

# **CAULMERT LIMITED**

Engineering, Environmental & Planning  
Consultancy Services

## **Yanley Landfill Site**

**Viridor Waste Exeter Limited**

## **Activities & Operating Techniques Report**

### **Environmental Permit Variation Application**

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**APPROVAL RECORD**

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**Client:** Viridor Waste Exeter Limited

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**Document Title:** Activities & Operating Techniques Report

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## 1. INTRODUCTION

### 1.1 Document context

1.1.1 This Activities and Operating Techniques Report is in response to the environmental permit application form C3 for bespoke waste installation permits.

1.1.2 The C3 form requests information about the activities the application relates to and the operating techniques that will apply to them. Information is requested on: -

- a) Types of activities;
- b) Types of waste to be accepted;
- c) Emissions;
- d) Operating techniques including technical standards;
- e) General requirements in relation to amenity and accident risks;
- f) Types and amounts of raw materials;
- g) Information for specific sectors (hazardous and non-hazardous waste recovery and disposal sector);
- h) Monitoring of point source emissions;
- i) Resource efficiency and climate change.

### 1.2 Activities to be varied (Part C3 question 1)

1.2.1 This 'Activities and Operating Techniques Report' has been prepared to provide responses to the environmental permit application form part C3 which relates to the issues listed above. To aid cross-referencing between this 'Activities and Operating Techniques Report' and the application form, the various issues are presented in the same order as in the application form and the headings in this document include reference to the specific question number to which the information relates.

1.2.2 The proposed variation is for the addition of a methane stripping plant with a capacity of 50 or more tonnes a day, in addition this will require the construction of connecting pipework infrastructure for discharge from the MSP to the foul sewer and an S1 emissions monitoring point.

1.2.3 Question 1 of Part C3 requires a table to be completed with details of all the activities listed in schedule 1 of the Environmental Permitting Regulations and all directly associated activities (DAAs) (in separate rows), which are proposed to be carried out at the installation. There are no proposals to amend or vary existing DAAs, therefore these have been left out in Table 1 below.

1.2.4 The addition of the leachate treatment plant will be applied as a listed activity to the permit as shown in Table 1 below.

**Table 1: Types of activities**

Schedule 1 listed activities					
Waste Operation name	Schedule 1 references	Description of the Activity (Schedule 1 wording & site specific description)	Activity capacity	Annex IIA or IIB (disposal and recovery codes) and description	Non-hazardous waste treatment capacity
Yanley Landfill Site	Section 5.2 Part A(1)(a) Disposal of waste in a landfill	Landfill for non-hazardous waste	N/A	<b>D5</b> – <i>Specially engineered landfill;</i> <b>R5 and R10</b> – <i>Land treatment result in benefit to agriculture or ecology.</i>	N/A
	Section 5.4 Leachate treatment	Leachate treatment plant with a capacity of 50 or more tonnes a day.	100 tonnes	<b>D9</b> – <i>Physical/physico-chemical treatment</i>  <b>D 15 Storage</b> <i>pending any of the operations numbered D 1 to D 14 (excluding temporary storage, pending collection, on the site where the waste is produced.)</i>	100 tonnes
Directly associated activities					
Name of DAA		Description of the DAA (including which Schedule 1 activity it serves)			
For waste installations that take waste					
Total storage capacity		Leachate storage and methane stripping tank capacity: 100 tonnes (>50 tonnes)			
Annual throughput		Leachate: 36,500t			

### 1.3 Types of waste accepted (Part C3 question 1)

1.3.1 The only waste type proposed is 19 07 03 landfill leachate, arising only from Yanley landfill site.

**1.4 Point Source Emissions to air, water and land (Part C3 question 2)**

1.4.1 Effluent from the MSP will discharge via the existing discharge point where trade effluent shall pass through the monitoring point into Wessex Water's foul public sewer and then to Avonmouth Sewage Treatment works (final discharge to sea).

**1.5 Point source emission to sewers, effluent treatment plants or other transfers off site**Yanley Landfill Methane Stripping Plant

1.5.1 Following treatment in the methane stripping plant, the leachate will be discharged to a foul public sewer regulated by Wessex Water which leads to the Avonmouth sewage treatment works, Bristol and discharges out to sea. The trade effluent agreement from Wessex Water, imposes restrictions on the quantity (100m<sup>3</sup> in any 24-hour period) quality of treated leachate to be discharged. A copy of the trade effluent consent is presented in Appendix 1.

1.5.2 Further details on the discharge and the resulting impact of the emission on controlled water following treatment at the sewage treatment works is included in the Surface Water Pollution Risk Assessment, document ref: 4898-CAU-XX-XX-RP-V-0304. The trade effluent discharge point is shown as YN/501 in the Yanley Landfill MEPP Monitoring & Extraction Point plan, drawing ref: YAN3000. Effluent will be monitored as it leaves the MSP and enters the foul sewer.

**1.6 Point source emission to water (other than sewers)**

1.6.1 There are no proposed surface water emission points from the MSP.

**1.7 Point source emission to land**

1.7.1 Not relevant to this application.

**1.8 Point source Emissions to Air**

1.8.1 There is a potential for odour release from untreated leachate and during venting to the atmosphere (venting to atmosphere will reduce the potential for pressure fluctuations). To minimise odours, raw leachate will enter the tank through an internal pipe extending vertically downwards to submerge the pipe end. Point Source Emissions to air is covered in further detail in the 'Methane Stripping Process Description and BAT review' report in document ref. 4898-CAU-XX-XX-RP-V-0303.

**1.9 Technical standards (Part C3 question 3a)**

1.9.1 Question 3a asks that relevant technical guidance notes for each activity at the waste operation should be specified. Table 2 below is a summary table of the technical guidance that will apply either fully or in part to the proposed leachate treatment activities. For the avoidance of doubt with regards to which of the guidance or standards that apply, the relevant technical standards which apply to this activity are detailed separately below.

