

# Notice of variation with introductory note

Environmental Permitting (England & Wales) Regulations 2010

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3C Waste Limited

Llanddulas Landfill Site  
Abergele Road  
Llanddulas  
Conwy  
North Wales  
LL22 8HP

Variation application number

**EPR/BU0800IZ/V011**

Permit number

**EPR/ BU0800IZ**

# **Llanddulas Landfill Site**

## **Permit number EPR/BU0800IZ**

### **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.

The changes brought in by this permit variation are to environmental monitoring frequencies only.

The schedules specify the changes made to the original permit.

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

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application BU2853IS	Received 27/02/2003	Applicant agrees that separate applications should be conjoined – see letter dated 30 January 2004 Ref 4D-197-126
Application BU0800IZ	Received 9 June 2003	
Permit BU0800IZ determined	6 February 2004	
Variation Application EPR/BU0800IZ/V002	Received 8 April 2004	
Variation determined EPR/BU0800IZ/V002	28 April 2004	
Variation Application EPR/BU0800IX/V003	10/10/07	
Variation Application EPR/BU0800IX/V004	30/05/08	
Variation determined EPR/BU0800IZ/V003	03/06/08	
Variation determined EPR/BU0800IZ/V005	25/07/08	
Variation Application EPR/BU0800IX/V006	Received 24/12/08	
Variation Application EPR/BU0800IX/V006	Withdrawn 05/06/09	
Variation Application EPR/BU0800IX/V007	Received 21/01/09	
Variation Application EPR/BU0800IX/V008	Received 02/09/09	
Variation Application EPR/BU0800IX/V007	Withdrawn 12/02/10	
Variation Application EPR/BU0800IX/V008	Refused 21/09/10	

<b>Status log of the permit</b>		
<b>Description</b>	<b>Date</b>	<b>Comments</b>
Application EPR/BU0800IZ/V009	Duly made 08/12/11	Application to allow importation of leachate for treatment
Variation determined EPR/BU0800IZ/V009	07/02/12	Varied permit issued.
Agency variation determined EPR/BU0800IZ/V010	12/06/13	Agency variation to implement the changes introduced by IED
Variation application BU0800IZ/V011 duly made	18/03/16	Application to vary monitoring and reporting requirements
Variation application BU0800IZ/V011 determined	10/06/16	Variation Issued
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/BU0800IZ**

issued to:  
**3C Waste Limited** ("the operator")

whose registered office is

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

company registration number **02632581**

to operate a regulated facility at


**Llanddulas Landfill Site  
Llanddulas Quarry  
Abergele Road  
Llanddulas  
Abergele  
LL22 8HP**

to the extent set out in the schedules.

The notice shall take effect from 10/06/2016

Signed

Date

	<b>10 June 2016</b>
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Eirian Macdonald  
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:

### Permit condition 3.6.1 shall now read:

- 3.6.1 The operator shall, unless otherwise agreed in writing by the Natural Resources Wales, undertake the monitoring specified in the following tables in schedule 4 to this permit:
- (a) Leachate specified in tables S4.1 and S4.8;
  - (b) Point source emissions specified in tables S4.2 and S4.3;
  - (c) Groundwater specified in tables S4.4 and S4.10;
  - (d) Landfill gas specified in tables S4.5, S4.6, S4.7 and S4.11;
  - (e) Surface water specified in table S4.9.

### Table S4.1 shall be amended to read:

<b>Table S4.1 Leachate level limits and monitoring requirements</b>			
<b>Monitoring point reference/ Description</b>	<b>Limit</b>	<b>Monitoring frequency</b>	<b>Monitoring method</b>
Phase 1A and Phase 1B - LCP1AR, LMP1, LMP2 Phase 1C – LCP1C, LMP3 Phase 2a - LCP2Ar2, LMP4 Phase 2b - LCP2Br2, Phase 2c - LCP2Cr, LMP5 Phase 3(1)+Extension – LCP3, LMP3/1 Phase3A – LCP3A, LMP3/2	2m above cell base	Monthly	In accordance with the Environment Agency's "Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water" (LFTGN02)

### Table S4.4 shall be amended to read:

<b>Table S4.4 Trigger levels for emissions into groundwater and monitoring requirements</b>					
<b>Monitoring point reference</b>	<b>Parameter</b>	<b>Limit (including unit)</b>	<b>Reference Period</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
GWBH4, GWBH7, GWBH23, GWBH25, GWBH34, GWBH35, GWBH36 as shown on the 2 drawings referenced ESID11 for Phases 1, 2, 3 and 3a parts of	Ammoniacal Nitrogen	1mg/l	Spot Sample	Quarterly	In accordance with the Agency's
	Chloride	250mg/l	Spot Sample	Quarterly	"Guidance on
	Mercury	0.01µg/l	Spot Sample	Quarterly	Monitoring of
	Mecoprop	0.04 µg/l	Spot Sample	Quarterly	Landfill
	Potassium	12mg/l	Spot Sample	Quarterly	Leachate,
	Phenols	0.5µl	Spot Sample	Quarterly	Groundwater

the Application	Tributyl Tin	0.001µg/l	Spot Sample	Quarterly	and Surface Water” (LFTGN02)
	Trifuralin	0.01 µg/l	Spot Sample	Quarterly	

**Table S4.5 shall be amended to read:**

<b>Table S4.5 Landfill gas in external monitoring boreholes – limits and monitoring requirements</b>				
<b>Monitoring point ref/ description</b>	<b>Parameter</b>	<b>Limit (incl. unit)</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>
BH01 – 30, BH41 – 42 as shown on the drawings referenced ESID8 for Phases 1, 2, 3 and 3a parts of the Application	Methane	1% v/v above agreed background levels	Fortnightly	Portable infra-red detector
	Carbon dioxide	No limit		
	Oxygen	No limit		
	Atmospheric Pressure	No limit		
BH40	Methane	2.5 % v/v above agreed background levels	Fortnightly	Portable infra-red detector
	Carbon dioxide	No limit		
	Oxygen	No limit		
	Atmospheric Pressure	No limit		
BH31 – 39, BH47 – 57, BH2003/1, Bh2003/2 and BH100-120 as shown on the drawings referenced ESID8 for Phases 1, 2, 3 and 3a parts of the Application	Methane	1% v/v above agreed background levels	Monthly	Portable infra-red detector
	Carbon dioxide	No limit		
	Oxygen	No limit		
	Atmospheric Pressure	No limit		

**Table S4.8 shall be amended to read:**

<b>Table S4.8 Leachate– other monitoring requirements</b>				
<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
Phase1A and Phase 1B - LCP1AR	Temperature	Quarterly	In accordance with the Environment agency’s “Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water” (LFTGN02)	
	Electrical Conductivity	Quarterly		
Phase 1C – LCP1C	pH	Quarterly		
Phase 2a – LCP2Ar2	Ammonical Nitrogen (NH <sub>4</sub> -N)	Quarterly		
Phase 2b – LCP2Br2	Chloride (Cl)	Quarterly		
Phase 2c – LCP2Cr	Total alkalinity (CaCO <sub>3</sub> )(tot alk)	Quarterly		
Phase 3(1)+extension LCP3				
Phase 3A – LCP3A				

**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
	Magnesium (Mg)	Quarterly		
	Potassium (k)	Quarterly		
	Total sulphates (SO <sub>4</sub> )	Quarterly		
	Calcium (Ca)	Quarterly		
	Sodium (Na)	Quarterly		
	BOD	Quarterly		
	COD	Quarterly		
	TOC	Quarterly		
	TON	Quarterly		
	Mecoprop	Quarterly		
	Mercury (Hg)	Quarterly		
	Lead (Pb)	Quarterly		
	Zinc (Zn)	Annually		
	Copper (Cu)	Annually		
	Cadmium (Cd)	Annually		
	Nickel (Ni)	Annually		
	Iron (Fe)	Annually		
	Chromium (Cr)	Annually		
	Manganese (Mn)	Annually		

Table S4.10 shall be amended to read:

**Table S4.10 Groundwater – other monitoring requirements**

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
<u>Upstream</u>	Water level	Quarterly	In accordance with the Environment agency's "Guidance on Monitoring of Landfill Leachate, Groundwater and Surface Water" (LFTGN02)	
GWBH32, GW1, GWBH33, GWBH34, GW2, GWBH35	Electrical Conductivity (EC)	Quarterly		
	pH	Quarterly		
<u>Downstream</u>	Ammonical Nitrogen (NH <sub>4</sub> -N)	Quarterly		
GWBH25, GWBH26, GWBH27B, GWBH06R, GWBH36, GWBH28, GWBH24, GWBH22, GWBH23, GWBH07, GWBH04	Chloride (Cl)	Quarterly		
as shown on the 2 drawings referenced ESID11 for Phases 1, 2, 3 and 3a parts of the Application				
GWBH27B, GWBH36	Lead (Pb)	Quarterly		
	Mecoprop	Quarterly		



**Table S4.10 Groundwater – other monitoring requirements**

<b>Emission point reference or source or description of point of measurement</b>	<b>Parameter</b>	<b>Monitoring frequency</b>	<b>Monitoring standard or method</b>	<b>Other specifications</b>
as shown on the 2 drawings referenced ESID11 for Phases 1, 2, 3 and 3a parts of the Application	Mercury (Hg)	Quarterly		
<u>Upstream</u> GWBH32, GW1, GWBH33, GWBH34, GW2, GWBH35  <u>Downstream</u> GWBH25, GWBH26, GWBH27B, GWBH06R, GWBH36, GWBH28, GWBH24, GWBH22, GWBH23, GWBH07, GWBH04  as shown on the 2 drawings referenced ESID11 for Phases 1, 2, 3 and 3a parts of the Application	Total alkalinity (CaCO <sub>3</sub> )(tot alk)	Quarterly		
	Magnesium (Mg)	Quarterly		
	Potassium (k)	Quarterly		
	Zinc (Zn)	Quarterly		
	Copper (Cu)	Quarterly		
	Cadmium (Cd)	Quarterly		
	Nickel (Ni)	Quarterly		
	Iron (Fe)	Quarterly		
	Chromium (Cr)	Quarterly		
	Total sulphates (SO <sub>4</sub> )	Quarterly		
	Calcium (Ca)	Quarterly		
	Manganese (Mn)	Quarterly		
	Sodium (Na)	Quarterly		
	TOC	Quarterly		
	TON	Quarterly		
	Dissolved Methane	Quarterly		
GWBH27B, GWBH36 as shown on the 2 drawings referenced ESID11 for Phases 1, 2, 3 and 3a parts of the Application	List 1 Leachate Screen	Annually		

**Schedule 3 – conditions to be added**

None