



The Company Director and/or Secretary
Ingrebourne Valley Limited
Cecil House
Foster Street
Harlow Common
Harlow
Essex
CM17 9HY

Date: 21 February 2018

Dear Sir/Madam

Your new environmental permit

Permit reference: EPR/DB3800MK/A001

Waste returns reference: EAWML 403032

Operator name: Ingrebourne Valley Limited

Facility name: Pinch Restoration

Our determination of your application for a permit is complete. We are satisfied that you can carry out your activities in accordance with the enclosed permit, without harm to the environment or human health. Please keep the permit in a safe place.

This letter contains web links to other documents. If you are not able to access these please phone our Customer Contact Centre for help on 03708 506 506.

Please look at the table below and note any of the things that apply to your permit.

If...	then..
you plan to keep your records at a site other than where the activity takes place	you need to let us know within 20 working days of receiving this letter.
your permit includes pre-operational or improvement conditions	check the deadlines for completing measures and make sure you carry them out by the times stated.
your permit includes standard rules	We have enclosed the rules set/s. We may change these in future but will let you know about any changes. You must make sure you're always following the latest rules set.
You are carrying out a waste operation or activity and need to submit quarterly waste returns on waste movements Note: This does not apply to permits that only have stand alone water discharge or groundwater activities.	you must use the current version of our form which is available at www.gov.uk/government/collections/national-operator-waste-returns Please select the appropriate form for the method of submission you wish to use. You must submit a return even if no waste was received at your site. Please send email returns to: national-operator-returns@environment-agency.gov.uk
your permit includes an installation	we enclose a legal notice and information about reporting to the Pollution Inventory.
you need to submit other returns	send these to your area office. Speak to your area officer to check local arrangements.





Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Ingrebourne Valley Limited

Pinch Restoration

Gerpins Lane

Rainham

Greater London

RM14 2XR

Permit number

EPR/DB3800MK

Pinch Restoration

Permit number EPR/DB3800MK

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

The Pinch Restoration site is approximately 16.6 hectares and is located approximately 3 km north-east of Rainham and sits within the Thames Chase Community Forest. It was historically a gravel extraction site with the subsequent void being landfilled under a historical landfill licence. The site has been identified as a 'damaged land' by the All London Green Grid (ALGG) policy framework which encourages improvements to damaged and derelict land for long term natural, environmental and amenity improvements.

The permit allows the importation of inert waste material for treatment prior to recovery to land as a Deposit for Recovery activity. The operator is limited to import the volume of 360,000 m³ equivalent to 648,000 tonnes in accordance with the approved Waste Recovery Plan in order to re-profile and restore the land to grassland and forestry use. The restored site will support woodland planting and will be managed by the Forestry Commission. The operator is also permitted to import an additional 36,000 m³ of waste material for treatment and exportation off site. The total volume of waste material accepted at the site is 396,000 m³.

The recovery operation will last for approximately 18 to 24 months by which the site should be fully restored to a satisfactory standard.

The site's surface water run-off is managed via a Sustainable Urban Drainage System (SUD) which consists of a number of attenuation ponds around the perimeter of the site and two discharge points which discharge to an unnamed watercourse along the western and to a land drainage ditch along the south-eastern site boundary. The unnamed watercourse along the western boundary connected to the Ingrebourne River and Ingrebourne Marshes, Site of Special Scientific Interest (SSSI) within 20m of the application site. There will be no discharge of uncontaminated surface water run-off to public foul sewer.

The site is located within the relevant distance criteria of 2km of Ingrebourne Marshes Site of Special Scientific Interest (SSSI), within 200m of Ingrebourne Valley Local Wildlife Site (LWS) and Central Farm Streamside LWS, and 50m of three Protected Habitats.

If you need to deploy mobile plant under a mobile plant permit at a site that is subject to a site based permit to enable you to complete the recovery activity, there will be inconsistencies between the requirements of the two permits and, in this situation, those of the site based permit prevail. Therefore you must be able to deliver the desired recovery activity through use of this permit alone, without relying upon the subsequent use of a separate mobile plant permit.

