane gas treatment plant.
Variation determined EPR/BV7877IR/V007 (Billing ref. QP3634RZ)	18/04/2016	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/BV7877IR

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

Risley Landfill Site
Silver Lane
Risley
Warrington
Cheshire
WA3 6BY

to the extent set out in the schedules.

The notice shall take effect from 18/04/2016

Name	Date
Claire Roberts	**18/04/2016**

Authorised on behalf of the Environment Agency

Schedule 1 – conditions to be deleted

None

Schedule 2 – conditions to be amended

The following conditions are amended as a result of the application made by the operator.

Table 1.1 in Schedule 1 of the permit as referenced in condition 2.1.1 is amended as follows:

Table S1.1 activities		
Activity listed in Schedule 1 of the EP Regulations	**Description of specified activity and WFD Annex I and II operations**	**Limits of specified activity and waste types**
Section 5.2 Part A(1)(a), The disposal of waste in a landfill.	D5 – Specially engineered landfill for non-hazardous waste.	Receipt, handling, storage and disposal of non-hazardous wastes, consisting of the types and quantities specified in condition 2.8 Tables S3.1 and S3.2 as an integral part of landfilling.
Section 5.4 A(1)(a)(i) Disposal of Waste other than by Incineration or Landfill – i) biological treatment of waste.	D8 – Biological treatment of waste for the purpose of disposal. Control, storage and treatment of landfill leachate Control, storage and treatment of leachate from other landfills and the biopile treatment process. Biopile treatment of hazardous soil.	Biological treatment of landfill leachate in a sequence batch reactor. Receipt, storage, tankering and treatment of leachate, consisting of the types and quantities specified in condition 2.8 Table S3.5 to point of entry to sewer. Collection, storage and treatment (excluding re-circulation into landfill) of leachate from other landfills and the biopile treatment process to point of entry to sewer. Handling, Storage and Treatment of hazardous waste soils, consisting of the types and quantities specified in condition 2.8 Table S3.3 to produce soils for restoration or as daily cover.
Directly Associated Activity		
Pre-treatment of landfill gas.	Pre-treatment of landfill gas in order to remove Siloxanes prior to combustion in gas utilisation plant.	Landfill gas arising from Risley III and the permitted landfill. Treatment of gas by PpTek Siloxane removal system and vent air burner (enclosed flare).
Burning of waste as a fuel.	Combustion of landfill gas for the purpose of electricity generation.	Landfill gas arising from Risley III and the permitted landfill.
Landfill gas flaring	Flaring of landfill gas for disposal in an appliance.	Collection and Flaring of landfill gas from the Risley III and permitted 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.
Treatment of waste prior to landfilling	Aerosol destruction treatment.	Treatment of waste, consisting of the types and quantities specified in condition 2.8 Table S3.4 to reduce the hazard of aerosols.
Fuel storage	Storage of fuel for operation of plant and equipment.	Fuel storage tank.

Table S1.2 in Schedule 1 of the permit as referenced in condition 2.3.1 is amended as follows:

Table S1.2 Operating Techniques		
Description	Parts	Date Received
Application	The response to questions 1.2, 2.1, 2.2, 2.3, 2.4 and 2.5 in part B of the Application Form excluding sections: 1.1.17 – Drawing ESID 7a did not contain sufficient detail of leachate control facilities; 1.1.20 and 1.1.25 - Drawing ESID 8 did not contain sufficient detail of the in waste gas control facilities and perimeter gas monitoring; 1.1.28 and 1.1.30 – Drawing ESID 11 did not contain sufficient detail of surface water and groundwater monitoring locations; 1.2.27 – Air dispersion modelling; 2.3.9 - Thickness of leachate drainage blanket; 2.3.38 – see 1.1.28 and 1.2.8 above; 2.3.42 and 2.3.43 - see 1.1.30 and 1.2.8 above; 2.3.59 – Air dispersion modelling; 2.3.78 – Clearance time; 3.1.3 to 3.1.18 (inclusive) - Air dispersion modelling	03/12/2003
Request for information	All parts	Response date 04/05/2004
Response to Schedule 4 Notice dated 10/05/2004	All parts	Response dated 09/06/2004 and 21/06/2004
Request for information	All parts	23/07/2004
Response to Schedule 4 Notice dated 08/12/2004	All parts except air dispersion modelling	Response dated 22/12/2004
Request for information	All parts	Response dated 09/02/2005
Request for information	All parts	Response dated 03/03/2005
Request for information	All parts	Response dated 16/02/2005, 08/03/2005 and 14/03/2005
Request for information	All parts	Response dated 19/04/2005
Meeting dated 14/04/2004	All parts	Response dated 20/04/2004
Request for information condition 1.4.1.13 of permit BV7877IR	All parts	Response date 10/02//2006
Request for information condition 1.4.1.14 of permit BV7877IR	None	Response dated 20/06/2005
Request for information condition 1.4.1.15 of permit BV7877IR	All parts	Response dated 18/05//2005
Request for information condition 2.2.4.8 of permit BV7877IR	None	Response dated 21/07/2005
Request for information condition 2.2.4.9 of permit BV7877IR	Landfill gas monitoring plan and location of new extraction system between BH33 and BH35.	Response dated 17/10/2005
Variation Application EPR/BV7877IR/V005	Responses to questions in parts C2 and C3 of the variation application including supporting documents.	15/07/2013
Request for information (email dated 08/08/2013)	Responses to questions 1 and 2.	08/08/2013
Variation Application EPR/BV7877IR/V006	Variation supporting statement, Air Dispersion Model document, Accident/Environmental Risk Assessment.	26/02/2016

