

Variation notice with introductory note

Environmental Permitting (England & Wales) Regulations 2010

Bryn Posteg Landfill

Sundorne Products (Llanidloes) Ltd
Tylwch Road
Llanidloes
Powys
SY18 6JJ

Variation notice number
EPR/BU7766IC/V004

Permit number
BU7766IC

Bryn Posteg Landfill

Permit number EPR/BU7766IC

Introductory note

This introductory note does not form a part of the permit

The following notice, gives notice of the variation of an environmental permit to operate a regulated facility/facilities

This variation authorises:

- the new surface water reed bed management system and interim emission limit values;
- amends the emission limits for the flare to the new technical standards;
- amends the emission and monitoring point reference for the leachate treatment plant effluent;
- amends referencing points for groundwater boreholes;
- incorporates revised groundwater trigger levels following 4-yearly hydrogeological risk assessment review;
- incorporates a new improvement condition to review the leachate treatment facility in line with best available techniques;
- incorporates a new improvement condition to monitor up stream water quality and flow and establish final emission limits for new surface water point;
- amends the installation boundary to reflect the leachate sewer line route and it's revised route.

Schedule 1 of this notice lists any deleted conditions, Schedule 2 lists any amended conditions, Schedule 3 lists any conditions that have been added and Schedule 4 shows any changes to the plan.

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

Status Log of the permit		
Detail	Date	Response Date
ApplicationBU7766IC	Received 22/04/03	Duly made 02/05/03
Response to request for information	Request Schedule 4 dated 6/07/03	Response dated 31/07/03
Response to request for information	Schedule 4 dated 11/08/03	Response dated 05/09/03
	Follow-up Letter dated 21/10/03	Response dated 30/11/03
		Response dated 29/12/03
	Follow-up Letter dated 22/12/03	Response dated 05/01/04
		Response dated 20/01/04
	Follow-up Letter dated 23/02/04	Response dated 27/02/04
	Follow-up Letter dated 02/03/04	Response dated 11/03/04

Response to request for information	Letter dated 03/06/03	
	Schedule 4 dated 19/09/03	Response dated 01/10/03
	Letter dated 19/11/03	Response dated 20/11/03
	Follow-up Letter dated 22/12/03	Response dated 03/02/04
Response to request for information	Letter dated 11/09/03	Response dated 17/09/03
	Schedule 4 dated 14/10/03	Response dated 27/10/03 Response dated 22/12/03
	Letter dated 12/01/04	
	Follow-up Letter dated 04/02/04	Response dated 18/02/04 Response dated 23/02/04
Response to request for information	Letter dated 22/09/03	Response dated 01/10/03 CQA Plan received dated 20/01/04
	Letter dated 02/03/04	Response dated 11/03/04 Response dated 12/05/04
Response to request for information	Letter dated 26/09/03	Response dated 20/10/03
Response to request for information	Schedule 4 dated 19/11/03	Response dated 15/12/03
	Follow-up Letter dated 22/12/03	Response dated 07/01/04
	Letter dated 27/01/04	Response dated 29/01/04
	Follow-up letter dated 02/03/04	Response dated 11/03/04 Leachate management plan dated March 2004
Response to request for information	E-mail dated 15/09/03	
	Further E-mail dated 25/09/03	Response by e-mail dated 26/09/03 Response dated 04/11/03
	Letter dated 22/12/03	Response dated 09/01/04
Response to request for information	Letter dated 19/11/03	Response dated 27/11/03
	Financial Provision – Commercially confidential	Follow-up Response dated 05/12/03
	Letter dated 16/12/04	Response dated 17/02/04