**Table 2: Technical standards – leachate treatment**

Description of Schedule 1 activity or directly associated activity	Relevant technical guidance note or Best available techniques as described in BAT conclusions under IED	Document reference
Activity ref A1: Leachate management	<p>EPR 1.00: How to comply with your environmental permit.</p> <p>Establishing best available techniques (BAT) Conclusions for waste treatment, under Directive 2010/75/EU of the European Parliament and of the Council, (August 2018).</p> <p>Sector Guidance Note IPPC S5.06 Recovery and Disposal of Hazardous and Non-hazardous waste.</p> <p>Best Available Techniques (BAT) reference document for Waste Treatment</p> <p>IED 2010.75/EU Integrated Pollution Prevention and Control.</p> <p>UK Landfill Industry Code of Practice (ICoP) “The establishment of appropriate containment standards for leachate storage and treatment plant” (January 2017).</p>	<p>‘Methane Stripping Plant process description <i>SGN BAT review</i>’ (doc. ref. 4239-CAU-XX-XX-RP-V-0314)</p> <p>Risk Assessments:</p> <ul style="list-style-type: none"> <li>- Amenity and Accident Risk Assessment (document ref 4898-CAU-XX-XX-RP-V-0301)</li> <li>- Surface Water Pollution Risk Assessment (document ref 4898-CAU-XX-XX-RP-V-0304)</li> </ul>

1.9.2 The Environment Agency’s GOV.UK guidance EPR 1.00 ‘*How to comply with your environmental permit*’ applies to all sites operated under the environmental permitting regime. It sets out good practice standards that should be applied by all operators.

1.9.3 The UK ICoP for the “establishment of appropriate containment standards for leachate storage and treatment plant” provides practical aspects of leachate storage and management in structures across the UK. It has been produced to provide industry specific and focussed guidance on the provision of suitable primary and secondary containment for the following systems:

- Leachate treatment plants;
- Stand-alone leachate storage tanks (leachate removal by tinkering etc)
- On-waste leachate storage facility; and,
- Working areas associated with the above facilities.

1.9.4 The MSPs process description and BAT review are based on European BAT reference document (BREFs) 'Best Available Techniques (BAT) reference document for waste treatment' IED 2010/75/EU (Integrated Pollution Prevention and Control) that are intended to ensure European consistency in the understanding of what is BAT for a certain sector. This BREF document has been applied to the BAT for Yanley Landfill Site. In addition, to show that Yanley Landfill Site has systematically developed proposals to apply BAT for the proposed MSP, the Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste, integrated Pollution Prevention and Control (IPPC) for best practise for sites that transfer or treat wastes, has been applied.

#### **1.10 Process description (Part C3 question 3a)**

1.10.1 A process description for the Methane Stripping Plant activity is provided in the '*Methane Stripping Plant process description & BAT review*' which has been submitted with this application under document ref: 4898-CAU-XX-XX-RP-V-0303.

#### **1.11 General requirements – amenity and accidents (Part C3 question 3b)**

1.11.1 It is a general requirement for all applications to consider the risk of emissions in relation to possible accidents, fugitive emissions, odour and noise and vibration. Risk assessments were carried out using the Environment Agency's templates for amenity and accident risk assessments and Surface Water Pollution Risk Assessment which considers emissions of substances as a result of the proposed operations. Document references include:

Amenity & Accidents Risk Assessment 4898-CAU-XX-XX-RP-V-0301;

Surface Water Pollution Risk Assessment 4898-CAU-XX-XX-RP-V-0304;

#### **1.12 Types and amounts of raw materials (Part C3 question 3c)**

1.12.1 Antifoam and anti-scaling chemicals will be used as a raw material and dosed into the methane stripping treatment plant to reduce foaming and scaling as result of the agitative process and leachate treatment process. Details of the types and amounts are included in the Methane Process Description & BAT Review Report, document ref: 4898-CAU-XX-XX-RP-V-0303.

#### **1.13 Information for specific sectors (Part C3 question 3d)**

1.13.1 For certain sectors, information related to how the criteria of the relevant sector guidance notes for those sectors should be provided.

1.13.2 The specific questions for the waste treatment sector are not relevant to this application for a new methane stripping plant, as leachate treatment is more appropriately covered by the BAT Conclusions (2018) and BREF as described under the technical standards.



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## 2. MONITORING

### 2.1 Measures for monitoring point source emissions (Part C3 question 4a)

#### Emissions to air

- 2.1.1 Fugitive 'emissions to air' resulting from the MSP have been considered in further detail in the 'Methane Stripping Process Description & BAT Review' document ref: 4898-CAU-XX-XX-RP-V-0303 included within this application.

#### Emissions to water (other than sewers)

- 2.1.2 There will be no additional point source emissions to surface water, so additional monitoring is not proposed.

#### Emissions to sewers, effluent treatment plants or other transfers off site

- 2.1.3 There is an emission to foul sewer located west of Colliters Brook at Grid Ref: ST560 700 under a trade effluent consent. Location of sampling, monitoring and discharge point is identified on as 'YN/501' on the 'Yanley Landfill Monitoring Extraction Point plan' drawing ref: YAN3000.
- 2.1.4 The emissions monitoring that will be carried out relevant to the new activities are detailed within 'Substances' of the Trade Effluent Consent in Appendix 1. These are not required to be replicated in the permit.

### 2.2 Basic measures for improving energy-efficiency of activities (Question 6a)

- 2.2.1 Please refer to treatment process description & BAT review document (Ref 4898-CAU-XX-XX-RP-V-0303) for further detail on the Methane Stripping Plant.

### 2.3 Breakdown of changes to the energy used and created (Question 6b)

Responses below relate only to the Methane Stripping Plant.

- 2.3.1 The maximum annual power consumption for the MSP is 30MWhr. The main energy consumption will be for the 2 x Elmo Riechschle vane blowers with an operating power of 0.75kW per hour which will operate 365 days per year. A number of process/discharge/dosing pumps that will operate intermittently throughout the process.

### 2.4 Climate-change levy agreement or specific measures (Question 6c)

- 2.4.1 It is requested that where no Climate Change Levy Agreement has been entered into, a description of the specific measures the operator will use for improving the energy efficiency must be provided.
- 2.4.2 Please refer to treatment process description & BAT review document (Ref 4898-CAU-XX-XX-RP-V-0303) for further detail of the methane stripping plant.

**2.5 Raw and other materials, other substances and water to be used (Question 6d)**Raw materials other than water

- 2.5.1 The types and quantities of raw materials were provided in response to question 3c, antifoam and anti-scaling will be dosed to reduce the level of foaming and scaling as a result of the leachate agitation and treatment process.
- 2.5.2 Raw materials use within the methane Stripping plant is also small and is detailed further in the Methane Stripping Plant Process Description and BAT Review, document ref: 4898-CAU-XX-XX-RP-V-0303.
- 2.5.3 The operator will select the least harmful products to use in the operation wherever possible.
- 2.5.4 The operator will keep Material Safety Data Sheets (MSDS) for all products used at the facility and will monitor the quantity of materials used. This will provide data for regular reviews of raw materials usage at the facility.

