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Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

FCC Waste Services (UK) Limited

Chirk Landfill Site
Pen-y-Bont Works
Chirk
Wrexham
LL14 5AR

Variation application number

EPR/GP3830BG/V007

Permit number

EPR/GP3830BG

Chirk Landfill Site

Permit number EPR/GP3830BG

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 Operator requested variation makes limited changes to the requirements for emissions monitoring as they relate to leachate and to landfill gas.

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 – GP3830BG	Received 09/11/04	
Schedule 4 information requests in relation to Landfill Gas Risk Assessment, Stability Risk Assessment and Hydrogeological Risk Assessment	Requested 27/04/05	Response received 09/07/05
Request for further information in relation to schedule 4 served on 27/04/05	Requested 13/09/05	Response received in 2 sections ECNIA response 26/09/05 Golders response 27/09/05
Permit determined GP3830BG	09/11/05	
Permit varied PP3032LN	29/06/07	
Application for variation BP3031XH	Received 10/10/07	
Permit varied BP3031XH	30/05/08	
Application for admin variation EPR/GP3830BG/V004	20/01/11	
Application determined EPR/GP3830BG/V004	24/02/11	

Administrative variation EPR/GP3830BG/V005	Received 03/12/12	Change of company name and update of the wording of the financial provision condition
Administrative variation EPR/GP3830BG/V005 issued	17/12/12	
Agency variation determined EPR/GP3830BG/V006	12/06/13	Agency variation to implement the changes introduced by IED
Application for variation EPR/GP3830BG/V007	24/04/14	
Variation Determined	03/11/14	

End of introductory note

Notice of variation

Environmental Permitting (England and Wales) Regulations 2010

The Natural Resources Body for Wales ("Natural Resources Wales") in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies

Permit number
EPR/GP3830BG

issued to:
FCC Waste Services (UK) Limited ("the operator")

whose registered office is

**Ground Floor West
900 Pavilion Drive
Northampton Business Park
Northampton
NN4 7RG**

company registration number **988844**

to operate a regulated facility at

**Chirk Landfill Site
Pen-y-Bont Works
Chirk
Wrexham
LL14 5AR**

to the extent set out in the schedules.

The notice shall take effect from 03/11/2014

Name	Date
	03/11/2014

Authorised on behalf of Natural Resources Wales

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 S1.2 is amended to give updated operating techniques. The amended table is as follows:

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	The response to questions, 2.1, 2.2, 2.3, 2.4, 2.5, 2.7, 2.8 and 2.9 of part B of the Application Form.	9 November 2004
Schedule 4 Notice response from WRG Waste Services Ltd	All Parts	Received 9 July 2005
Response from WRG Waste Services Ltd to Agency letter requesting further information dated 13 September 2005	All Parts	Received in two sections dated 26 & 27 September 2005
Revised version of drawing reference WR4446/ESID6A	Doc Ref – 0552552.250 ESID6A	December 05
The location, design, installation and monitoring of additional groundwater monitoring points to be located between the site and the River Dee.	Document Ref 05529525.250 - Golders Associates (UK) Ltd.	7 February 2006
	Document Ref 05529525.250 - Golders Associates (UK) Ltd.	Amended 29 th Sept 2006
Review of the groundwater monitoring data for all existing boreholes individually including submission of revised borehole specific control and trigger levels derived in accordance with Agency guidance document LFTGN01 'Hydrogeological risk assessment for landfills'.	Document Ref 05529525.250 - Golders Associates (UK) Ltd.	7 February 2006
	Document Ref 05529525.250 - Golders Associates (UK) Ltd.	Amended 29 th Sept 2006
Detailed leachate management plan.	Leachate management Plan Version 3 Letter – PYB GF03 – GP3830BG	10 th September 2006
The location, design, installation and monitoring of additional off-site groundwater monitoring points to be located between the site and the River Dee.	Document reference Ref 05529525.500 - Golder Associates (UK) Ltd	February 2007

