

# Notice of variation and consolidation with introductory note

**The Environmental Permitting (England & Wales) Regulations 2016**

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Earthline Limited  
Shipton Quarry  
Shipton-on-Cherwell  
Oxfordshire  
OX5 3EL

**Variation application number**

EPR/GB3431AD/V002

**Permit number**

EPR/GB3431AD

# Shipton Quarry

## Permit number EPR/GB3431AD

### Introductory note

#### This introductory note does not form a part of the notice

Under the Environmental Permitting (England & Wales) Regulations 2016 (schedule 5, part 1, paragraph 19) a variation may comprise a consolidated permit reflecting the variations and a notice specifying the variations included in that consolidated permit.

Schedule 1 of the notice specifies the conditions that have been varied and schedule 2 comprises a consolidated permit which reflects the variations being made. All the conditions of the permit have been varied and are subject to the right of appeal.

The permit is varied to extend the site boundary to the east and increase the total volume of waste accepted. The groundwater compliance limits have now been incorporated in to the permit following the discharge of improvement conditions imposed at permit issue.

Following a statutory review of permits in the landfill sector we have issued this variation to consolidate the original permit and subsequent variations and to update some of the conditions. We have also converted the permit into the current EPR permit format using modern conditions.

The Environment Agency has a duty, under the Environmental Permitting (England and Wales) Regulations 2016, regulation 34(1), to periodically review permits. As a result of that review we have identified a number of necessary changes we must make to the permit to reflect current legislation and best practice. These changes principally relate to:

- A change to the hydrogeological risk assessment condition so that reviews are undertaken every 6 years rather than every 4 years;
- Standard groundwater quality monitoring tables (schedule 3); and
- A standard reporting table (schedule 4).

The schedules specify the changes made to the permit.

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

| Status log of the permit                                       |                         |                                                                   |
|----------------------------------------------------------------|-------------------------|-------------------------------------------------------------------|
| Description                                                    | Date                    | Comments                                                          |
| Application<br>EPR/GB3431AD/V0021                              | Duly made<br>06/01/2009 | Application for an inert landfill                                 |
| Permit determined<br>EPR/AP3399VF/A001                         | 03/06/2009              | Permit issued to Alan Hadley Limited                              |
| Permit varied                                                  | 18/11/2009              |                                                                   |
| Application<br>EPR/GB3431AD/T001                               | Duly made<br>18/04/2012 | Applications to transfer the permit in full to Earthline Limited. |
| Transfer determined                                            | 03/05/2012              | Full transfer of permit complete                                  |
| Application<br>EPR/GB3431AD/V002 (variation and consolidation) | Duly made<br>06/11/2019 | Application to vary the site boundary and total tonnage of waste. |

| Status log of the permit             |            |                                                                                                      |
|--------------------------------------|------------|------------------------------------------------------------------------------------------------------|
| Description                          | Date       | Comments                                                                                             |
| Additional information requested     | 06/05/2020 | Response to Schedule 5 notice - updated Hydrogeological Risk Assessment to include compliance limits |
| Additional information requested     | 17/06/2020 | Response to Schedule 5 notice, further detail in relation to ammoniacal nitrogen                     |
| Variation determined<br>EPR/GB3431AD | 20/08/2020 | Varied permit issued.                                                                                |

End of introductory note

# Notice of variation and consolidation

## The Environmental Permitting (England and Wales) Regulations 2016

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2016 varies

### Permit number

**EPR/GB3431AD**

### Issued to

**Earthline Limited** ("the operator")

whose registered office is

**The Upper Lime Kiln Works**

**Bytham Road**

**Ogbourne St George, Near Marlborough**

**Wiltshire**

**SN8 1TD**

company registration number 02534626

to operate a regulated facility at

**Shipton Quarry**

**Shipton-on-Cherwell**

**Oxfordshire**

**OX5 3EL**

to the extent set out in the schedules.