Water use

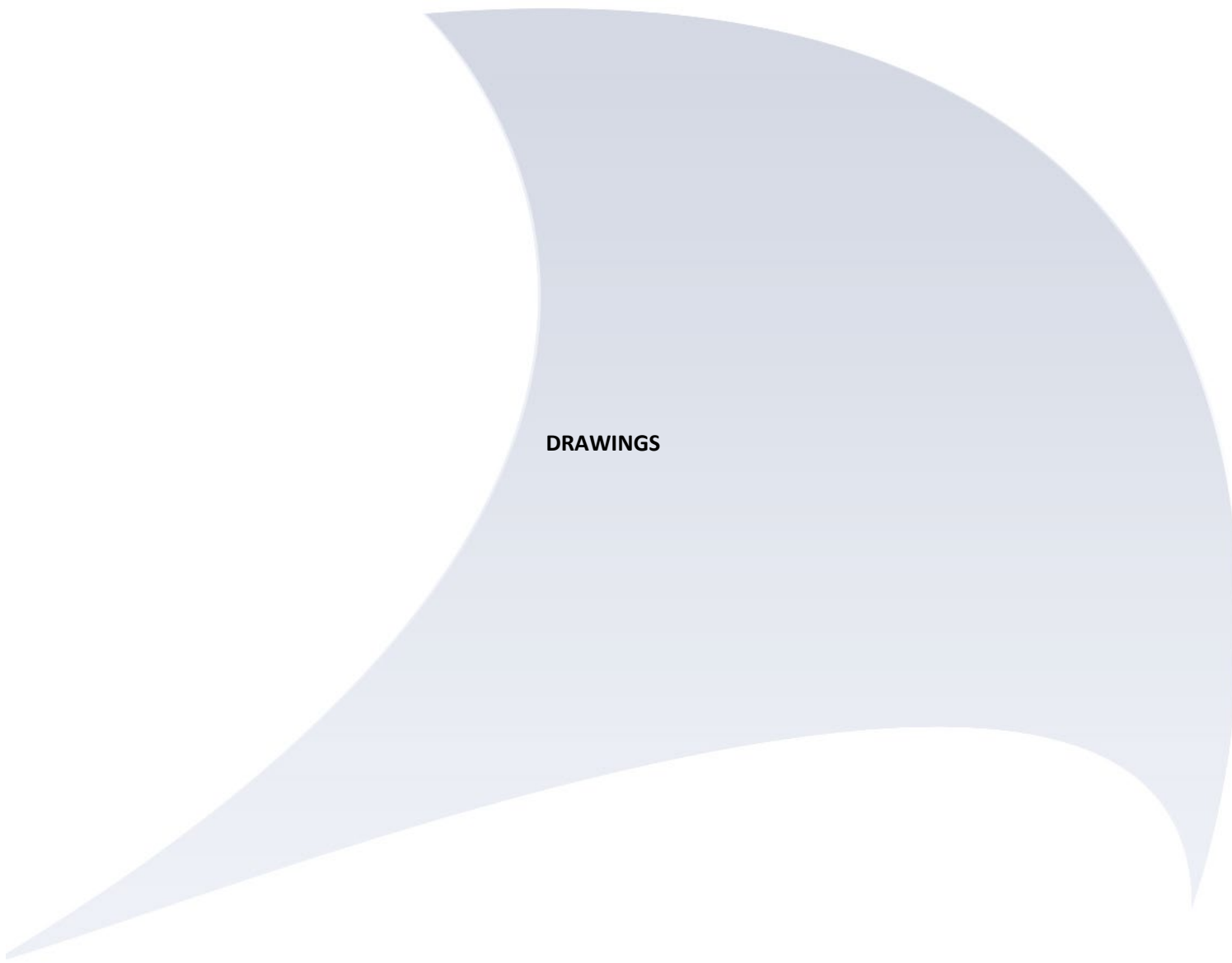
- 2.5.5 Water usage is small and limited to cleaning.

**2.6 Compliance with the Council Directive 2006/12/EC on waste (Question 6e)**

- 2.6.1 With respect to the Waste Framework Directive, the waste operation optimises efficiency with regards to the hierarchical approach required by the Directive.
- 2.6.2 In relation to the prevention of waste generation these activities onsite do not generate significant volumes of additional waste.