Table S1.2 Operating techniques

Description	Parts	Date Received
Revised conceptual model from the review of all the information gathered from existing and new groundwater monitoring boreholes	Document reference Ref 05529525.500 - Golder Associates (UK) Ltd	February 2007
Air impact assessment report incorporating detailed air dispersion modelling	Document Reference: Ref 06529200.500 Golder Associates (UK) Ltd Document Reference : Ref 06529200.500 Golder Associates (UK) Ltd	Submitted 7 July 06 Amended 19 Feb 07
Slope Monitoring Plan	Slope Monitoring Plan – Document reference - AS 5916/PYB/rac/01	February 06
Landfill Gas Management Plan	Document Reference: Ref 05529525.501/A.2 Golders Associates	November 2006
Groundwater Control and Trigger levels at T10 and BH7 - 14	Project No. 10514290011.250 Golders Associates	1 st December 2010
Variation Application EPR/GP3830BG/V007	The response to section 3 of part C3 of the application and the referenced documents including Letter dated 17 April 2014.	24/04/14

- Table S4.1 is amended to update the monitoring frequency. The amended table is as follows:

Table S4.1 Leachate level limits and monitoring requirements

Monitoring point reference/ Description	Limit	Monitoring frequency	Monitoring method
Leachate collection chambers LC01, LC03, LC04a, LC05a, LM04a, LM05, LM06 and LM07 as specified in drawing reference WR/4446/ESID7 (09/11/04) and ESID14 (15/01/07)	1m above the base of the cells*	monthly	To be agreed in writing with Natural Resources Wales

* The base of the cell shall be taken to mean the lip or point at which the liner dips into the leachate collection/extraction sump

- Table S4.2 is amended to update the parameters requiring monitoring. The amended table is as follows:

Table S4.2 Point source emissions to air – emission limits and monitoring requirements						
Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
A1 Flare Stack as identified on drawing reference WR4446/ESI D8	Nitrogen Oxides (Nox)	Landfill Gas Flare	150 mg/m ³	Hourly mean	Annually	Chemiluminescence
	Carbon Monoxide (CO)	Landfill Gas Flare	50 mg/m ³	Hourly mean	Annually	Non-Dispersive Infrared Analysis
	Total VOCs	Landfill Gas Flare	10 mg/m ³	Hourly mean	Annually	Extractive Sampling and FID analysis
For Engines Commissioned before 31st December 2005						
A2 Engine Exhausts as identified on drawing reference WR4446/ESI D8	Nitrogen Oxides (Nox)	Gas utilisation plant	650 mg/m ³	Hourly mean	Annually	Extractive Sampling and Chemiluminescence
	Carbon Monoxide (CO)	Gas utilisation plant	1500 mg/m ³	Hourly mean	Annually	Extractive Sampling and Non-Dispersive Infra Red Analysis
	Total Volatile Organic Compounds (VOCs)	Gas utilisation plant	1750 mg/m ³	Hourly mean	Annually	Extractive Sampling and FID Analysis
For Engines Commissioned After 31st December 2005						
A2 Engine Exhausts as identified on drawing reference WR4446/ESI D8	Nitrogen Oxides (Nox)	Gas utilisation plant	500 mg/m ³	Hourly mean	Annually	Extractive Sampling and Chemiluminescence
	Carbon Monoxide (CO)	Gas utilisation plant	1400 mg/m ³	Hourly mean	Annually	Extractive Sampling and Non-Dispersive Infra Red Analysis
	Total Volatile Organic Compounds (VOCs)	Gas utilisation plant	1000 mg/m ³	Hourly mean	Annually	Extractive Sampling and FID Analysis

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

- Table S4.5 is amended to give Action Limits. The amended table is as follows:

Table S4.5 Landfill gas in external monitoring boreholes – limits and monitoring requirements					
Monitoring point Ref. /description	Parameter	Limit (%v/v)	Action Limit (%v/v)	Monitoring frequency	Monitoring standard or method
G1, G2, G3, G4, G5, G6, G7, G8, G9, G10, G11, G12, G13, G14, G15, G16, G17, T1, T2, T3, T4, T5, T6, T7, T8, T9, T10, T11, T12, T13	Oxygen	N/A		Monthly	To be agreed in writing with Natural Resources Wales
	Atmospheric Pressure	N/A		Monthly	
	Methane	1 %v/v		Monthly	
G1	Carbon Dioxide		3.22	Monthly	
G2	Carbon Dioxide		3.21	Monthly	
G3	Carbon Dioxide		2.91	Monthly	
G4	Carbon Dioxide		2.57	Monthly	
G5	Carbon Dioxide		2.53	Monthly	
G6	Carbon Dioxide		2.77	Monthly	
G7	Carbon Dioxide		3.36	Monthly	
G8	Carbon Dioxide		3.62	Monthly	
G9	Carbon Dioxide		3.48	Monthly	
G10	Carbon Dioxide		2.76	Monthly	
G11	Carbon Dioxide		2.72	Monthly	
G12	Carbon Dioxide		3.33	Monthly	
G13	Carbon Dioxide		2.28	Monthly	
G14	Carbon Dioxide		2.82	Monthly	
G15	Carbon Dioxide		2.27	Monthly	
G16	Carbon Dioxide		2.18	Monthly	
G17	Carbon Dioxide		3.19	Monthly	
T1	Carbon Dioxide		2.86	Monthly	
T2	Carbon Dioxide		2.90	Monthly	
T3	Carbon Dioxide		3.49	Monthly	
T4	Carbon Dioxide		4.99	Monthly	
T5	Carbon Dioxide		3.85	Monthly	
T6	Carbon Dioxide		3.69	Monthly	
T7	Carbon Dioxide		2.91	Monthly	
T8	Carbon Dioxide		3.50	Monthly	
T9	Carbon Dioxide		3.90	Monthly	
T10	Carbon Dioxide		2.40	Monthly	
T11	Carbon Dioxide		2.27	Monthly	
T12	Carbon Dioxide		2.71	Monthly	
T13	Carbon Dioxide		2.96	Monthly	

- Table S4.8 is amended to update the monitoring frequencies. The amended table is as follows:

Table S4.8 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 collection chambers LC01, LC03, LC04a, LC05a, LM04a, LM05, LM06 and LM07 as specified in drawing reference WR/4446/ESID7 (09/11/04) and ESID14 (15/01/07)	pH	Quarterly		
	Electrical Conductivity	Quarterly		
	Ammoniacal Nitrogen	Quarterly		
	Temperature	Quarterly		
	Chloride	Quarterly		
	Sulphate	Quarterly		
	BOD	Quarterly		
	Total Alkalinity (CaCO ₃) (tot alk)	Quarterly		
	Total Phenols	Quarterly		
	COD	Quarterly		
	TOC	Quarterly		
	TON	Quarterly		
	Na	Quarterly		
	K	Quarterly		
	Ca	Quarterly		
	Cr	Quarterly		
	Cu	Quarterly		
	Fe	Quarterly		
	Pb	Quarterly		
	Mg	Quarterly		
	Mn	Quarterly		
	Cd	Quarterly		
	Mecoprop	Biannually		
	Naphthalene	Biannually		
	Ni	Quarterly		
	Zn	Quarterly		
	Hg	Quarterly		
Total Cyanide	Annual			
List I screen **		Annually*		

* The operator shall carry out leachate screening from leachate sampled from each hydraulically separate cell in accordance with the Environment Agency's guidance document "Hydrogeological Risk Assessment for Landfills (LFTGN01)

** Any substance detected in the annual List I screening of leachate required above shall be incorporated into the biannual monitoring regime for groundwater unless otherwise agreed with Natural Resources Wales.

Schedule 3 – conditions to be added

None