Response to request for information - odour	Meeting of the 05/04/04	Appendix 1 & 2 dated 16/04/04 Odour Management Plan dated 14/05/04 Appendix 3 dated 17/05/04
Request to extend determination	Request dated 06/04/04	Request accepted 07/04/04
Request to extend determination	Request dated 07/05/04	Request accepted 10/05/04
Request to extend determination	Request dated 20/05/04	Request accepted 24/05/04
Request to extend determination	Request dated 28/05/04	Request accepted 01/05/04
Request to extend determination	Request dated 11/06/04	Request accepted 14/06/04
Permit determined	Issued 15/06/04	
Partial Transfer Application	Received 10 March 2005	Additional information received 18/03/05 Duly Made 18 April 2005 Additional information received 21/04/05
Request for further Information	Meeting of the 03/05/05 in connection to the Gas Engine permit	Response dated 10/05/05 Response dated 25/05/05
New Permit (TP3736SQ) for Gas Engine	Issued 15 June 2005	
Variation (HP3536SG) to Permit BU77661Y	Issued 15 June 2005	
New Template Variation Determined LP3739ME	Issued 26 March 2007	
Variation TP3331LJ to Permit BU77661C	Issued 15 April 2009	
Variation (DP3131ST) to Permit BU77661C	Request dated 02/02/10	
Additional Information Received		Response received via email from David Williams on 27/02/2010
Additional Information Received		Response received via email from David Williams on 09/03/2010
Additional Information Received		Response received via email from David Williams on 14/05/2010
Additional Information Received		Response received via email from David Williams on 20/05/2010
Variation determined	Issued 3 December 2010	

Other Part A installation permits relating to this installation

Operator	Permit Number	Date of Issue
Sundorne Products (Llanidloes) Ltd	TP3736SQ	15 June 2005

End of Introductory Note

Notice of variation

Environmental Permitting
(England and Wales) Regulations 2010

Permit number

EPR/BU7766IC

The Environment Agency in exercise of its powers under Regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 (SI 2010 No 675) varies the permit as set out below.

Sundorne Products (Llanidloes) Ltd ("the operator"),

of/ whose registered office/or principal office is

Potters Yard

Severn Road

Welshpool

Powys

SY21 7YE

company registration number **3353423**

to operate an installation at

Bryn Posteg Landfill

Tylwch Road

Llanidloes

Powys

SY18 6JJ

and that permit is varied to the extent set out in Schedules 1 to 4 of this notice.

The notice shall take effect from 3 December 2010.

Name	Date
A Gibbs	3 December 2010

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 follows:

- 2.2.1 The activities authorised under condition 2.1.1 shall not extend beyond the Site, being the land shown edged in red on the Site Plans 1 and 4 in Schedule 2 of this permit, excluding the area hatched brown identified as “MRF Composting” on Plan 1 and the area edged in green as detailed on Plans 2 and 3 in Schedule 2.

The following tables are amended:

Schedule 1, Table S1.2 Operating techniques

Schedule 1, Table S1.3 Improvement programme requirements

Schedule 4, Table S4.2 Point sources emissions to air – emission limits and monitoring requirements

Schedule 4, Table S4.3 Point source emissions to water (other than sewer) – emission limits and monitoring requirements

Schedule 4, Table S4.4 Point source emissions to sewer – emission limits and monitoring requirements

Schedule 4, Table S4.5 Trigger levels for emissions into groundwater and monitoring requirements

Schedule 5, Table S5.1 Reporting of monitoring data

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	22/04/03
Letter from Enviroarm Ltd detailing: surface water management	Section titled 'Engineering and Operational Management and Monitoring'	31/07/03
Letter from Enviroarm Ltd detailing: Waste acceptance, Leachate Management, Surface water Management, Groundwater Management, Dirt and Mud Management, Dust Management and Monitoring, Odour Management and Monitoring, Landfill Body Monitoring, Restoration and Aftercare, Odour risk Assessment, Particulate Matter Risk Assessment, Landfill Gas Risk Assessment and Waste Deposit and Emplacement, Unacceptable Waste Quarantine Area	All	05/09/03
Follow-up Letter from Enviroarm Ltd in connection with the initial letter of 05/09/03.		
Follow-up Letter from Enviroarm Ltd in connection with the initial letter of 05/09/03	All	30/11/03
Letter from Enviroarm Ltd in connection with the Unacceptable Waste Quarantine Area.	All	29/12/03
Letter from Enviroarm Ltd in connection with the Unacceptable Waste Quarantine Area.		
Follow-up Letter from Enviroarm Ltd in connection with the Unacceptable Waste Quarantine Area and revised surface water management plan.	All	05/01/04
Follow-up Letter from Enviroarm Ltd in connection with the initial letter of 05/09/03	All	20/01/04
	All	27/02/04
Letter from Enviroarm Ltd detailing mine shaft stability issues		
Letter from Evans Logistics containing a response from Mouchel Parkman in connection with mineshaft issues	All	11/03/03
Letter from Enviroarm Ltd detailing issues in connection with the hydrogeological risk		