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

Status log of the permit		
Description	Date	Comments
Application EPR/DB3800MK/A001	Duly made 05/10/17	Application for a deposit for recovery activity permit with discharge to surface water.
Additional information received	18/01/18	Submission of Groundwater and surface water monitoring data, Dust management plan, phase 1 and phase 2 ecological reports in response to Schedule 5 notice date 01/12/2017.
Additional information received	19/01/18	Submission of ESSD Report 63018R7Rev1 January 2018 in response to Schedule 5 notice date 01/12/2017.

Status log of the permit		
Description	Date	Comments
Additional information received	05/02/18	Submission of written evidence (Technical Note) of completed site clearing and reptile translocation, submission of Contaminated land risk assessment 63018R5 Final June 2017.
Additional information received	19/02/18	Submission of monitoring plan drawing titled 'Pinch restoration monitoring locations', reference number 63018D3, dated 2018, revision 1.
Permit determined EPR/DB3800MK	19/02/18	Permit issued to Ingrebourne Valley Limited.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/DB3800MK

The Environment Agency hereby authorises, under regulation 13 of the Environmental Permitting (England and Wales) Regulations 2016

Ingrebourne Valley Limited ("the operator"),

whose registered office is

**Cecil House
Foster Street
Harlow Common
Harlow
Essex
CM17 9HY**

company registration number 02848746

to operate a waste operations at

**Pinch Restoration
Gerpins Lane
Rainham
Greater London
RM14 2XR**

to the extent authorised by and subject to the conditions of this permit.

Name	Date
Tom Swift	19/02/18

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

- 1.1.1 The operator shall manage and operate the activities:
- (a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and
 - (b) using sufficient competent persons and resources.
- 1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.
- 1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.
- 1.1.4 The operator shall comply with the requirements of an approved competence scheme.

1.2 Avoidance, recovery and disposal of wastes produced by the activities

- 1.2.1 The operator shall take appropriate measures to ensure that:
- (a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and
 - (b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and
 - (c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.
- 1.2.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

- 2.1.1 The operator is only authorised to carry out the activities specified in schedule 1, table S1.1 (the 'activities').

2.2 The site

- 2.2.1 The activities shall not extend beyond the site, being the land shown edged in green on the site plan at schedule 7 to this permit.

2.3 Operating techniques

- 2.3.1 The activities shall, subject to the conditions of this permit, be operated using the techniques and in the manner described in the documentation specified in schedule 1, table S1.2, unless otherwise agreed in writing by the Environment Agency.

- 2.3.2 If notified by the Environment Agency that the activities are giving rise to pollution, the operator shall submit to the Environment Agency for approval within the period specified, a revision of any plan or other documentation ('plan') specified in schedule 1, table S1.2 or otherwise required under this permit which identifies and minimises the risks of pollution relevant to that plan, and shall implement the approved revised plan in place of the original from the date of approval, unless otherwise agreed in writing by the Environment Agency.

2.4 Waste acceptance

- 2.4.1 Waste shall only be accepted if:

- (a) it is of a type and quantity listed in schedule 2, table S2.1 and S2.2;
- (b) it has been identified as a suitable waste in the approved waste recovery plan;
- (c) its chemical, physical and biological characteristics make it suitable for its intended use on the site; and
- (d) it fulfils the approved waste acceptance criteria; and
- (e) all the approved waste acceptance procedures have been completed; and
- (f) it conforms to the description in the documentation supplied by the producer and holder; and
- (g) It is not waste consisting solely or mainly of dusts, powders or loose fibres; and
- (h) It is not hazardous wastes; and
- (i) It is not waste in liquid form.

- 2.4.2 The operator shall:

- (a) visually inspect without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the site and waste at the point of deposit; and
- (b) be satisfied that the waste conforms to the requirements of condition 2.4.1.