### 3. REFERENCES

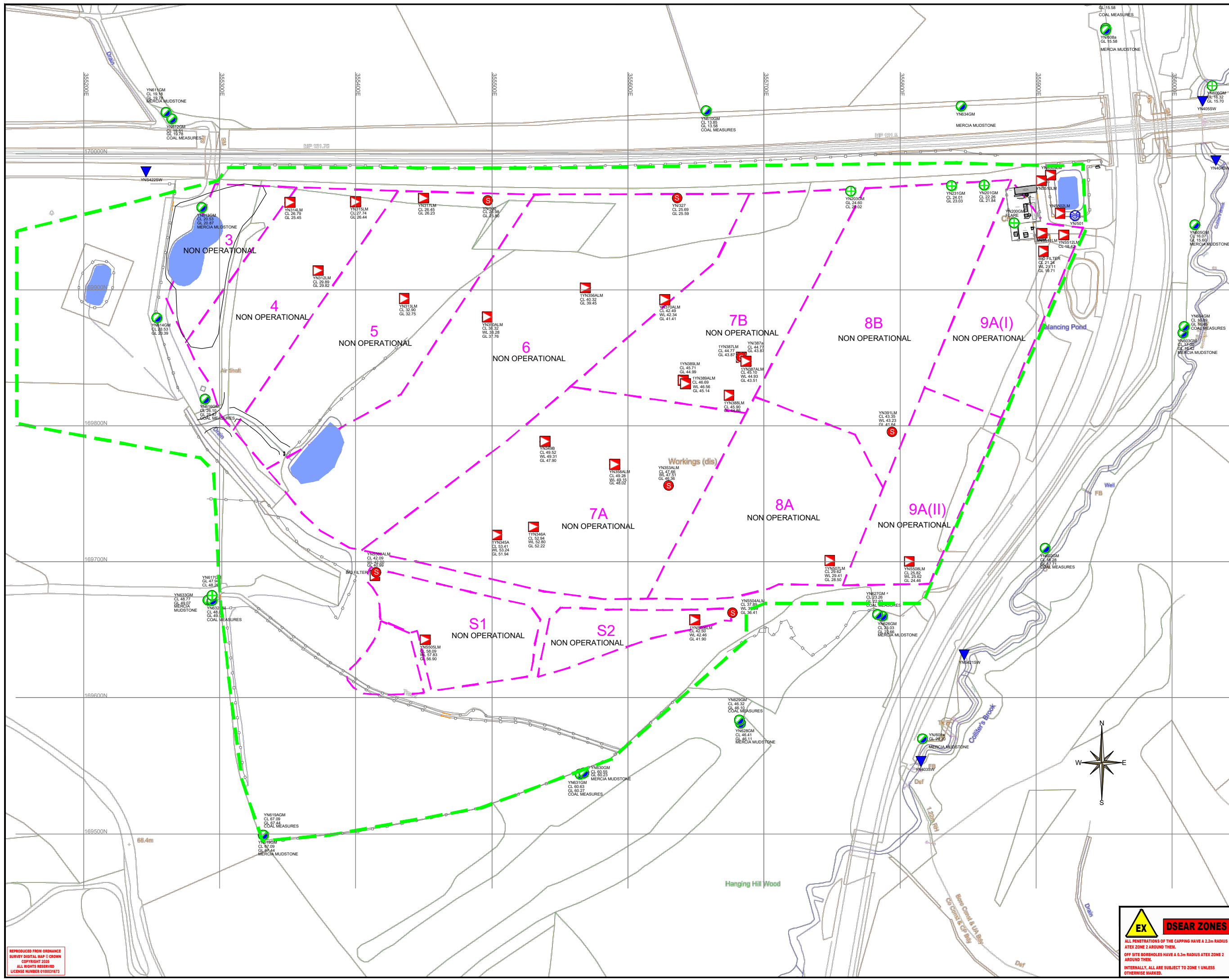
- 3.1.1 Directive 2008/98/EC of the European and of the Council of 19 November 2008 on waste and repealing certain Directives.
- 3.1.2 The Environmental Permitting (England and Wales) Regulations 2016.
- 3.1.3 Establishing best available techniques (BAT) Conclusions for waste treatment, under Directive 2010/75/EU of the European Parliament and of the Council, (August 2018).
- 3.1.4 Integrated Pollution Prevention and Control, The BAT (Best Available Techniques) Reference Document (BREF), Waste Treatment Industries, under Articles 16(2) of Council Directive 96/61/EC (IPPC Directive).
- 3.1.5 Environment Agency (2013): Sector Guidance Note IPPC S5.06. Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste.
- 3.1.6 UK Landfill Industry Code of Practice (2017) The Establishment of Appropriate Containment Standards for Leachate Storage Infrastructure.
- 3.1.7 Environment Agency (2013): Understanding the meaning of regulated facility. RGN 2 version 3.0.
- 3.1.8 Environment Agency (2020): Application for an environmental permit – Part C4 – carrying a bespoke waste operation permit. Version 13, August 2020.



**DRAWINGS**

TO BE READ IN CONJUNCTION WITH MEPP TABLES  
FOR IN WASTE GAS MONITORING WELLS SEE  
THE SITE 4000 STANDARD LAYOUT

- BUILDINGS
- WATER
- ROAD
- FENCES
- LEACHATE MONITORING POINT
- LEACHATE SUMP
- PERIMETER GAS MONITORING POINT
- DUAL GAS / GROUND WATER MONITORING
- GROUND WATER MONITORING POINT
- SURFACE WATER MONITORING POINT
- AIR EMISSIONS MONITORING POINT
- DEPOSITIONAL DUST GAUGE
- AIR QUALITY MONITORING POINT
- F.I.D MONITORING POINT
- EFFLUENT MONITORING POINT
- BASAL CELL BOUNDARY
- EP BOUNDARY
- (UG) UP GRADIENT
- (DG) DOWN GRADIENT
- (CG) CROSS GRADIENT
- (US) UP STREAM
- (DS) DOWN STREAM
- DIRECTION OF FLOW



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SITE NAME  
**YANLEY LANDFILL**

DRAWING TITLE  
**MONITORING & EXTRACTION POINT PLAN**

DRAWING NUMBER  
**YAN3000**

TASK NUMBER 16378

SCALE 1:2500@A0  
O/DRN S.Robinson  
O/DATE 15/12/2020  
O/APP D.O.Approved  
O/DATE 16/12/2020

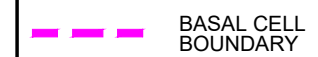
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INFORMATION TAKEN FROM  
SURVEY SERVICES MASTER FILE YAN066s-Feb/2020 Rev A  
OTHER DRAWINGS YAN12000-Mar/2010

**EX DSEAR ZONES**

ALL PENETRATIONS OF THE CAPPING HAVE A 2.2m RADIUS ATEX ZONE 2 AROUND THEM.  
OFF SITE BOREHOLES HAVE A 0.3m RADIUS ATEX ZONE 2 AROUND THEM.  
INTERNALLY, ALL ARE SUBJECT TO ZONE 1 UNLESS OTHERWISE MARKED.





(UG) UP GRADIENT

(DG) DOWN GRADIENT

(CG) CROSS GRADIENT

(US) UP STREAM

(DS) DOWN STREAM



### Yanley MEPP Tables Permit Variation 008 dated 8<sup>th</sup> November 2016

#### Permit Schedule 3, Revised Table S3.1

Table S3.1 Leachate level limits and monitoring requirements				
Monitoring Point Ref/Description	Limit	Monitoring frequency	Monitoring standard or method	
Operational Cells or Phases <sup>1</sup>				
N/A				
Non Operational Cells or Phases <sup>2</sup>				
<i>Leachate compliance points:</i>				
YN/312, YN/313, YN/315, YN/317, YN/320, YN/327, YN/332, YN/349B, YN/350A, YN/356A, YN/370A As shown on Drawing YAN3000	5 metres above cell base	Quarterly – spot reading	As specified in Environment Agency Guidance TGN02 (February 2003) or such other guidance as may be agreed in writing with the Environment Agency. Or as otherwise agreed with the Agency as part of a leachate monitoring plan.	
YNS505LM, YNS506LM As shown on Drawing YAN3000	2 metres above cell base			
YN/345A, YN/358A, YN/387A, YN/383A, YN/389A, YN/391 As shown on Drawing YAN3000	5 metres above cell base	Quarterly – average		
YNS503LM, YNS504LM As shown on Drawing YAN3000	2 metres above cell base			