The notice shall take effect from 20/08/2020.

| Name                  | Date              |
|-----------------------|-------------------|
| <b>Sifelani Mpofu</b> | <b>20/08/2020</b> |

Authorised on behalf of the Environment Agency

## Schedule 1

All conditions have been varied by the consolidated permit as a result of an Environment Agency initiated variation. The following table summarises the latest changes to the landfill permit template, however the permit may contain more changes than this where the permit has not been varied to recent template conditions.

| Condition      | Description of change                                                                                                                                                                                                    |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.4            | Generic condition to reflect the requirements of the Waste Framework Directive.                                                                                                                                          |
| 2.6.1(a)       | Added reference to a specific table to clarify what wastes are permitted by which permitted activity.                                                                                                                    |
| 3.1.1          | Generic condition imposed on all activities to simplify sub-conditions                                                                                                                                                   |
| 3.1.5 to 3.1.6 | Revised conditions to reflect the terminology used by the Groundwater Directive for 'hazardous substances' and to require hydrogeological risk assessment reviews are submitted every 6 years rather than every 4 years. |
|                | Sub-condition that referred to emission of 'non-hazardous pollutants' deleted. Such emissions are regulated by condition 3.2.                                                                                            |
|                | Two sub-conditions that referred to limits in specific tables in schedule 3 deleted as they are now covered by 3.1.1.                                                                                                    |
| 4.2.2          | Amended to ensure that information on 'annual production/ treatment' (Schedule 4, Table S4.2) is provided in February each year where annual reports may be submitted at other times of the year.                        |
| 4.2.2(a)       | Text expanded to clarify the details we require in an annual report.                                                                                                                                                     |
| 4.3.1          | Generic notifications condition added.                                                                                                                                                                                   |
| Schedules      |                                                                                                                                                                                                                          |
| Schedule 1     |                                                                                                                                                                                                                          |
| Table S1.1     | Amended description of the landfill activity to clarify that this includes restoration. Activity references amended to reflect changes introduced by Industrial Emissions Directive (2010/75/EU).                        |
| Schedule 2     | Standard list of wastes added.                                                                                                                                                                                           |
| Schedule 3     | Monitoring and compliance tables have been re-ordered so that those with compliance limits appear first.<br>Standard monitoring frequency and parameters have been included for certain routine monitoring requirements  |
| Schedule 4     |                                                                                                                                                                                                                          |
| Table S4.1     | Amended to only require regular reports of information that relate to compliance limits.                                                                                                                                 |
| Schedule 6     | Definitions added to clarify meaning of:<br>Inert waste<br>Previous year<br>Waste acceptance criteria<br>Waste acceptance procedure                                                                                      |

## Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

# Permit

## The Environmental Permitting (England and Wales) Regulations 2016

### Permit number

**EPR/GB3431AD**

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/GB3431AD/V002 authorising,

**Earthline Limited** ("the operator"),

whose registered office is

**The Upper Lime Kiln Works**

**Bytham Road**

**Ogbourne St George, Near Marlborough**

**Wiltshire**

**SN8 1TD**

company registration number 02534626

to operate a regulated facility at

**Shipton Quarry**

**Shipton-on-Cherwell**

**Oxfordshire**

**OX5 3EL**

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

| Name                  | Date              |
|-----------------------|-------------------|
| <b>Sifelani Mpofu</b> | <b>20/08/2020</b> |

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 Finance

- 1.2.1 The financial provision for meeting the obligations under this permit set out in the agreement made between the operator and the Environment Agency dated 15/07/2014 as varied on 20/08/2020 shall be maintained by the operator throughout the subsistence of this permit and the operator shall produce evidence of such provision whenever required by the Environment Agency.
- 1.2.1 The operator shall ensure that the charges it makes for the disposal of waste in the landfill cover all of the following:
- (a) the costs of setting up and operating the landfill;
  - (b) the costs of the financial provision required by condition 1.2.1; and
  - (c) the estimated costs for the closure and aftercare of the landfill.

### 1.3 Avoidance, recovery and disposal of wastes produced by the activities

- 1.3.1 The operator shall:
- (a) take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;
  - (b) review and record at least every four years whether changes to those measures should be made; and
  - (c) take any further appropriate measures identified by a review.