- 2.4.3 The total quantity of waste that shall be deposited under the permit shall be limited by the final levels shown on the final levels contour plan referenced in schedule 1 table S1.2.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3, tables S3.1, S3.2, S3.3 and S3.4.
- 3.1.2 The limits given in schedule 3 shall not be exceeded.
- 3.1.3 Where a substance is specified in schedule 3, but no limit is set for it, the concentration of such substance in emissions from the site shall be no greater than the background concentration.

3.2 Emissions of substances not controlled by emission limits

- 3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.
- 3.2.2 All liquids in containers, whose emission to water or land could cause pollution, shall be provided with secondary containment, unless the operator has used other appropriate measures to prevent or where that is not practicable, to minimise, leakage and spillage from the primary container.

3.3 Odour

- 3.3.1 Emissions from the activities shall be free from odour at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved odour management plan, to prevent or where that is not practicable to minimise the odour.
- 3.3.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to odour, submit to the Environment Agency for approval within the period specified, an odour management plan which identifies and minimises the risks of pollution from odour;
 - (b) implement the approved odour management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.4 Noise and vibration

- 3.4.1 Emissions from the activities shall be free from noise and vibration at levels likely to cause pollution outside the site, as perceived by an authorised officer of the Environment Agency, unless the operator has used appropriate measures, including, but not limited to, those specified in any approved noise and vibration management plan to prevent or where that is not practicable to minimise the noise and vibration.
- 3.4.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to noise and vibration, submit to the Environment Agency for approval within the period specified, a noise and vibration management plan which identifies and minimises the risks of pollution from noise and vibration;
 - (b) implement the approved noise and vibration management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

3.5 Monitoring

- 3.5.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) Point source emissions specified in table S3.1;
 - (b) Groundwater specified in table S3.2 and S3.3;
 - (c) Surface water specified in table S3.4;
- 3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.5.3 The operator shall undertake a topographical survey of the site referenced to ordnance datum that shall be used to produce a plan of a scale adequate to show the surveyed features of the site:
- (a) prior to commencement of the recovery activity; and
 - (b) on completion of the recovery activity to show final waste levels.

4 Information

4.1 Records

- 4.1.1 All records required to be made by this permit shall:

- (a) be legible;
- (b) be made as soon as reasonably practicable;
- (c) if amended, be amended in such a way that the original and any subsequent amendments remain legible, or are capable of retrieval; and
- (d) be retained, unless otherwise agreed in writing by the Environment Agency, for at least 6 years from the date when the records were made or, in the case of the following records, until permit surrender:
 - (i) off-site environmental effects;
 - (ii) matters which affect the condition of the land and groundwater;
 - (iii) waste types and quantities; and
 - (iv) the results of groundwater monitoring.

4.1.2 The operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery, origin and the identity of the carrier and producer of any waste that is received for recovery. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.

4.1.3 The operator shall keep on site all records, plans and the management system required to be maintained by this permit, unless otherwise agreed in writing by the Environment Agency.

4.2 Reporting

4.2.1 The operator shall send all reports and notifications required by the permit to the Environment Agency using the contact details supplied in writing by the Environment Agency.

4.2.2 Within one month of the end of each quarter, the operator shall submit to the Environment Agency using the form made available for the purpose, the information specified on the form relating to the site and the waste accepted and removed from it during the previous quarter.

4.2.3 Within 28 days of the end of the reporting period the operator shall, unless otherwise agreed in writing by the Environment Agency, submit reports of the monitoring and assessment carried out in accordance with the conditions of this permit, as follows:

- (a) in respect of the parameters and emission points specified in schedule 4 table S4.1;
- (b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2 ; and
- (c) giving the information from such results and assessments as may be required by the forms specified in those tables.

4.2.4 The operator shall submit the topographical survey plans required by condition 3.5.3 (a) and (b) to the Environment Agency within one month of the completion of the survey.