assessment	All	01/10/03
Follow-up Letter from Enviroarm Ltd detailing issues in connection with the hydrogeological risk assessment	All	03/02/04
Follow-up Letter from Enviroarm Ltd detailing issues in connection with the hydrogeological risk assessment containing a revised Land-sim Model.	All	17/09/03
Follow-up Letter from Enviroarm Ltd detailing issues in connection with the hydrogeological risk assessment containing a revised Land-sim Model.	All	27/10/03
Clarification letter from Enviroarm Ltd in connection to their letter of the 18/02/04	All	22/12/03
Letter from Enviroarm Ltd detailing issues concerning mineralogy issues		
Letter from Enviroarm Ltd enclosing the CQA Plan for the installation	All	18/02/04
Letter from Enviroarm Ltd clarifying a number of issues in the CQA plan		
Addendum No.3 to the CQA plan	All	23/02/04
Letter from Enviroarm Ltd detailing amendments to waste types and acceptance criteria and non conformance procedures.	All	01/10/03
Letter from Egniol Ltd detailing amendments to leachate management plan together with a revised copy of the leachate management plan	All	20/01/04
Letter from Egniol Ltd with further amendments to the leachate management plan and a revised copy of the leachate management plan (2 nd Revision).	All	11/03/04
Letter from Egniol amending the leachate head to a 1m control level	All	12/05/04
Fax from Egniol amending a number of tables within the leachate management plan.	All	20/10/03
Revised Leachate Management Plan	All	15/12/03
E-mail from Egniol Ltd concerning the Landfill Gas risk Assessment		

Letter from Egniol Ltd amending landfill gas risk assessment	All	05/01/04
Letter from Egniol Ltd amending the landfill management plan		
Appendix 1 & 2 to the Odour Management Plan	All	29/01/04
Odour Management Plan	All	11/03/04
Appendix 3 to the Odour Management Plan		
Evans Logistics letter regarding monitoring methods	All	March 2004
Odour assessment study	All	25/09/03
Additional letter from Sundorne regarding odour modelling	All	04/11/03
Letter regarding monitoring methods	All	08/01/04
Document entitled 'Potential leachate improvements to the Leachate Management System	All	16/04/04
Revised closure and aftercare plan and surface emissions risk assessment	All	14/05/04
Letter from Egniol regarding Aftercare and closure	All	17/05/04
Variation application reference DP3131ST including the following associated documents:	All	13/07/04
Leachate sewer management and monitoring plan (SewerMP2005v1)	All	August 2004
Geological Site Setting and Inspection of Pipeline from Leachate Treatment Plant to Discharge Point Ref:ARM/SCM/BP/LP/1/2005	All	17/11/04
Review of PPC Permit Conditions: Emissions to Air Flare Stack	All	09/05/05
Letter from Potters Waste Management regarding monitoring point reference numbers	All	August 2005
Drawing No. B1523QR-EMP-04	All	14/12/05
Surface water Management – Eastern Outfall		
Surface Water Management and Monitoring	All	18/04/06

Plan Ref:SWMP2005v1	All	21/07/2005
Potters Waste Management Bryn Posteg Landfill Nant Y Bradnant Survey Final Report		
	All	
Variation application Ref TP3331LJ Bryn Posteg Waste Treatment Facility		
	All	
PPC Variation Application Supporting Document: tyre storage		
Operational Techniques Report Rev 2		
Composting Management Plan	All – excluding references to landfill gas engines	
Accident Management Plan	All	03 October 2005
Letter regarding Tyre storage proposals		
Permit Variation application	All	November 04
Email and attachments from David Williams	All	February 2005
	All	
	All	August 2006
	Response to Questions 2.1 to 2.2 of the Part B application form. Excluding operational techniques report dated May 07 Rev 1.	May 2007
	All	June 2008
	All	24 October 2008
	All	November 2008
	All	November 2008
	All	18 December 2008
	All	01 June 2006
	All	27 February 2010, 09 March 2010, 14 May 2010 & 20 May 2010