### 1.4 Avoidance, recovery and disposal of wastes produced by the activities

- 1.4.1 The operator shall:

- (a) take appropriate measures to ensure that waste produced by the activities is avoided or reduced, or where waste is produced it is recovered wherever practicable or otherwise disposed of in a manner which minimises its impact on the environment;
- (b) review and record at least every four years whether changes to those measures should be made; and
- (c) 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 Improvement programme**

- 2.4.1 The operator shall complete the improvements specified in schedule 1, table S1.3 by the date specified in that table unless otherwise agreed in writing by the Environment Agency.
- 2.4.2 Except in the case of an improvement which consists only of a submission to the Environment Agency, the operator shall notify the Environment Agency within 14 days of completion of each improvement.

### **2.5 Landfill Engineering**

- 2.5.1
  - (a) No construction of any new cell or development area shall commence until the operator has submitted construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
  - (b) The operator shall review the construction proposals every 12 months.
- 2.5.2 The construction of a new cell or development area shall take place only in accordance with the approved construction proposals unless:
  - (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or

(b) a change has otherwise been agreed in writing by the Environment Agency.

- 2.5.3 The operator shall prepare a CQA Validation Report to cover every 12 month period of construction of the development area. The operator shall submit the CQA validation report to the Environment Agency within 4 weeks following construction of the development area.
- 2.5.4 No disposal of waste shall take place in a new cell or development area until the operator has submitted a CQA Validation Report and the Environment Agency has confirmed that it is satisfied with the CQA Validation Report.
- 2.5.5 No construction of landfill infrastructure shall commence until the operator has submitted relevant construction proposals or a written request to use previous construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.
- 2.5.6 The construction of the landfill infrastructure shall take place only in accordance with the approved construction proposals unless:
- (a) any change to the approved construction proposals would have no impact on the performance of any element of the design; or
  - (b) a change has otherwise been agreed in writing by the Environment Agency.
- 2.5.7 The operator shall submit a CQA Validation Report within 4 weeks of the completion of the landfill infrastructure.
- 2.5.8 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.5.1 and 2.5.5 do not apply and the relevant landfill infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.
- 2.5.9 For the purposes of conditions 2.5.1, 2.5.4 and 2.5.5 the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the relevant construction proposals or CQA Validation Report, either:
- (a) confirmed whether or not it is satisfied; or
  - (b) informed the operator that it requires further information.
- 2.5.10 Where the Environment Agency has required further information under condition 2.6.9, the Environment Agency shall be deemed to be satisfied where it has not, within the period of four weeks from the date of receipt of the further information, either:
- (a) confirmed whether or not it is satisfied; or
  - (b) informed the operator that it requires further information.

## **2.6 Waste acceptance**

- 2.6.1 Wastes shall only be accepted for disposal if:
- (a) they are listed in schedule 2, table S2.1; and
  - (b) they are inert waste; and
  - (c) they are not liquid waste (including waste waters but excluding sludge); and
  - (d) all the relevant waste acceptance procedures have been completed; and
  - (e) they fulfil the relevant waste acceptance criteria; and
  - (f) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria; and
  - (g) they are wastes which have been treated, except for wastes for which treatment is not technically feasible.
- 2.6.2 The operator shall:

- (a) visually inspect without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the landfill and waste at the point of deposit; and
  - (b) be satisfied that the waste conforms to the requirements of condition 2.6.1.
- 2.6.3 Where the operator has taken samples to establish that the waste is in conformity with the documentation submitted by the holder then the samples taken shall be retained for at least one month and results of any analysis for at least two years.
- 2.6.4 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.6.5 The total quantity of waste that shall be disposed of in the landfill shall be limited by the levels shown on drawing K0117\_-3.
- 2.6.6 The quantity of waste that is disposed of or recovered at the site in any year shall not exceed the limits in schedule 1, table S1.4.
- 2.6.7 The operator shall maintain and implement a system which ensures that a record is made of the quantity, characteristics, date of delivery and, where practicable, origin of any waste that is received for disposal or restoration and of the identity of the producer, or in the case of municipal waste and multiple collection vehicles, of the collector of such waste. Any information regarded by the operator as commercially confidential shall be clearly identified in the record.

## **2.7 Closure and aftercare**

- 2.7.1 The operator shall maintain a closure and aftercare management plan.

## **3 Emissions and monitoring**

### **3.1 Emissions to water, air or land**

- 3.1.1 The limits in schedule 3 shall not be exceeded.
- 3.1.2 The operator shall prevent the input of any hazardous substances from the activities into groundwater.
- 3.1.3 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
  - (a) between nine and six months prior to the sixth anniversary of the granting of the permit; and
  - (b) between nine and six months prior to every subsequent six years after the sixth anniversary of the granting of the permit.