Table S1.2 Operating Techniques		
Description	Parts	Date Received
Request for information (emails dated 22/03/2016 and 24/03/2016)	Responses to questions 1) a), b) and c) of email dated 23/03/2016 and responses to questions 1 d) and 3 of email dated 04/04/2016, regarding operation and maintenance of the Siloxane treatment plant.	23/03/2016 and 04/04/2016

Table S4.2 in Schedule 4 of the permit as referenced in conditions 3.1.1 and 3.6.1 is amended as follows:

Table S4.2 Point source emissions

Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
A1 - Flare stacks (permanent) located in engine and flare compound as shown on drawing ESID8	Oxides of Nitrogen, expressed as NO_2	Landfill Gas Flares	150 mg/m^3	Hourly mean	Annually (1)	In accordance with that described in the Agency's Technical Guidance Note M2 "Monitoring of stack emissions to air".
	Carbon Monoxide		50 mg/m^3			
	Total volatile organic compounds (VOC), expressed as Carbon		10 mg/m^3			
	Total non-methane volatile organic compounds (NMVOC)		5 mg/m^3			
	Operational Temperature		>1000°C (2)		Weekly while flare operational	
A2 – Existing engine exhausts located in engine and flare compound as shown on drawing ESID8	Oxides of Nitrogen, expressed as NO_2	Gas utilisation plant	650 mg/m^3	Hourly mean	Annually (3)	In accordance with that described in the Agency's Technical Guidance Note M2 "Monitoring of stack emissions to air".
	Carbon Monoxide		1500 mg/m^3			
	Total volatile organic compounds (VOC), expressed as Carbon		1750 mg/m^3			
	Total non-methane volatile organic compounds (NMVOC)		150 mg/m^3			

Table S4.2 Point source emissions

Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
A3 Gas utilisation plant located in engine and flare compound as shown on drawing ESID8.	Oxides of Nitrogen, expressed as NO_2	Gas utilisation plant	500 mg/m^3	Hourly mean	Annually (3)	In accordance with that described in the Agency's Technical Guidance Note M2 "Monitoring of stack emissions to air".
	Carbon Monoxide		1400 mg/m3^3			
	Total volatile organic compounds (VOC), expressed as Carbon		1000 mg/m^3			
	Total non-methane volatile organic compounds (NMVOC)		75 mg/m^3			
A4 Vent air burner (enclosed flare) of PpTek Siloxane removal system, as shown on drawing R303CB00 and labelled 'Vent Air Burner'.	Oxides of Nitrogen, expressed as NO_2	PpTek siloxane removal system	150 mg/m^3	Hourly mean	Annually (1)	In accordance with that described in the Agency's Technical Guidance Note M2 "Monitoring of stack emissions to air".
	Carbon Monoxide		50 mg/m^3			
	Total volatile organic compounds (VOC), expressed as Carbon		10 mg/m^3			
	Operational Temperature		>1000°C (2)		Weekly while flare operational	

(1) Annual monitoring is only required when flares operate in excess of 10% of the time, taken on an annual assessment period.

(2) This is an indicative performance limit. An alternative minimum temperature may be acceptable providing the Operator can demonstrate that the other emission limit values are met at this lower temperature in accordance with Environment Agency Guidance on Flaring Nov 2002.

(3) Quarterly monitoring shall be undertaken for the identified parameters using a portable combustion analyser, unless agreed otherwise in writing with the Agency.