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
1	<p>The Operator shall ensure that a review the integrity of all storage tanks and site surfacing for the Waste Treatment Facility against the requirements of Sections 2.1.3 and 2.2.5 of the Sector Guidance Note S5.06 be carried out by a qualified structural engineer. The review shall identify any measures necessary to meet those requirements and propose a time scale for implementing them. A written report of the review shall be submitted to the Environment Agency detailing the reviews findings and recommendations.</p> <p>Remedial action shall be taken to ensure all tanks and surfacing within the waste treatment facility meet the standards set out in the above documents and implement the maintenance and inspection regime.</p>	<p>15 January 2010</p> <p>To a timetable to be agreed in writing with the Agency</p>
2	<p>Undertake an assessment of the impact of bio-aerosols emissions from the biological treatment plant. The review shall use the methodology described in the Agency's "An Environmental Risk Management Framework for Composting Facilities in England and Wales", October 2004.</p> <p>The report shall include an assessment of the efficiency of existing controls implemented on site for the management of bio-aerosols and propose any improvements or additional measures required. The operator shall implement any improvement or measures to a timetable as approved in writing by the Agency</p>	15 January 2010
3	<p>Undertake an assessment of the impact of odour from the installation.</p> <p>The report shall include an assessment of the efficiency of existing controls implemented on site for the management of odour and propose any improvements or additional measures required. The operator shall implement any improvement or measures to a timetable as approved in writing by the Agency</p>	15 January 2010
4a	The Operator shall undertake and submit to the Agency a review of the Leachate Treatment taking place on the installation (including treatment infrastructure and methods) against the standards set out in IPPC S5.03 Technical Guidance for the Treatment of Hazardous and Non-Hazardous Landfill Leachate. If the review identifies deficiencies in the current leachate treatment infrastructure and methods, the operator shall identify and submit to the Agency the improvements needed to achieve the standards set out in the above guidance and propose a timetable for their implementation.	31 December 2011
4b	Any improvements identified by IC4a above shall be implemented to the timetable agreed with the Agency.	In line with the agreed timetable
5a	The operator shall monitor on a monthly basis, for a period of 12 months, up stream water quality and flow from the new surface water discharge point SW3 as shown on plan 1009.REED.01.	31 December 2011
5b	Within 2 months of completing the 12 month monitoring programme, the operator shall statistically review the data obtained from 5a and submit a report to the Agency for approval that identifies revised emission trigger limits. The determinants as specified in table S4.3 shall be included.	1 March 2012

Table S4.2 Point sources emissions to air – emission limits and monitoring requirements

S4.2 Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Landfill Gas Flare as shown on Drawing Reference 1168.GPM.MN07	Oxides of Nitrogen	Landfill Gas Flare	150 mg/m3	Hourly mean	Annually	ISO 10849: 1996
	CO		50 mg/m3			ISO 12039: 2001
	Total VOCs		10 mg/m3			BS EN 12619: 1999 or BS EN 13526: 2002
	Non Methane Volatile Organic Compounds (NMVOC's)		5 mg/m3			BS EN 13649
	Operational Temperature		>1000°C			None specified
NB. Annual monitoring is only required when flares operate in excess of 10% of the time, taken on an annual assessment period.						

Table S4.3 Point source emissions to water (other than sewer) – emission limits and monitoring requirements

Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
P1, P2 as shown on drawing No.SWS2 &	Ammoniacal Nitrogen	Surface water collection system	0.25 mg/l	Spot Sample	Monthly	LFTGN02 Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water or as agreed in writing with the Agency
	Suspended Solids		50 mg/l			
	pH		6 - 9			
	BOD		To be agreed under IC 5			
SW3 as shown on drawing 1009.REED.01	Ammoniacal Nitrogen		1 mg/l (Limit To be reviewed under IC 5)			
	Suspended Solids		50 mg/l (Limit To be reviewed under IC 5)			
	pH		6 - 9			
	BOD		To be agreed under IC 5			