4.3 Notifications

4.3.1 In the event that the operation of the activities gives rise to an incident or accident which significantly affects or may significantly affect the environment, the operator must immediately—

- (a) inform the Environment Agency,
- (b) take the measures necessary to limit the environmental consequences of such an incident or accident, and
- (c) take the measures necessary to prevent further possible incidents or accidents;

4.3.2 In the event of a breach of any permit condition the operator must immediately—

- (a) inform the Environment Agency, and

- (b) take the measures necessary to ensure that compliance is restored within the shortest possible time.

- 4.3.3 In the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.
- 4.3.4 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.
- 4.3.5 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.
- 4.3.6 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

- (a) any change in the operator's trading name, registered name or registered office address; and
- (b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

Where the operator is a corporate body other than a registered company:

- (a) any change in the operator's name or address; and
- (b) any steps taken with a view to the dissolution of the operator.

In any other case:

- (a) the death of any of the named operators (where the operator consists of more than one named individual);
- (b) any change in the operator's name(s) or address(es); and
- (c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

- 4.3.7 Where the operator proposes to make a change in the nature or functioning, or an extension of the activities, which may have consequences for the environment and the change is not otherwise the subject of an application for approval under the Regulations or this permit:

- (a) the Environment Agency shall be notified at least 14 days before making the change; and
- (b) the notification shall contain a description of the proposed change in operation.

- 4.3.8 The operator shall notify the Environment Agency in writing:

- (a) at least 14 days before the commencement of the recovery activity;
- (b) within 14 days of completion of the recovery activity.

4.4 Interpretation

- 4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.
- 4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made 'immediately', in which case it may be provided by telephone.

Schedule 1 – Operations

Table S1.1 activities	
Description of activities for waste operations	Limits of activities
Treatment and use of waste in deposit for recovery activity: R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) R5: Recycling/reclamation of other inorganic compounds	Secure storage of wastes listed in Table S2.1 for the purpose of recovery. Storage of wastes listed in Table S2.1 shall be limited to three years. Treatment of wastes specified in Table S2.1 to produce aggregates for recovery. Use of waste types specified in Table S2.1 for the purposes of construction work and restoration, reclamation or improvement of land.
Treatment and transfer of non-hazardous waste for off-site recovery activity: R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) R5: Recycling/reclamation of other inorganic compounds	Secure storage of wastes listed in Table S2.2 for the purpose of off-site recovery. Storage of wastes listed in Table S2.2 shall be limited to three years. Treatment of wastes specified in Table S2.2 to produce aggregates for off-site recovery.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Document(s) provided in response to section 3a – Technical standards, and section 4a – Describe measures you use for monitoring emissions; and Appendix 4 – Specific questions for inert waste landfill and deposit for recovery operations, Part B4 of the application form.	05/10/17
Application	Approved waste recovery plan: Document titled 'Pinch Landfill: Recovery Plan' (reference 63018R4 Version Final dated April 2017) and cross sections plan no 0912/P/CS/1 and 0912/P/CS/2 in response to section 1c of Part B4 of the application form.	05/10/17
Application	Existing and final levels contour plan: Appendix F – Technical Cross Sections: drawing titled 'Cross Sections' drawing number 1102 08 dated 11 June 2015 of approved waste recovery plan titled 'Pinch Landfill: Recovery Plan' (reference 63018R4 Version Final dated April 2017).	05/10/17
Response to Schedule 5 notice dated 21/11/2017	Technical Note submitted in response to question 5 a) with confirmation of 'construction of attenuation ponds'.	18/01/18