### **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 The operator shall:
  - (a) if notified by the Environment Agency that the activities are giving rise to pollution, submit to the Environment Agency for approval within the period specified, an emissions management plan which identifies and minimises the risks of pollution from emissions of substances not controlled by emission limits;
  - (b) implement the approved emissions management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

### **3.3 Noise and vibration**

- 3.3.1 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.
- 3.3.2 The operator shall:
- (a) if notified by the Environment Agency that the activities are giving rise to pollution outside the site due to 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.

### **3.4 Monitoring**

- 3.4.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring and any other actions specified in the following tables in schedule 3 to this permit:
- (a) Groundwater specified in tables S3.1 and S3.3;
  - (b) Landfill gas specified in table S3.2;
- 3.4.2 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.
- 3.4.3 A topographical survey of the site referenced to ordnance datum shall be carried out and shall be used to produce a plan of a scale adequate to show the surveyed features of the site:
- (a) annually; and
  - (b) prior to the disposal of waste in any new cell or new development area of the landfill; and
  - (c) following closure of the landfill or part of the landfill

## **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) the results of groundwater monitoring;
    - (ii) landfill gas monitoring;
    - (iii) waste types and quantities.

- 4.1.2 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 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 A report or reports on the performance of the activities over the previous year ('the annual report') shall be submitted to the Environment Agency by 31st January each year or such other date as may be agreed in writing by the Agency. The report(s) shall include as a minimum:
- (a) a review of the results of the monitoring and assessment carried out in accordance with this permit against the relevant assumptions, parameters and results in the risk assessments submitted in relation to this activity and any agreed amendments thereto. The review will include written descriptions of the improvements made to operational performance during the year, action plans developed and planned improvements for the coming year;
  - (b) the topographical surveys required by condition 3.4.3 other than those submitted as part of a CQA validation report;
  - (c) the volumetric difference (reported in cubic metres) between the most recent topographical survey and the previous annual topographical survey i.e. the additional volume of the landfill void that is occupied by waste;
  - (d) an assessment of the settlement behaviour of the landfill body based on the difference between the most recent topographical survey and previous annual topographical survey for the areas of the landfill which did not receive waste between the surveys;
  - (e) a calculation of the remaining capacity (reported in cubic metres) derived from the pre-settlement contours and the most recent topographical survey; and
- 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 or other reporting format as agreed in writing with the Environment Agency; and
  - (c) giving the information from such results and assessments as may be required by the forms specified in those tables.
- 4.2.4 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.
- 4.2.5 The operator shall, unless notice under this condition has been served within the preceding four years, submit to the Environment Agency, within six months of receipt of a written notice, a report assessing whether there are other appropriate measures that could be taken to prevent, or where that is not practicable, to minimise pollution.

## 4.3 Notifications

- 4.3.1 In the event:
- (a) 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—
    - (i) inform the Environment Agency,

- (ii) take the measures necessary to limit the environmental consequences of such an incident or accident, and
  - (iii) take the measures necessary to prevent further possible incidents or accidents;
- (b) of a breach of any permit condition the operator must immediately—
  - (i) inform the Environment Agency, and
  - (ii) take the measures necessary to ensure that compliance is restored within the shortest possible time;
- (c) 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.

4.3.2 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.

4.3.3 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

4.3.4 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.

## 4.4 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                                |                                                       |
|------------------------------------------------------|-------------------------------------------------------|
| Specified activity and WFD Annex I and II operations | Activity description and limits of specified activity |
| D1: Deposit into or onto land                        | The disposal of inert waste into or onto land.        |

| Table S1.2 Operating techniques |                                                                                                                    |                                        |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| Description                     | Parts                                                                                                              | Date Received                          |
| Application                     | Operating techniques, environmental risk assessment and Hydrogeological Risk Assessment, Stability risk assessment | 05/01/2009                             |
| Application                     | Updated hydrogeological Risk assessment and associated compliance limits                                           | 06/11/2019<br>06/05/2020<br>17/06/2020 |
| Application                     | Stability risk assessment                                                                                          | 06/11/2019                             |
| Application                     | Waste acceptance procedures and email received 07/07/2020 @ 11:39                                                  | 06/11/2019                             |
| Application                     | Environmental setting and installation design report                                                               | 06/11/2019                             |

| Table S1.3 Improvement programme requirements |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|
| Reference                                     | Requirement                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Date                                           |
| IC1                                           | The operator shall progressively install in-waste gas monitoring points at a minimum density of 2 points per hectare unless otherwise agreed with Environment Agency and commence routine in waste gas monitoring.<br><br>The landfill gas monitoring boreholes shall be constructed and recorded in accordance with a Construction Quality Assurance (CQA) Plan covering all elements of the landfill gas monitoring system. The proposal shall be in accordance with Environment Agency Guidance: LFTGN03 'Management of Landfill Gas'. | Within two months of completion of each phase. |
| IC2                                           | Following completion of 12 months of monitoring the operator shall, using the findings of the monitoring data, submit to the Environment Agency for written approval the compliance limit for ammoniacal nitrogen in borehole SP09/15.                                                                                                                                                                                                                                                                                                    | 31/08/2021                                     |
| IC3                                           | Submit a written plan to the Environment Agency for approval. The plan must contain the details of the proposals for the protection and development of the geological features of the site and the details of the access and long-term management of the geological features identified in this plan.                                                                                                                                                                                                                                     | 30/11/2020                                     |

| Table S1.4 Annual waste input limits |                    |
|--------------------------------------|--------------------|
| Category                             | Limit Tonnes/ Year |
| Inert Waste for disposal             | 250,000            |

## Schedule 2 – List of permitted waste

| Table S2.1 Permitted waste types for disposal at a landfill for inert waste |                                                                                                                                                                                |
|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Waste code                                                                  | Description                                                                                                                                                                    |
| <b>10</b>                                                                   | <b>Wastes from thermal processes</b>                                                                                                                                           |
| <b>10 11</b>                                                                | <b>wastes from manufacture of glass and glass products</b>                                                                                                                     |
| 10 11 03                                                                    | waste glass-based fibrous materials                                                                                                                                            |
| <b>15</b>                                                                   | <b>Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified</b>                                                            |
| <b>15 01</b>                                                                | <b>packaging (including separately collected municipal packaging waste)</b>                                                                                                    |
| 15 01 07                                                                    | glass packaging                                                                                                                                                                |
| <b>17</b>                                                                   | <b>Construction and demolition wastes (including excavated soil from contaminated sites)</b>                                                                                   |
| <b>17 01</b>                                                                | <b>concrete, bricks, tiles and ceramics</b>                                                                                                                                    |
| 17 01 01                                                                    | concrete                                                                                                                                                                       |
| 17 01 02                                                                    | bricks                                                                                                                                                                         |
| 17 01 03                                                                    | tiles and ceramics                                                                                                                                                             |
| 17 01 07                                                                    | Mixtures concrete, bricks, tiles and ceramics                                                                                                                                  |
| <b>17 02</b>                                                                | <b>wood, glass and plastic</b>                                                                                                                                                 |
| 17 02 02                                                                    | glass                                                                                                                                                                          |
| <b>17 05</b>                                                                | <b>soil (including excavated soil from contaminated sites), stones and dredging spoil</b>                                                                                      |
| 17 05 04                                                                    | soil and stones other than those mentioned in 17 05 03                                                                                                                         |
| <b>19</b>                                                                   | <b>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</b> |
| <b>19 12</b>                                                                | <b>wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified</b>                                          |
| 19 12 05                                                                    | glass                                                                                                                                                                          |
| <b>20</b>                                                                   | <b>Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions</b>                                 |
| <b>20 01</b>                                                                | <b>separately collected fractions (except 15 01)</b>                                                                                                                           |
| 20 01 02                                                                    | glass                                                                                                                                                                          |
| <b>20 02</b>                                                                | <b>garden and park wastes (including cemetery waste)</b>                                                                                                                       |
| 20 02 02                                                                    | soil and stones                                                                                                                                                                |