Table S4.4 Point source emissions to sewer – emission limits and monitoring requirements						
Emission point Ref. & Location	Parameter	Source	Limit (incl unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
Emission point - Point where the pumped treated leachate effluent enters a shared sewer as indicated by the end of the red line on drawing number 1009.IB.01. Monitoring point – Point as referenced “Sample Point” on drawing reference 1009.SF.01.	Ammoniacal Nitrogen	Leachate treatment plant	150mg/l	Spot sample	Monthly	None specified
	Suspended solids		500mg/l		Monthly	
	COD		1000mg/l		Monthly	
	Sulphate		1000mg/l		Monthly	
	Soluble CH ₄		0.14mg/l		Monthly	
	Oils		Nil		Monthly	
	pH		6-10		Monthly	
	Temperature		Less than 43 °C		Monthly	
	List I substances identified to be present within the leachate				6 monthly	
NB. Monitoring point is considered same effluent quality as emission point because no other inputs present in sewer pipe between the 2 points. As confirmed in writing from the operator on 20 th May 2010.						

Table S4.5 Trigger levels for emissions into groundwater and monitoring requirements						
Monitoring point reference as shown on Drawing B1523QR_EMP-04	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method	
W1 to W10	Ammoniacal Nitrogen – N	2 mg/l	Spot Sample	Quarterly	Monitoring to be carried out in accordance with Environment Agency Document LFTGN02 “Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water” unless otherwise agreed in writing with the Agency.	
	Cadmium	0.0056 mg/l				
	Chloride	69 mg/l				
	Nickel	0.12 mg/l				
	Toluene	0.004 mg/l				
	Xylene	0.003 mg/l				
	Zinc	0.85 mg/l				
	Ethylbenzene	0.001 mg/l				
	Mecoprop	0.0001 mg/l				
	2-4 D	0.0001 mg/l				

Table S5.1 Reporting of monitoring data			
Parameter	Emission or monitoring point/reference	Reporting period	Period begins
Leachate levels (Table S4.1) Parameters as required by condition 3.6.1	Leachate abstraction points specified in Table S4.1. Area A and B as shown on Drawing 1168.GPM.MN06C	Quarterly	Quarterly
Landfill gas emissions to air (Table S4.2) Parameters as required by condition 3.6.1 and Table S4.2	Landfill Gas Flare as shown on	Annually	Annually
Emissions to water (Table S4.3) Parameters as required by condition 3.6.1 and Table S4.3	P1, P2 as shown on drawing No.SWS2 & SW3 as shown on drawing 1009.REED.01	Quarterly	Quarterly
Emissions to sewer (Table S4.4) Parameters as required by condition 3.6.1 and Table S4.4	Discharge point to STW via pipeline as shown drawing 1168.IB.01	Quarterly	Quarterly
Emissions to groundwater (Table S4.5) Parameters as required by condition 3.6.1 and Table S4.5	W1 to W10 as shown on Drawing B1523QR_EMP-04	Quarterly	Quarterly
Landfill gas external monitoring boreholes (Table S4.6) Parameters as required by condition 3.6.1 and Table S4.6	All peripheral landfill gas monitoring boreholes as identified on drawing no.1168.GPM	Quarterly	Quarterly
Other landfill gas monitoring (Table S4.7 and S4.8) Parameters as required by condition 3.6.1 and Table S4.7 and S4.8	Permanently and temporarily capped cells	Annually	Quarterly
	Gas collection system as shown on drawing reference no.755487-C-06	Quarterly	
	Input to the landfill gas management compound	Annually	
	Input to the landfill gas management compound (continuous monitoring). Summary data only such as max/min average and total quantity.	Quarterly	
Other leachate monitoring (Table S4.9) Parameters as required by condition 3.6.1 and Table S4.9	All monitoring points as shown on Drawing 1168.GPM.MN06C	Every 6 months for parameters monitored 6 monthly frequency and annually for all parameters monitored on a annual frequency.	Quarterly
Particulate matter in ambient air (Table S4.10) Parameters as required by condition 3.6.1 and Table S4.10	All monitoring points as shown in plan No.1168.GPM.MN07	Quarterly	Quarterly
Other groundwater water monitoring (Table S4.11) Parameters as required by condition 3.6.1 and Table S4.11	W1 to W10 as shown on Drawing B1523QR_EMP-04	Every 3 months for parameters monitored on a monthly or quarterly frequency and annually for all parameters monitored on a annual frequency.	Quarterly

Schedule 3 – conditions to be added

None.

An additional plan shall be added to Schedule 2:
Plan No.4:

