



Pen Y Bont Landfill Site (Operational)

Annual Environmental Reporting

**31/01/16
FCC Environment
Pen-Y-Bont Landfill Site
Pentre
Wrexham
LL1 5AR**

Introduction

This report provides the additional information required to be reported to Natural Resources Wales in accordance with condition 4.2.1 of PPC permit GP3830BG, variation number PP3032LN.

Condition 4.2.1 (a) – Annual monitoring data review

This will be provided in a separate report on the agreed submission date of the 31st March 2016.

Condition 4.2.1 (b) – Improvement target progress

Progress is summarized below;

FCC Environment							Best Practice - Site Performance Improvement	
Pen-Y-Bont Environmental Action Plan 2015								
Action No	Date Raised	Item Title	Action Requirements	Owner	Planned Start Date	Planned Comp Date	Status	Progress Comments
1	02/01/2015	PYBIMS 21 Environmental Monitoring	Leachate dips (Monthly)	Site Manager/ Environment Manager	02/01/2015	31/12/2015	G	As per permit leachate monitoring to be done monthly by FCC Environment monitoring team.
2	02/01/2015	PYBIMS 12 Litter	Litter Picker on site when required to ensure no waste leaving working face	Site Manager	02/01/2015	31/12/2015	G	Ongoing throughout year as required
3	02/01/2015	PYBIMS - 11 Dirt and Mud	Maintenance of wheelwash (Fortnightly)	Site Manager/Site Ops	02/01/2015	31/12/2015	G	This will be carried out on fortnightly basis to minimise mud being carried off site and onto public highway
4	02/01/2015	PYBIMS - 15 Raw and Auxillary Materials	A Monthly water meter reading will be taken. Further action required if unexpected usage occurs.	Site Manager	02/01/2015	31/12/2015	G	Ongoing throughout year
5	02/01/2015	PYBIMS - 02 Waste Acceptance	Weighbridge checks on Waste Carriers Licenses	Weighbridge Clerk	02/01/2015	31/12/2015	G	Ongoing throughout year as required
6	02/01/2015	PYBIMS - 02 Waste Acceptance	Weighbridge checks on Duty of Care Waste Transfer Notes	Weighbridge Clerk	02/01/2015	31/12/2015	G	Ongoing throughout year
7	02/01/2015	PYBIMS - 15 Raw and Auxillary Materials	Ensure plant usage in line with budgeted requirement, while achieving adequate compaction resulting in reduction in fuel consumption.	Site Plant Operatives	02/01/2015	31/12/2015	G	Reduce fuel costs whenever possible minimal usage required
8	02/01/2015	PYBIMS - 08 Landfill Gas	Installation of New Gas Wells and lagging on KOP's and condensate lines to prevent lines freezing ensuring gas control is maintained during adverse weather conditions.	Site Ops / Infnis	02/01/2015	31/12/2015	G	New lagging placed around condensate/Air lines to prevent freezing up - to be checked at regular intervals by Infnis to ensure efficiency. New gas wells installed January 2015
9	02/01/2015	PYBIMS - 08 Landfill Gas	Any and all odour complaints to be investigated and verification sought.	Site Manager	02/01/2015	31/12/2015	G	Ongoing throughout year
10	02/01/2015	PYBEMS 10 Leachate Control	Pumps installed on the Northern and Southern parts of site to prevent surface water run off becoming leachate.	Site Manager	02/01/2015	31/06/2015	G	Daily checks carried out and logged within Site Manager's weekly checks.Pumps removed July 2015 after capping works had been completed.
Status Key			Escalation					
			Action Pending					
G			Action in progress and on plan					Action 1 week late a prompt to the action owner must be made immediately.
R			Roadblock/show stopper, requires urgent attention/escalation					Action 3 weeks late, escalation to line manager and action owners line manager to be carried out immediately
B			Action completed					

Condition 4.2.1 (c) – Energy consumption

Table S5.3 Performance Parameters			
Parameter	Frequency of assessment	Annual total	Unit
Potable water use	Annually	520m3	Cubic metres
Energy used (including for leachate treatment)	Annually	42,337	MWh of electricity
Non potable water use	Annually	N/A	Cubic metres

Condition 4.2.1 (d) – Annual production/treatment

Table S5.2: Annual production/treatment	
Leachate:	Cubic metres/year
Disposed of off site;	18,517m3
Disposed of to any on-site effluent treatment plant;	0m3
Recirculated into the waste mass.	0m3
Surface water and/or groundwater:	Cubic metres/year
Disposed of off site;	0
Disposed of to any on-site effluent treatment plant;	0
Landfill gas:	Normalised cubic metres/year
Combustion in flares;	577,000
Combustion in gas engines;	8,599,000
Other methods of gas utilisation.	0

Condition 4.2.1 (e) – Contamination and decontamination

No contamination events

Condition 4.2.1 (f) – Topographical survey (Annual Site Plan)

Provided separately; FCC drawing no. 466A249 (Plan 2).

Condition 4.2.1 (g) – Volumetric difference between topographical surveys

47,642m³

Condition 4.2.1 (h) – Assessment of settlement behaviour

Settlement monitoring points have been established on the restored areas of the site to ensure settlement behaviour of the waste on the landfill site is recorded.

The selected points will be monitored at a minimum time period of once a year.

For reference purposes the settlement monitoring point locations will be marked on the FCC 466M244_2015 “Settlement Monitoring Plan” (Plan 4B).

Chirk Landfill Site							
Settlement Monitoring Information for 2015 Annual Monitoring Plan :Permit Returns							
Point ID	Eastings	Northings	Height	Height	Ht Diff	Type of marker	Notes
	m	m	m	m	m		
			24/10/14	06/01/16			
466SM1	329047.016	341727.68	80.115	80.14	0.025	Spot Level	Spot Level
466SM2	329060.646	341765.532	80.977	80.989	0.012	Spot Level	Spot Level
466SM3	329069.895	341793.69	80.344	80.342	-0.002	Spot Level	Spot Level
466SM4	329088.879	341822.771	78.648	78.635	-0.013	Spot Level	Spot Level
466SM5	329117.599	341861.085	75.514	75.536	0.022	Spot Level	Spot Level
466SM6	329192.028	341833.751	83.889	83.747	-0.142	Spot Level	Spot Level
466SM7	329146.008	341822.027	85.992	85.790	-0.202	Spot Level	Spot Level
466SM8	329098.845	341771.488	87.484	87.342	-0.142	Spot Level	Spot Level
466SM9	329084.911	341696.764	87.126	87.027	-0.099	Spot Level	Spot Level
466SM10	329114.452	341667.828	86.071	85.646	-0.425	Spot Level	Spot Level - Engineering works carried out in area
466SM11	329144.626	341627.709	82.742	82.184	-0.558	Spot Level	Spot Level - Engineering works carried out in area
466SM12	329168.095	341590.696	80.795	80.286	-0.509	Spot Level	Spot Level - Engineering works carried out in area

The survey levels recorded for 2015 show that there has been no significant fluctuations in settlement behaviour.

Condition 4.2.1 (i) – Calculation of remaining capacity

97,498m³

Condition 4.2.1 (j) – WAC compliance testing

As per condition 2.8 of the Permit variation, we confirm that all wastes accepted for disposal under condition 2.8 have been characterised and monitored in accordance with Schedule 10 of the “Environmental Permitting (England & Wales) Regulations 2007. Any WAC testing required has been carried out in line with the procedure detailed in the “Waste Acceptance Criteria” section of FCCs internal management system, reference EMS 3-13.02-LNF.