## Schedule 3 – Emissions and monitoring

| Table S3.1 Groundwater – emission limits and monitoring requirements                                                     |                     |                        |                  |                      |                                                                                                                                                                                                                                                                                                      |
|--------------------------------------------------------------------------------------------------------------------------|---------------------|------------------------|------------------|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monitoring point reference                                                                                               | Parameter           | Limit (including unit) | Reference Period | Monitoring frequency | Monitoring standard or method                                                                                                                                                                                                                                                                        |
| Boreholes RPS04, RPS05, SP08/15, SP09/15 and SP01/19 as shown on drawing SHIPTON1910, Drawing number 6 (included in HRA) | Ammoniacal nitrogen | 0.33mg/l*              | Spot Sample      | Quarterly            | 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. |
|                                                                                                                          | Chloride            | 72 mg/l                |                  |                      |                                                                                                                                                                                                                                                                                                      |
|                                                                                                                          | Sulphate            | 337 mg/l               |                  |                      |                                                                                                                                                                                                                                                                                                      |
|                                                                                                                          | Benzene             | 7µg/l                  |                  |                      |                                                                                                                                                                                                                                                                                                      |
| *The compliance limit for ammoniacal nitrogen in borehole SP09/15 will be agreed following completion of IC2             |                     |                        |                  |                      |                                                                                                                                                                                                                                                                                                      |

| Table S3.2 Landfill gas: in-waste monitoring – Action level and monitoring requirements |                       |                                |                      |                                                                                                                                                                                                                                                                                                               |
|-----------------------------------------------------------------------------------------|-----------------------|--------------------------------|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monitoring point Ref. /description                                                      | Parameter             | Action level (including units) | Monitoring frequency | Monitoring standard, specifications and other actions                                                                                                                                                                                                                                                         |
| To be agreed following completion of IC1                                                | Methane               | 1% v/v                         | Monthly*             | As per LFTGN03 September, 2004 or such other subsequent guidance as may be agreed in writing with the Environment Agency.                                                                                                                                                                                     |
|                                                                                         | Carbon Dioxide        | No limit                       |                      | Where the concentration of methane at any in-waste monitoring location exceeds the specified action level, the operator shall investigate the root cause in accordance with their gas action plan and waste acceptance procedures.<br><br>Record whether the ground is:<br>Waterlogged, frozen , snow covered |
|                                                                                         | Oxygen                | No limit                       |                      |                                                                                                                                                                                                                                                                                                               |
|                                                                                         | Atmospheric Pressure  | No limit                       |                      |                                                                                                                                                                                                                                                                                                               |
|                                                                                         | Differential Pressure | No limit                       |                      |                                                                                                                                                                                                                                                                                                               |
| *Monitoring to commence immediately following installation of boreholes                 |                       |                                |                      |                                                                                                                                                                                                                                                                                                               |

| Table S3.3 Groundwater – other monitoring requirements                                      |                                                                                                                                                                                         |                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Monitoring Point Ref./Description                                                           | Parameter                                                                                                                                                                               | Monitoring frequency                                           | Monitoring standard or method                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Up gradient<br>BH13, BH14, RPS02 and RPS03 as shown on drawing SHIPTON2005B                 | Water Level, Electrical Conductivity, Chloride, Ammoniacal Nitrogen, pH                                                                                                                 | Quarterly                                                      | 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                                             | Total Alkalinity, Magnesium, Potassium, Sulphate, Calcium, Sodium, Chromium (VI), Copper, Iron, Lead, Nickel, Zinc, Manganese, Selenium, Cyanide                                        | Annually                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                                                                                             | Hazardous substances<br>Arsenic (III) & (V), Mercury, Benzene, Toluene, Ethyl Benzene, Xylene, Benzo(a)pyrene, Poly Chlorinated Biphenyls (PCB), Polycyclic Aromatic Hydrocarbons (PAH) | Annually for first six years of operation then every two years |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Down gradient<br>RPS04,RPS05, SP08/15, SP09/15 and SP01/19 as shown on drawing SHIPTON2005B | Water Level, Electrical Conductivity, Chloride, Ammoniacal Nitrogen, pH                                                                                                                 | Quarterly                                                      | 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.<br><br>For hazardous substances, if the results of routine monitoring suggest an increase in contamination above the baseline or up gradient groundwater quality, the operator shall undertake a full hazardous substances screen on all groundwater samples, to include all the confirmed hazardous substances on the Water Framework UK TAG website ( <a href="http://www.wfduk.org/resources/groundwater-hazardous-substances-standards">http://www.wfduk.org/resources/groundwater-hazardous-substances-standards</a> ). |
|                                                                                             | Total Alkalinity, Magnesium, Potassium, Sulphate, Calcium, Sodium, Chromium (VI), Copper, Iron, Lead, Nickel, Zinc, Manganese, Selenium, Cyanide                                        | Annually                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Table S3.3 Groundwater – other monitoring requirements |                                                                                                                                                                                                           |                                                                            |                               |
|--------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|-------------------------------|
| Monitoring Point Ref./Description                      | Parameter                                                                                                                                                                                                 | Monitoring frequency                                                       | Monitoring standard or method |
|                                                        | Hazardous substances<br>Arsenic (III) & (V), Mercury,<br>Benzene, Toluene, Ethyl<br>Benzene, Xylene,<br>Benzo(a)pyrene, Poly<br>Chlorinated Biphenyls (PCB),<br>Polycyclic Aromatic<br>Hydrocarbons (PAH) | Annually for<br>first six years<br>of operation<br>then every<br>two years |                               |
| All monitoring points                                  | Base of monitoring point<br>(mAOD)                                                                                                                                                                        | Annually                                                                   |                               |

## Schedule 4 – Reporting

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

| <b>Table S4.1 Reporting of monitoring data</b>                                 |                          |                                              |
|--------------------------------------------------------------------------------|--------------------------|----------------------------------------------|
| <b>Parameter</b>                                                               | <b>Reporting period*</b> | <b>Period ends</b>                           |
| Emission to groundwater<br>As specified by schedule 3, table S3.1              | Every 3 months           | 31 March, 30 June, 30 September, 31 December |
| Landfill gas in monitoring boreholes<br>As specified by schedule 3, table S3.2 | Every 3 months           | 31 March, 30 June, 30 September, 31 December |
| Other groundwater monitoring<br>As specified by schedule 3, table S3.3         | Every 3 months           | 31 March, 30 June, 30 September, 31 December |

| <b>Table S4.2 Reporting Forms</b>                 |                                                                                                   |                     |
|---------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------|
| <b>Media/parameter</b>                            | <b>Reporting Format</b>                                                                           | <b>Date of Form</b> |
| Groundwater                                       | Form Groundwater 1, or other reporting format to be agreed in writing with the Environment Agency | 20/08/2020          |
| Landfill gas                                      | Form LFG 1, or other reporting format to be agreed in writing with the Environment Agency         | 20/08/2020          |
| Waste Return                                      | E-waste Return Form                                                                               | -                   |
| Landfill topographical surveys and interpretation | Reporting format to be agreed in writing with the Environment Agency                              | -                   |

## Schedule 5 – Notification

This page outlines 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                                                  |  |

|                                                                              |  |
|------------------------------------------------------------------------------|--|
| (b) Notification requirements for the breach of a limit                      |  |
| To be notified within 24 hours of detection unless otherwise specified below |  |
| 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 supplied 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.                                                                  |  |

|                  |  |
|------------------|--|
| <b>Name*</b>     |  |
| <b>Post</b>      |  |
| <b>Signature</b> |  |
| <b>Date</b>      |  |

\* authorised to sign on behalf of the operator

## Schedule 6 – Interpretation

“Accident” means an accident that may result in pollution.

“Annually” means once every year.

“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 sewer, the surface water quality up-gradient of the sewage treatment works discharge; or
- For emissions of landfill gas, the ground or air outside the site and not attributable to the site.

“Construction Proposals” means written information, at a level of detail appropriate to the complexity and pollution risk, on the design, specifications of materials selected, stability assessment (where relevant) and the construction quality assurance (CQA) programme in relation to the Landfill Infrastructure.

“CQA Validation Report” means the final “as built” construction and engineering details of the Landfill Infrastructure. It must provide a comprehensive record of the construction and must include, where relevant:

- The results of all testing required by the CQA programme - this must include the records of any failed tests with a written explanation, details of the remedial action taken, referenced to the appropriate secondary testing;
- Plans showing the location of all tests;
- “As-built” plans and sections of the works;
- Copies of the site engineer’s daily records;
- Records of any problems or non-compliances and the solution applied;
- Any other site specific information considered relevant to proving the integrity of the Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the Construction Proposals.