Table S1.2 Operating techniques		
Description	Parts	Date Received
Response to Schedule 5 notice dated 21/11/2017	Technical Note submitted in response to question 9 a) with confirmation of 'unmodified buffer margin of not less than 20m' will be maintained along the western boundary'.	18/01/18
Response to Schedule 5 notice dated 21/11/2017	Technical Note submitted in response to question 9 d) with confirmation of implementation of recommendations of Phase 1 and Phase 2 survey reports'.	18/01/18
Response to Schedule 5 notice dated 21/11/2017	Pinch Landfill: Dust Management Plan (Report reference: 63018R8, January 2018, version final) submitted in response to question 7 a).	18/01/18
Response to Request for Further Information dated 01/02/2018	Email responses in regards to completed recommendations of Phase 1 and Phase 2 survey reports, supported with 'Technical Note', and confirmation of further 'survey prior to any works commencing'.	05/02/18
Application	Waste Acceptance Criteria (WAC): Appendix H – Material Acceptance Procedure Waste Types and Quality Considerations of Environmental Settings and Site Design (ESSD) document (reference number: ESI Report 63018R7Rev January 2018).	19/01/18
Application	Monitoring plan drawing titled 'Pinch restoration monitoring locations', reference number 63018D3, dated 2018, revision 1.	19/02/18

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Permitted waste types and quantities for treatment and use of waste in deposit for recovery	
Maximum quantity	The total quantity of waste accepted at the site shall be less than 360,000 m ³ or 648,000 tonnes, whichever is the lesser value.
Waste code	Description
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones (excluding topsoil and peat)
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 05	glass
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones (excluding topsoil and peat)

Table S2.2 Permitted waste types and quantities for treatment and transfer of non-hazardous waste for off-site recovery	
Maximum quantity	The total quantity of waste accepted at the site shall be less than 36,000 m ³ or 64,800 tonnes, whichever is the lesser value.
Waste code	Description
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones (excluding topsoil and peat)
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE

Table S2.2 Permitted waste types and quantities for treatment and transfer of non-hazardous waste for off-site recovery

Maximum quantity	The total quantity of waste accepted at the site shall be less than 36,000 m³ or 64,800 tonnes, whichever is the lesser value.
Waste code	Description
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 05	glass
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 02	garden and park wastes (including cemetery waste)
20 02 02	soil and stones (excluding topsoil and peat)

Schedule 3 – Emissions and monitoring

Table S3.1 Point source emissions to water (other than sewer) – emission limits and monitoring requirements

Emission point ref. & location	Source	Parameter	Limit (including unit)	Reference period	Monitoring frequency	Monitoring standard or method
PSW01 and PSW2 as identified in 'Pinch restoration monitoring locations' plan in Table S1.2	Surface water	Ammoniacal nitrogen	8.4 mg/l	Spot Sample	Monthly	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), <u>risk assessments for your environmental permit (www.gov.uk)</u> or such other subsequent guidance as may be agreed in writing with the Environment Agency.
		Sulphate	198 mg/l			
		Arsenic	0.0044 mg/l			
		TOC	13.5 mg/l			
		Cadmium	0.00008 mg/l			

Table S3.2 Groundwater – emission limits and monitoring requirements

Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
PGW01 as identified in 'Pinch restoration monitoring locations' plan in Table S1.2	Ammoniacal nitrogen	61.5 mg/l	Spot Sample	Monthly (during restoration)	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), <u>risk assessments for your environmental permit (www.gov.uk)</u> , or such other subsequent guidance as may be agreed in writing with the Environment Agency.
	Sulphate	2 mg/l			
	Arsenic	0.087 mg/l			
	TOC	82 mg/l			
	Cadmium	0.00008 mg/l			

Table S3.2 Groundwater – emission limits and monitoring requirements

Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
PGW02 and PGW03 as identified in 'Pinch restoration monitoring locations' plan in Table S1.2	Ammoniacal nitrogen	12 mg/l			
	Sulphate	773 mg/l			
	Arsenic	0.012 mg/l			
	TOC	59 mg/l			
	Cadmium	0.0009 mg/l			