<sup>1</sup> Any cells or phases that do not have a final engineered cap agreed in accordance with the existing 'landfill engineering' condition 2.4

<sup>2</sup> Any cells or phases that have a final engineered cap agreed in accordance with the existing 'landfill engineering' condition 2.4

#### Permit Schedule 3, Revised Table S3.9

Table S3.9 Leachate – other monitoring requirements				
Monitoring Point Ref/Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Operational Cells or Phases <sup>1</sup>				
N/A				
Non Operational Cells or Phases <sup>2</sup>				
YN/320, YN/327, YN/332, YN/391, YN/387A, YN/383A, YNS503LM, YNS504LM As shown on drawing YAN3000	pH, EC, total alkalinity, ammoniacal nitrogen, chloride, COD, BOD, cadmium, chromium, copper, lead, nickel, iron, arsenic, magnesium, potassium, total sulphates, calcium, sodium, zinc, manganese	Annually	At leachate compliance point as listed in Table S3.1. As specified in Environment Agency Guidance TGN02 (February 2003) and Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J3, version 2.1, December 2011, with one sampling point per cell / phase or such other subsequent guidance as may be agreed in writing with the Environment Agency.	None
YN/320, YN/327, YN/332, YN/391, YN/387A, YN/383A, YNS503LM, YNS504LM As shown on drawing YAN3000	Hazardous substances	Once every four years		
YN/320, YN/327, YN/332, YN/391, YN/387A, YN/383A, YN/391, YNS503LM, YNS504LM As shown on drawing YAN3000	Depth to base (mAOD)	Annually		

<sup>1</sup> Any cells or phases that do not have a final engineered cap agreed in accordance with the existing 'landfill engineering' condition 2.4

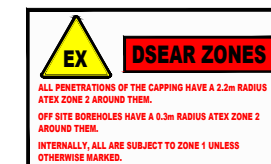
<sup>2</sup> Any cells or phases that have a final engineered cap agreed in accordance with the existing 'landfill engineering' condition 2.4

#### Permit Schedule 3, Revised Table S3.4

Table S3.4 Groundwater – emission limits and monitoring requirements					
Monitoring Point Ref /Description	Parameter	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
YN/605, YN/608A, YN/634	Ammoniacal nitrogen	2.0 mg/l	Spot sample	Quarterly	Unless otherwise agreed in writing with the Agency monitoring methods used shall be in accordance with Agency guidance document 'Guidance on monitoring of landfill leachate, groundwater and surface water' (LFTGN02)
	Chloride	250 mg/l			
	Mecoprop	0.1 µg/l		Annually	
	Toluene	4.0 µg/l			
As shown on drawing YAN3000	m.p-xylene	3.0 µg/l			
	Mercury	0.4 µg/l			

#### Permit Schedule 3, Revised Table S3.7

Table S3.7 Groundwater – other monitoring requirements			
Monitoring Point Ref /Description <sup>1</sup>	Parameter	Monitoring frequency	Monitoring standard or method
<b>Mercia Mudstone</b> <i>Up gradient:</i> YN/619, YN/630, YN/633	Water level, electrical conductivity, chloride, ammoniacal nitrogen, pH	Quarterly	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), risk assessments for your environmental permit ( <a href="http://www.gov.uk">www.gov.uk</a> ) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
	Total alkalinity, magnesium, potassium, total sulphates, calcium, sodium, chromium, copper, iron, lead, nickel, zinc, manganese	Annually	
	Hazardous substances	Annually for first six years of operation	
<b>Coal Measures</b> <i>Up gradient:</i> YN/619A, YN/629, YN/631	Water level, electrical conductivity, chloride, ammoniacal nitrogen, pH	Quarterly	As specified in Environment Agency Guidance TGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), risk assessments for your environmental permit ( <a href="http://www.gov.uk">www.gov.uk</a> ) or such other subsequent guidance as may be agreed in writing with the Environment Agency. After the initial 6 year monitoring period for hazardous substances, if the results of quarterly or annual monitoring suggest an increase in contamination, the operator shall also undertake a full leachate hazardous substances screen.
	Total alkalinity, magnesium, potassium, total sulphates, calcium, sodium, chromium, copper, iron, lead, nickel, zinc, manganese	Annually	
	Hazardous substances detected in leachate	Annually for first six years of operation then every two years	



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SITE NAME <b>YANLEY LANDFILL</b>
DRAWING TITLE <b>MEPP TABLES SHEET 1 OF 2</b>
DRAWING NUMBER <b>YAN3000</b>
TASK NUMBER: 16378
SCALE: NTS O/DRN: S.Robinson O/DATE: 15/12/2020 O/APP: D.O. Approved O/DATE: 16/12/2020
REVISION R/DRN: R/DATE: R/APP: R/DATE:
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TO BE READ IN CONJUNCTION WITH MEPP TABLES FOR IN WASTE GAS MONITORING WELLS SEE THE SITE 4000 STANDARD LAYOUT



(UG) UP GRADIENT

(DG) DOWN GRADIENT

(CG) CROSS GRADIENT

(US) UP STREAM

(DS) DOWN STREAM

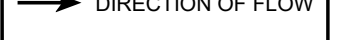


Table S3.7 Groundwater – other monitoring requirements			
Monitoring Point Ref /Description <sup>1</sup>	Parameter	Monitoring frequency	Monitoring standard or method
<b>Mercia Mudstone</b> Groundwater monitoring points: YN/619, YN/630, YN/633, YN/603, YN/605, YN/608A, YN/634  <b>Coal Measures</b> Groundwater monitoring points: YN/619A, YN/629, YN/631, YN/607A, YN/610, YN/612	Base of monitoring point (mAOD)	Annually	

<sup>1</sup> As shown on drawing YAN3000

Permit Schedule 3, Revised Table S3.3

Table S3.3 Point source emissions to water (other than sewer) – emission limits and monitoring requirements						
Monitoring Point Ref /Description	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
YNS421, YNS422, YN/404,  As shown on drawing YAN3000	Suspended Solids	Surface Water	100 mg/l	Spot sample	Monthly	Unless otherwise agreed in writing with the Agency monitoring methods used shall be in accordance with Agency guidance document 'Guidance on monitoring of landfill leachate, groundwater and surface water' (LFTGN02)

Permit Schedule 3, Revised Table S3.10

Table S3.10 Surface water – other monitoring requirements				
Monitoring Point Ref /Description	Parameter	Monitoring Frequency	Monitoring Standard or Method	Other specifications
Surface water monitoring points: YN/403, YN/404, YN/405, YNS421, YNS422  As shown on drawing YAN3000	Ammoniacal nitrogen Chloride Suspended solids Visual Oil and Grease pH Electrical conductivity	Monthly	Spot sample	Unless otherwise agreed in writing with the Agency monitoring methods used shall be in accordance with Agency guidance document 'Guidance on monitoring of landfill leachate, groundwater and surface water' (LFTGN02)

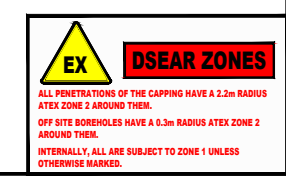


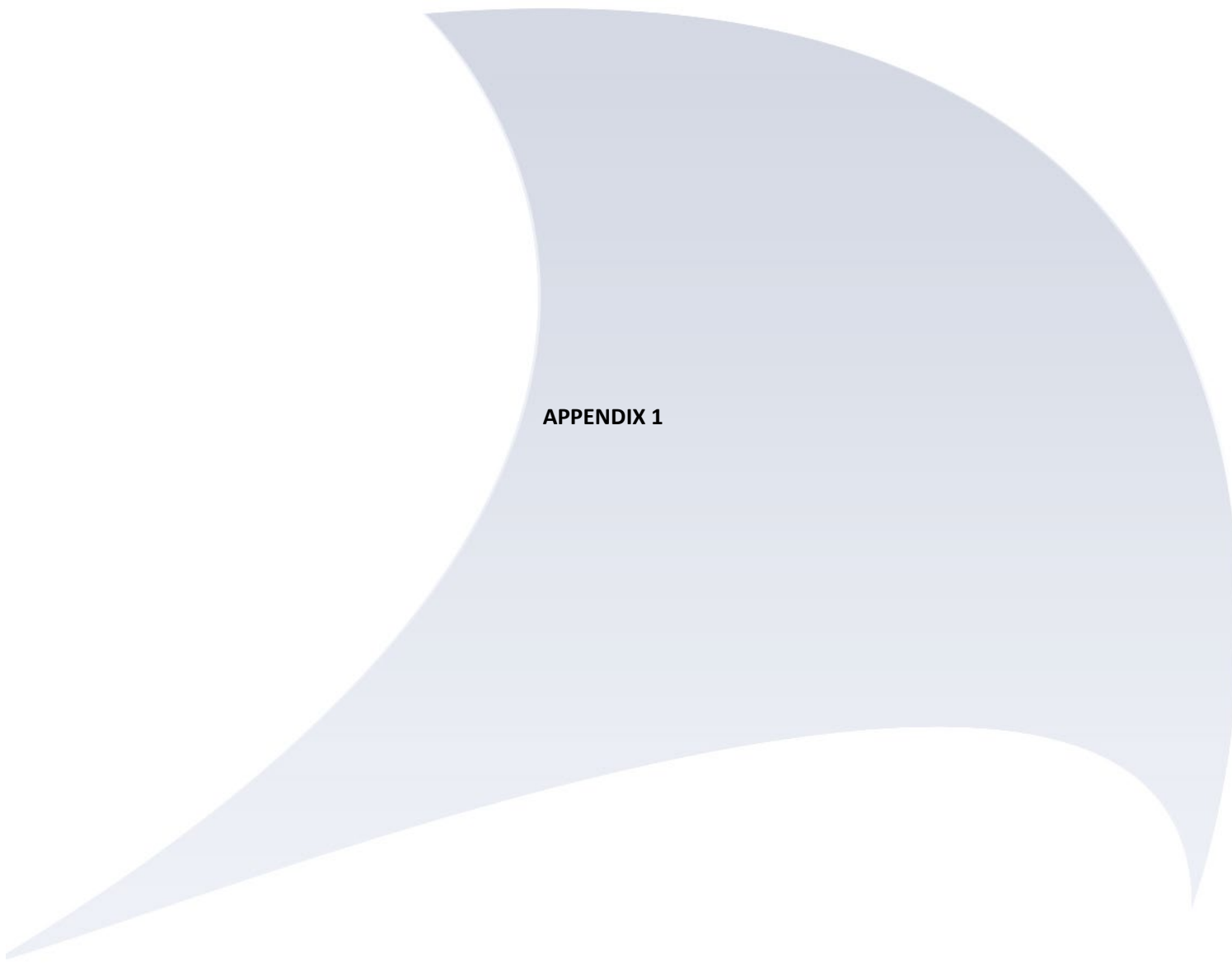
1st Floor Riverside House, Sir Thomas Longley Road, Medway City Estate, Rochester, Kent. ME2 6JN  
 Tel : 01732 229200 Fax : 01732 229280

THIS DRAWING IS UNCONTROLLED CONTACT D.O. FOR LATEST ISSUE

SITE NAME <b>YANLEY LANDFILL</b>
DRAWING TITLE <b>MEPP TABLES SHEET 2 OF 2</b>
DRAWING NUMBER <b>YAN3000</b>
TASK NUMBER 16378

SCALE NTS	REVISION
OIDRN S.Robinson	R/IDRN
OIDATE 15/12/2020	R/IDATE
O/APP D.O.Approved	R/APP
O/DATE 16/12/2020	R/DATE
INFORMATION TAKEN FROM	
SURVEY YAN066s-Feb/2020 Rev A	
SERVICES MASTER FILE	
OTHER DRAWINGS YAN12000-Mar/2010	

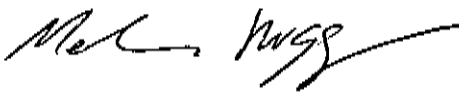




**APPENDIX 1**



APPROVAL FORM

DOCUMENT TITLE :	YANLEY TRADE EFFLUENT CONSENT		
ISSUE NUMBER :	One	ISSUE DATE :	8 December 2000
NEXT REVIEW DATE :	N/A	NO OF PAGES (EXCLUDING THIS ONE)	N/A
PROCEDURE & SECTION NO :	N/A		
APPROVED	SIGNATORY ONE	SIGNATORY TWO	
SIGNED :		N/A	
NAME :	M D Huggins	N/A	
POSITION :	EMS Co-ordinator	N/A	
DATE :	8 December 2000	N/A	

**NB : WHERE FIELD IS NOT APPLICABLE - INSERT N/A**  
**IS DOCUMENT ATTACHED A CONTROLLED DOCUMENT? YES/NO (Please Delete)**  
**IF YES, REGISTRATION STAMP (Including Binder Number) :**

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DOCUMENT: DC2**

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WESSEX WATER AUTHORITY

PUBLIC HEALTH ACT, 1936

PUBLIC HEALTH (DRAINAGE OF TRADE PREMISES) ACT, 1937

PUBLIC HEALTH ACT, 1961

WATER ACT, 1973

CONTROL OF POLLUTION ACT, 1974

CONSENT TO THE DISCHARGE OF  
TRADE EFFLUENT

TO:

Terry Adams Ltd  
Beech Cottage  
Old Rydon Lane  
EXETER  
EX2 7JR

WHEREAS:

I. You have served on us the Wessex Water Authority (hereinafter referred to as 'the Authority') a Trade Effluent Notice, in pursuance of the provisions of the Public Health (Drainage of Trade Premises) Act, 1937, dated the **twenty fifth** day of **January 1988** in respect of trade premises situate at **Yanley No 3 Landfill, Bridgwater Rd., BRISTOL, Avon**

II. In pursuance of the provisions of the Public Health (Drainage of Trade Premises) Act, 1937, the discharge of trade effluent in accordance with the said trade effluent notice would not be lawful without the consent of the Authority.

III. The Authority is prepared to give such consent but subject to the conditions hereinafter set forth and to be observed by you.

IV. Any connection of your drain to the public sewer necessitated by this consent shall be made at your own expense and to the satisfaction of the Authority.

NOW THEREFORE WE HEREBY GIVE YOU NOTICE that the Authority's consent to the discharge of trade effluent from the above mentioned premises is subject to the following condition and not otherwise. —

- |  |           |  |
|--|-----------|--|
| <b>Sewers Affected</b>                             | <b>1.</b> | The public sewer into which the trade effluent may be discharged is the foul sewer, west of Colliter's Brook at Grid Ref: ST560 700  |
| <b>Provision of drains for trade effluent only</b> | <b>2.</b> | If required by the Authority drains, sampling and testing points shall be provided through which trade effluent and nothing else shall pass.                                       |
| <b>Change in the point(s) of discharge</b>         | <b>3.</b> | No change shall be made in the point or points at or through which the trade effluent is to be discharged to the public sewer except with the consent in writing of the Authority. |

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Matters to be eliminated prior to discharge to the sewer

- 4. Apart from the substances specified in this consent, the trade effluent shall not include any substances of a nature, composition or quantity likely, either alone or in combination with the contents of the sewer, to –
  - (a) injure the public sewers into which it is discharged or by which it is conveyed, or,
  - (b) interfere with the free flow of the contents of the public sewers aforesaid, or,
  - (c) injure the sewage treatment works or any machinery or equipment installed thereat, or
  - (d) interfere with any processes of purification of sewage or trade effluent, or,
  - (e) cause a nuisance or give off a vapour or harmful substance, or
  - (f) affect prejudicially the quality of the watercourse receiving the purified sewage effluent.

Condensing water

- 5. If required by the Authority condensing and cooling water shall be eliminated from the effluent.

Changes in composition and cessation of discharge

- 6. THE AUTHORITY SHALL BE NOTIFIED FORTHWITH IN WRITING OF ANY CHANGES IN CONDITIONS AND OR PROCESSES WHICH ARE LIKELY TO ALTER THE NATURE OR COMPOSITION OF THE EFFLUENT AND ALSO THE PERMANENT CESSATION OF THE DISCHARGE IN WHICH LATTER CASE THIS CONSENT BECOMES VOID.

Nature or composition

- 7. The trade effluent to be discharged under this consent shall consist of waste water specified in the said trade effluent notice and derived from leachate from Landfill site

pH Value

- 8. The pH of the trade effluent to be discharged under this consent shall not be less than pH 6 or greater than pH.10

Temperature

- 9. The temperature of the trade effluent to be discharged under this consent shall not exceed 43.3°C (110° F).

Conditions of acceptance

- 10. The effluent shall not contain the substances listed in the Appendix in proportions greater than those stated.

Maximum amount to be discharged in any day

- 11. The maximum quantity of trade effluent which may be discharged into the public sewer on any one day of 24 hours shall not exceed 100 cubic metres (m<sup>3</sup>).

Maximum rate of discharge

- 12. The rate of discharge of trade effluent to the public sewer shall not exceed 12.0 litres per second (l/s).

Inspection Chamber

- 13. You shall, if required by the Authority at your own expense:–
  - (a) provide and maintain suitable inspection chambers or manholes in a position and of a type to be approved by the Authority in connection with each pipe or channel through which the trade effluent is discharged into the public sewer, so as to enable a person readily to take at any time a sample of the trade effluent passing into the public sewer.

Measurement and determination of discharge

- (b) provide and maintain in connection with every such pipe or channel either a notch gauge and continuous recorder or some other meter or other apparatus of a type approved by the Authority suitable and adequate for measuring and automatically recording the volume and rate of discharge of the trade effluent discharged into the public sewers, and for the testing of such apparatus.

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13. Cont/...

- (c) provide and maintain apparatus to be approved by the Authority for determining the nature and composition of the trade effluent being discharged from the premises into the public sewer, and for the testing of such apparatus.
- (d) provide and maintain suitable and adequate treatment plant for the trade effluent if it is shown to be necessary.
- (e) keep to the satisfaction of the Authority records of the volume, rate of discharge, nature and composition of any trade effluent discharged and records of readings of meters and other apparatus provided in compliance with the conditions of this consent.

Payment

14.

- (a) Subject to Section 59 (1) (e) of the Public Health Act, 1961 or any amendments, variations or modifications thereof, the occupier of the said premises shall pay to the Authority such charges as determined by the charging rates as the Authority may so prescribe.
- (b) A Schedule of charging rates including the methods by which, and the principles on which the charges are made, may be inspected during normal business hours at the Divisional Office of the Authority as designated in paragraph d below or at the Principal Offices of the Authority, namely Wessex House, Passage Street, Bristol.
- (c) All payments arising from the charges as levied by the Authority in respect of such Trade Effluent consents shall be paid on demand.
- (d) All sums due in respect of charges should be remitted (unless otherwise specified by the Authority) to the Authority's Divisional Offices at  
1 Clevedon Walk  
Nailsea  
BRISTOL BS19 2QR
- (e) The granting of time or any indulgence of any nature by the Authority shall not affect or invalidate the rights of the Authority or affect, reduce or mitigate the liability of the Occupier.