Table S5.1 in Schedule 5 of the permit as referenced in condition 4.2.2 is amended as follows:

Table S5.1 Reporting of monitoring

Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Leachate levels As required by condition 3.6.1	Extraction and monitoring points in Phases 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10	Every 3 months	21/04/2005
Emissions to air Parameters as required by condition 3.6.1	Flare A1. All engines in category A2 and A3. Vent air burner (enclosed flare) A4.	Every 12 months	21/04/2005
Emissions to water Parameters as required by condition 3.6.1	SW1 and S1	Every 3 months	21/04/2005
Groundwater Parameters as required by condition 3.6.1 Monitoring point base and List I screen	R418 (95202418), R419 (95202419), R420 (95202420), R421 (95202421), R422 (95202422), R423 (95202423), R424 (95202424) and R425 (95202425)	Every 3 Months for monthly and quarterly periods Every 12 months	21/04/2005
Ambient air monitoring Parameters as required by condition 3.6.1	Installation boundary	Every 3 months	21/04/2005
Landfill gas surface emissions Parameters as required by condition 3.6.1	Permanently capped zone Temporarily capped zone	Every 12 months	21/04/2005
Particulate matter Parameters as required by condition 3.6.1	BHN10, BHN13, BHN33 and BHN22	Every 3 months	21/04/2005
Landfill gas lateral migration Parameters as required by condition 3.6.1	BHN1 (95201052), BHN2 (95201053), BHN3 (95201054), BHN4 (95201055), BHN5 (95201056), BHN6 (95201057), BHN7 (95201058), BHN8 (95201059), BHN9 (95201060), BHN10 (95201061), BHN11 (95201062), BHN12 (95201063), BHN13 (95201064), BHN14 (95201065), BHN15 (95201066), BHN16 (95201067), BHN17 (95201068), BHN18 (95201069), BHN19 (95201070), BHN20 (95201071), BH6, BH7, BH8, BH9, BH10, BH13 (95201018), BH14 (95201017), BH15 (95201016), BH16 (95201015), BH17 (95201014), BH18 (95201013), BH22 (95201048), BH23 (95201045), BH24 (95201044), BH25 (95201043), BH26 (95201042), BH27 (95201041), BH28 (95201040), BH29 (95201039), BH30 (95201038), BH31 (95201037), BH32 (95201036), BH33 (95201035), BH34 (95201034), BH34A (95201134, BH35 (95201033), BH36 (95201032), BH37 (95201031), BH38(95201030), BH39 (95201029), BH40 (95201028), BH41 (95201027), BH42 (95201026) BH43 (95201025), BH44 (95201024), BH45 (95201023), BH46 (95201022), BH47 (95201021), BH48 (95201020) and BH49 (95201019)	Every 3 months	21/04/2005
Other Landfill gas monitoring Parameters as required by condition 3.6.1	Trace gas emissions at input to LFG Utilisation Compounds	Every 12 months	21/04/2005

Table S5.1 Reporting of monitoring			
Parameter	**Emission or monitoring point/reference**	**Reporting period**	**Period begins**
Other leachate monitoring Parameters as required by condition 3.6.1	SR1 (95203010), SR2 (95203020), LW3A (95203030), LW3B (95203031), LW4B, LW4C (95203045), SR5 (95203050), SR6A (95203060), SR6B (95203061), SR7 (95203070), LW8 (95203080), LW9A (95203090), LW9B (95203091), LW10 (95203102), SR10A (95203101) and SR10B (95203103)	Every 3 months for weekly, monthly and quarterly periods	21/04/2005
Monitoring point base, and List 1 Screen	MP1A, MP1B, MP2A, MP2B, MP3A, MP3B, MP3C, MP3D, MP4A, MP4B, MP4C, MP4D, MP4E, MP4F, MP5A, MP5B, MP5C, MP5D, MP5E, MP5F, MP5G, MP6A, MP6B, MP6C, MP6D, MP7A, MP7B, MP8A and MP8B	Every 12 months	
Other surface water monitoring Parameters as required by condition 3.6.1	S1 (95204010), S3 (95204030), S3A (95204031), S4 (95204040), S4A (95204041) and S6 (95204060)	Every 3 months	21/04/2005

The following conditions are amended following an Environment Agency initiated variation to update the permit conditions to reflect the changes to the Environmental Permitting Regulations introduced by the Industrial Emissions Directive.

Condition 4.3.1 of the permit is amended as follows:

4.3.1 In the event:

(a) that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

(i) inform the Environment Agency,

(ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and

(iii) take the measures necessary to prevent further possible incidents or accidents;

(b) of a breach of any permit condition the operator must immediately—

(i) inform the Environment Agency, and

(ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;

(c) of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

Condition 4.3.2 of the permit is amended as follows:

4.3.2 Any information provided under condition 4.3.1(a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

Schedule 3 – conditions to be added

The following conditions are added following an Environment Agency initiated variation to update the permit conditions to reflect the changes to the Environmental Permitting Regulations introduced by the Industrial Emissions Directive:

3.1.3 For the following activities referenced in schedule 1, table S1.1 (Section 5.4 A(1)(a)(i) biological treatment of landfill leachate), periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil, unless such monitoring is based on a systematic appraisal of the risk of contamination.