Table S3.3 Groundwater – other monitoring requirements

Monitoring Point Ref./Description	Parameter	Monitoring frequency	Monitoring standard or method
PGW01, PGW02 and PGW03 as identified in 'Pinch restoration monitoring locations' plan in Table S1.2	Groundwater level, pH, Temperature, Electrical conductivity, Alkalinity as CaCO ₃ , Calcium, Chloride, Magnesium, Sodium, Sulphate, Potassium, Lead, Nickel, Zinc, Chromium, Copper, Arsenic, Cadmium, Iron, Manganese, Ammoniacal Nitrogen, Chemical oxygen demand (COD), Total oxidised nitrogen (TON), Naphthalene, Benzene, Toluene, Ethylbenzene, Xylenes, Total organic carbon (TOC)	Monthly (during restoration)	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), <u>risk assessments for your environmental permit (www.gov.uk)</u> , or such other subsequent guidance as may be agreed in writing with the Environment Agency.

Table S3.4 Surface water – other monitoring requirements				
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Outfall 1 and 2 locations as identified in 'Pinch restoration monitoring locations' plan in Table S1.2	Total Suspended Solids (TSS), pH, Temperature, Alkalinity as CaCO ₃ , Calcium, Chloride, Magnesium, Sodium, Sulphate, Potassium, Lead, Nickel, Zinc, Chromium, Copper, Arsenic, Cadmium, Iron, Manganese, Ammoniacal Nitrogen, Biological oxygen demand and Chemical oxygen demand (BOD and COD), Electrical conductivity, Total oxidised nitrogen (TON), Naphthalene, Benzene, Toluene, Ethylbenzene, Xylenes, Dissolved oxygen, Total organic carbon (TOC)	Monthly (30 months as defined by planning consent during restoration)	Spot sample	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), risk assessments for your environmental permit (www.gov.uk) or such other subsequent guidance as may be agreed in writing with the Environment Agency.

Schedule 4 – Reporting

Parameters, for which reports shall be made, in accordance with conditions of this permit, are listed below.

Table S4.1 Reporting of monitoring data		
Parameter	Reporting period	Period ends
Emissions to water (other than sewer) Parameters as required by schedule 3, table S3.1	Every 6 months	30 June, 31 December
Groundwater monitoring Parameters as required by schedule 3, table S3.2	Every 3 months	31 March, 30 June, 30 September, 31 December
Other surface water monitoring Parameters as required by schedule 3, table S3.3	Every 3 months	31 March, 30 June, 30 September, 31 December
Other surface water monitoring Parameters as required by schedule 3, table S3.4	Every 3 months	31 March, 30 June, 30 September, 31 December

Table S4.2 Reporting forms		
Media/parameter	Reporting format	Date of form
Surface water	Form Water 1 or other form as agreed in writing by the Environment Agency	DD/MM/18
Groundwater	Form Groundwater 1 or other form as agreed in writing by the Environment Agency	DD/MM/18

Schedule 5 – Notification

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

If any information is considered commercially confidential, it should be separated from non-confidential information, supplied on a separate sheet and accompanied by an application for commercial confidentiality under the provisions of the EP Regulations.

Part A

Permit Number	
Name of operator	
Location of Facility	
Time and date of the detection	

(a) Notification requirements for any incident or accident which significantly affects or may significantly affect the environment	
To be notified within 24 hours of detection	
Date and time of the event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances(s) potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken, or intended to be taken, to stop any emission	
Description of the failure or accident.	

(b) Notification requirements for the breach of a limit	
To be notified within 24 hours of detection unless otherwise specified below	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value and uncertainty	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Time periods for notification following detection of a breach of a limit	
Parameter	Notification period

(c) Notification requirements in the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment	
To be notified within 24 hours of detection	
Description of where the effect on the environment was detected	
Substances(s) detected	
Concentrations of substances detected	
Date of monitoring/sampling	

Part B – to be submitted as soon as practicable

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission	
The dates of any unauthorised emissions from the facility in the preceding 24 months.	

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

'accident' means an accident that may result in pollution.

'Annex I' means Annex I to Directive 2008/98/EC of the European Parliament and of the Council on waste.