Failure of recording apparatus

15.

If any notch gauge or recorder or other apparatus installed for the purpose of complying with conditions imposed by this consent ceases to measure or record or is suspected of not measuring or recording correctly, the quantity of trade effluent discharged on each day into the public sewer during the period from the date on which the records of the volume of trade effluent discharged into the public sewer were last accepted by the Authority as being correct, up to the date when the gauge or recorder or other apparatus again registers correctly, shall be deemed for the purpose of any payment to be made to the Authority to be the same quantity as the average daily volume of trade effluent discharged during the period of one month preceding the date on which the said records were last accepted as aforesaid, or during the period of one month immediately after the gauge or recorder or other apparatus has been correct, whichever is the greater.

Charging information

16.

All information, figures and records, including those relating to water consumption, required by the Authority for the assessing of their charge for reception, conveyance and disposal of the effluent must be given on request.

Dated this

day of

August 19 99

Divisional General Manager

For and on behalf of the Authority

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**Page 4 of 8**

Your attention is drawn to the right of appeal to the Secretary of State for the Department of the Environment which is conferred by Section 3 of the Public Health (Drainage of Trade Premises) Act, 1937, (as amended by Section 86 of the Fifth Schedule of the Public Health Act, 1961) on any person who is aggrieved by a condition attached to a consent.

Your attention is also drawn to Section 61 of the Public Health Act, 1961, which provides that, on such an appeal, the Minister may review all the conditions attached to the consent, whether appealed against or not, and may substitute for them any other set of conditions, whether more or less favourable to the appellant, or may annul the conditions. The Minister may include provision as to the charges to be made in pursuance of any condition attached to a consent for any period before the determination of the appeal. He may also give a direction that no trade effluent shall be discharged in pursuance of the trade effluent notice in question until a specified date, or vary such a direction by the local authority by substituting either an earlier or a later date specified in the direction.

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Terry Adams Ltd - Yanley

Wessex Water

WATER INDUSTRY ACT 1991

NOTICE OF DIRECTION

TO: Terry Adams Limited  
Greendale Court  
Clyst St Mary  
Exeter EX5 1AW

WHEREAS:

Trade effluent is now discharged from the premises situate at Yanley No. 3 Landfill, Bridgwater Road, Bristol

*(hereinafter referred to as 'the said premises') under a Consent by Wessex Water Services Limited (hereinafter recorded as 'the Company')*

NOW THEREFORE the Company HEREBY GIVE NOTICE OF THEIR DIRECTION pursuant to Section 124 of the Water Industry Act 1991

that as from the 26th day of October 1994

the said Consent shall be varied to the extent set out in the Schedule overleaf.

Dated this

18 day of *AUGUST* 1994

For and on behalf of Wessex Water Services Ltd

*R. Lacey*

Richard Lacey  
Divisional Manager

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DOCUMENT: DC2

Page 6 of 8

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The Technical Appendix to the Consent shall be in accordance with the attached conditions of discharge which replaces any previous Technical Appendix.

## NOTE

Your attention is drawn to the right of appeal to the Director General of Water Services which is conferred by Section 126(1) of the Water Industry Act 1991.

"The owner or occupier of any trade premise may -

- (a) within two months of the giving to him under subsection(5) of Section 124 of a notice of direction under that section, or
- (b) with the written permission of the Director, at any later time, appeal to the Director against the direction."

The logo for Wessex Water, featuring the words "Wessex Water" in a stylized, cursive font.

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Page 7 of 8

### CONSENT APPENDIX 1

The effluent shall not at any time include the following substances:

- a Volatile petroleum products producing an inflammable vapour at a temperature of less than seventy three degrees Fahrenheit when tested in accordance with the Petroleum (Consolidation) Act 1928
- b Chlorinated hydrocarbons and related compounds
- c Calcium carbide

### CONSENT APPENDIX 2

1. Suspended solids shall not exceed 500 milligrams per litre (mg/l) of effluent.
2. The metals listed below shall not individually exceed the concentration stated in milligrams per litre (mg/l) of effluent of soluble or insoluble salts of compounds expressed as the metal:
  - a. Chromium (Cr) shall not exceed 2.5 mg/l of effluent
  - b. Nickel (Ni) shall not exceed 2.5 mg/l of effluent
  - c. Copper (Cu) shall not exceed 2.5 mg/l of effluent
  - d. Zinc (Zn) shall not exceed 2.5 mg/l of effluent
  - e. Lead (Pb) shall not exceed 2.5 mg/l of effluent
3. The total sulphate content of the effluent expressed as  $\text{SO}_4$  shall not exceed 1000 milligrams per litre (mg/l) of effluent.
4. The total sulphide content of the effluent expressed as S shall not exceed 5 milligrams per litre (mg/l)

### CONSENT APPENDIX 3

The effluent shall not contain materials which may be retained by a screen having perforations of 6mm in diameter.



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Terry Adams - Yanley No. 3

Wessex Water Services Limited

## WATER INDUSTRY ACT 1991

NOTICE OF DIRECTION

TO: Terry Adams Limited  
Greendale Court  
Clyst St Mary  
Exeter  
EX5 1AW

## WHEREAS:

Trade effluent is now discharged from the premises situate at Yanley No. 3 Landfill, Bridgwater Road, Bristol

*(hereinafter referred to as 'the said premises')* under a Consent by Wessex Water Services Limited *(hereinafter recorded as 'the Company')*

NOW THEREFORE the Company HEREBY GIVE NOTICE OF THEIR DIRECTION pursuant to Section 124 of the Water Industry Act 1991

that as from the 18th day of December 1995

the said Consent shall be varied to the extent set out in the Schedule overleaf.

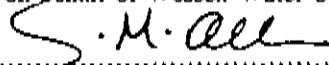
Dated this

17<sup>th</sup>

day of

October 19 95

For and on behalf of Wessex Water Services Ltd



S M Allen

Divisional Manager



Registered Office: Intec, Parc Menai, Bangor, Gwynedd, LL57 4FG  
**Tel:** 01248 672666  
**Fax:** 01248 672601  
**Email:** [contact@caulmert.com](mailto:contact@caulmert.com)  
**Web:** [www.caulmert.com](http://www.caulmert.com)