“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.

“Emissions to land” includes emissions to groundwater.

“EP Regulations” means The Environmental Permitting (England and Wales) Regulations 2016, 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.

“Exceeded” means that a value is above a permitted limit, or where a range of values or a minimum value is set as a permitted limit it means a value outside that range or below the minimum value, whichever is applicable.

“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.

“Hazardous substances” as defined by the Environmental Permitting (England and Wales) Regulations 2016, SI 2016 No.1154, schedule 22.

“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.

“Landfill infrastructure” means any specified element of the:

- Artificially established geological barrier;
- surface water drainage systems;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes.

“List of Wastes” means the list of wastes established by Commission Decision 2014/995/EC replacing Decision 1994/3/EC and 2000/532/ EC establishing a list of wastes pursuant to Article 7 of Council Directive 2008/98/EC 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.

“Liquids” means any liquid other than leachate.

“MPP” means the monitoring point plan, required to specify routine monitoring locations.

“No impact” means that the change made to the construction process will not affect the agreed design criteria, specification or performance in a way that has a negative effect.

“Previous year” means the 12 month period preceding the month the annual report is submitted in.

“Quarter” means a calendar year quarter commencing on 1 January, 1 April, 1 July or 1 October.

“Relevant waste acceptance criteria” means the waste acceptance criteria and the associated sampling and test methods specified in the Council Decision Annex (2003/33/EC, European Council of 19 December 2002).

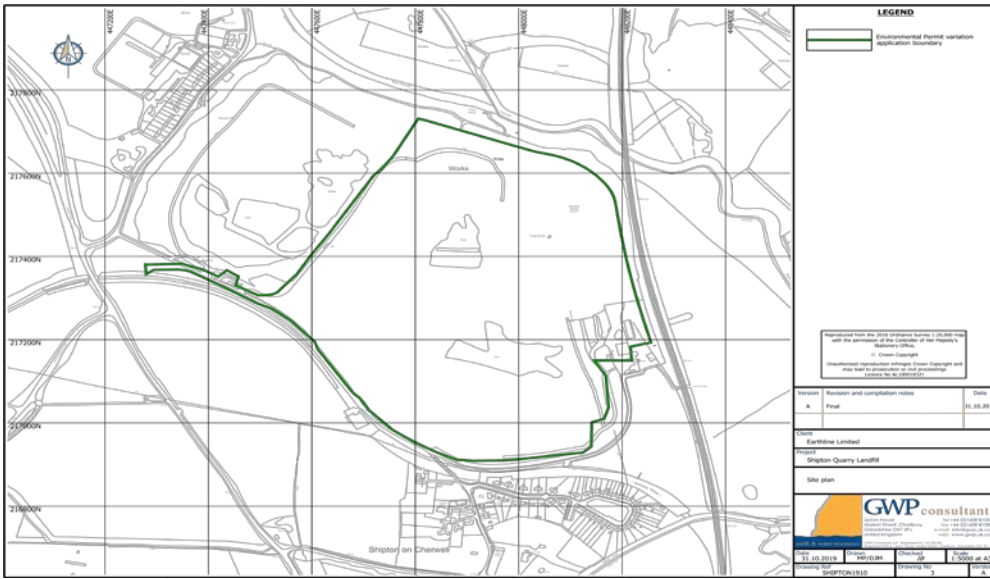
“Relevant waste acceptance procedures” means the procedure for the acceptance of waste at landfills and the associated sampling and test methods specified in the Council Decision Annex (2003/33/EC, European Council of 19 December 2002).

“Review of the Hydrogeological Risk Assessment” means a written review of the hydrogeological risk assessment included in the Application, together with any other parts of the Application that addressed the requirements of the EP Regulations. The review shall assess whether the activities of disposal or tipping for the purpose of disposal of waste authorised by the permit continue to meet the requirements of the EP Regulations.

“Waste code” – See “List of Wastes”.

“WFD” means Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste [and repealing certain Directives] – the Waste Framework Directive.

## Schedule 7 – Site plan



END OF PERMIT