'Annex II' means Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

'application' means the application for this permit, together with any additional information supplied by the operator as part of the application and any response to a notice served under Schedule 5 to the EP Regulations.

'authorised officer' means any person authorised by the Environment Agency under section 108(1) of The Environment Act 1995 to exercise, in accordance with the terms of any such authorisation, any power specified in section 108(4) of that Act.

'Background concentration' means such concentration of that substance as is present in:

- For emissions to surface water, the surface water quality up-gradient of the site; or
- For emissions to groundwater, the groundwater quality up-gradient of the site; or
- For emissions of ground gas, the ground or air outside the site and not attributable to the site

'ecological improvement' means providing, maintaining or improving the soils ability to provide a growing medium including for growth of vegetation on landscaping and for recreational and amenity uses.

'emissions to land' includes emissions to groundwater.

'emissions of substances not controlled by emission limits' means emissions of substances to air, water or land from the activities, either from the emission points specified in schedule 3 or from other localised or diffuse sources, which are not controlled by an emission limit.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations SI 2016 No.1154 and words and expressions used in this permit which are also used in the Regulations have the same meanings as in those Regulations.

'groundwater' means all water, which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

'List of Wastes' means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

'inert waste' means waste that does not undergo any significant physical, chemical or biological transformations. Inert waste will not dissolve, burn or otherwise physically or chemically react, biodegrade or adversely affect other matter with which it comes into contact in a way likely to give rise to environmental pollution or harm human health. The total leachability and pollutant content of the waste and the ecotoxicity of the leachate must be insignificant, and in particular not endanger the quality of surface water and/or groundwater

'quarter' means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

'R' means a recovery operation provided for in Annex II to Directive 2008/98/EC of the European Parliament and of the Council on waste.

'Site infrastructure' means any specified element of the:

- permanent capping;
- surface water drainage systems;
- groundwater monitoring boreholes;

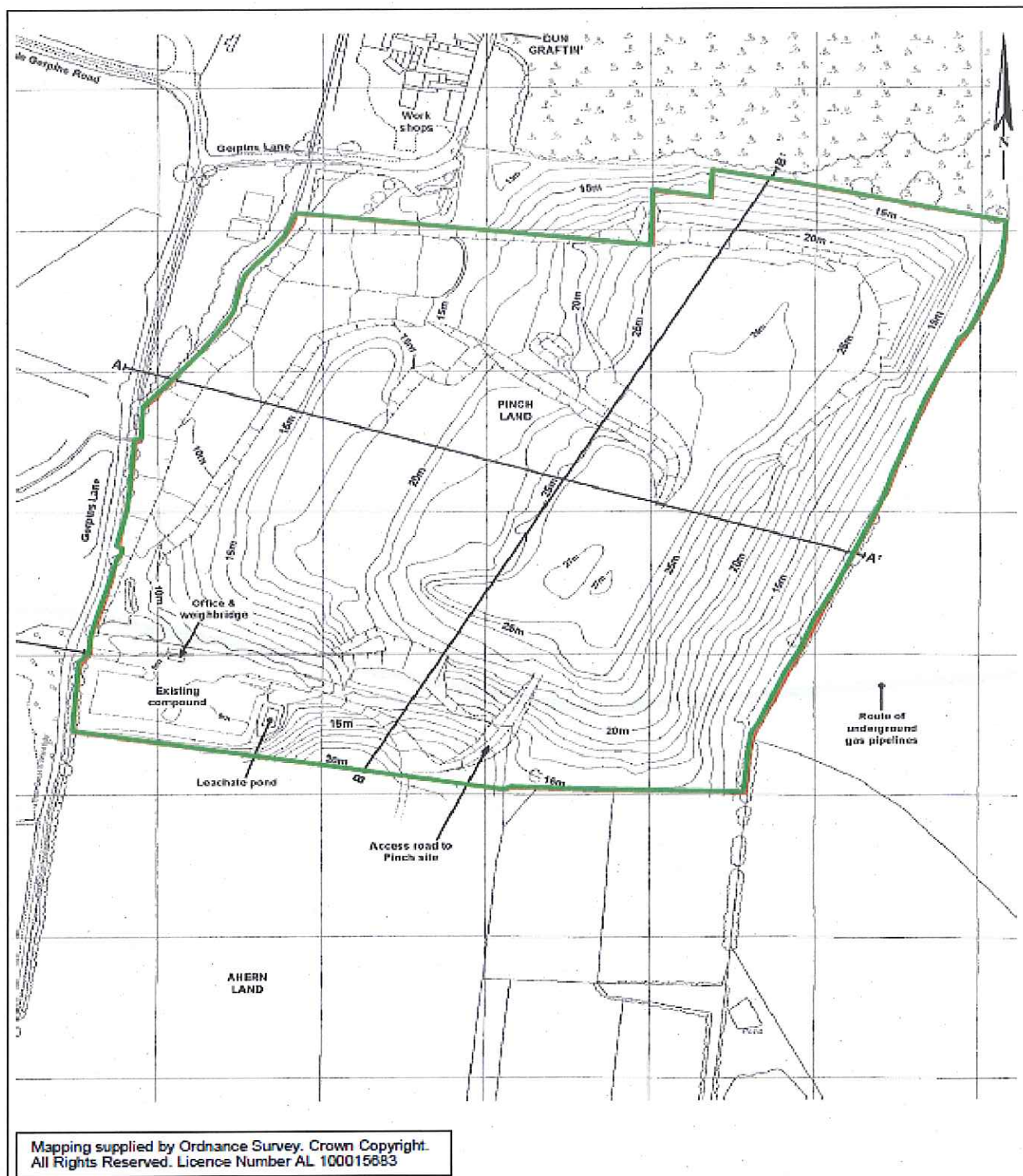
within the site.

'Waste code' means the six digit code referable to a type of waste in accordance with the 'List of Wastes' and in relation to hazardous waste, includes the asterisk.

'Waste Framework Directive' or 'WFD' means Waste Framework Directive 2008/98/EC of the European Parliament and of the Council on waste.

'year' means calendar year ending 31 December.

Schedule 7 – Site plan



Drawing 63018D2 Proposed Environmental Permit Boundary

Adapted from D.K. Symes Associates Plan No. 0912/P/A/2 v1
(9 November 2015)

Date	July 2017	Drawn	CJB
Scale	A4	Checked	FKC
Original	A4	Revision	1
File Reference O:\63018\Pinch\PermitApplication\Drawings			

esi
Environment
Specialists

END OF PERMIT

Reporting Forms

Permit Number: DB3800MK Operator: Ingrebourne Valley Limited

Facility: Pinch Restoration Form Number: Water1 / 19/02/18

Reporting of emissions to water (other than to sewer) the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]

- 1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum – maximum' measured values.
- 2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- 3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- 4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed Date.....
(Authorised to sign as representative of Operator)

Permit Number: DB3800MK Operator: Ingrebourne Valley Limited

Facility: Pinch Restoration Form Number: Groundwater1 / 19/02/18

Reporting of groundwater monitoring for the period from DD/MM/YYYY to DD/MM/YYYY

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result ^[1]	Test Method ^[2]	Sample Date and Times ^[3]	Uncertainty ^[4]

- 1. The result given is the maximum value (or the minimum value in the case of a limit that is expressed as a minimum) obtained during the reporting period, expressed in the same terms as the emission limit value. Where the emission limit value is expressed as a range, the result is given as the 'minimum - maximum' measured values.
- 2. Where an internationally recognised standard test method is used the reference number is given. Where another method that has been formally agreed with the Environment Agency is used, then the appropriate identifier is given. In other cases the principal technique is stated, for example gas chromatography.
- 3. For non-continuous measurements the date and time of the sample that produced the result is given. For continuous measurements the percentage of the process operating time covered by the result is given.
- 4. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed Date.....
(Authorised to sign as representative of Operator)