

# Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2010

Tarmac Cement and Lime Limited

South Pit, Phase 3 Landfill Manor Way Swanscombe Dartford Kent DA10 0LL

#### Variation application number

EPR/RP3039SZ/V007

Permit number EPR/RP3039SZ

# South Pit, Phase 3 Landfill Permit number EPR/RP3039SZ

## Introductory note

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

The following gives notice of the variation and consolidation of this environmental permit.

This variation adds an additional activity to treat hazardous leachate (Section 5.3 Part A1(a) (ii) - Disposal of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment) arising from the South Pit, Phase 3 landfill.

In adding the above activity, two additional point source emissions (one to air (AMP1) and other to the sewer (S1)) are authorised.

This variation also:

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- incorporates an updated methodology for measuring and assessing the leachate level in the monitoring boreholes;
- amends leachate head limits in closed cells; and
- changes the groundwater compliance point from the current borehole G12 to EW7/14.

Schedule 1 to this notice summarises the changes we have made to this permit.

Status log of the permit			
Description	Date	Comments	
Application RP3039SZ EPR/RP3039SZ/A001	Duly made 29/11/04	Received 10/11/04	
Permit determined EPR/RP3039SZ	04/11/05	Original permit issued to Lafarge Cement UK PLC.	
Environment Agency Initiated Variation CP3433MC (EPR/RP3039SZ/V002)	Issued 29/02/08		
Variation Application BP3033GY (EPR/RP3039SZ/V003)	Duly made 02/03/09		
Variation determined BP3033GY (EPR/RP3039SZ)	15/06/09	Change in the annual permitted tonnage from 10,000 to 40,000 and inclusion of revised monitoring trigger level.	
Variation Application EPR/RP3039SZ/V004	Duly made 12/07/12	Name changed to Lafarge Cement UK Limited.	
Variation determined EPR/RP3039SZ	30/07/12	Varied permit issued to Lafarge Cement UK Limited.	
Variation Application EPR/RP3039SZ/V005	Duly made 23/09/13	Name changed to Lafarge Tarmac Cement and Lime Limited.	
Variation determined EPR/RP3039SZ/V005	22/11/13	Varied permit issued to Lafarge Tarmac Cement and Lime Limited.	
Environment Agency Landfill Sector Review 2014 Permit reviewed Variation determined EPR/RP3039SZ/V006 Permit EPR/RP3039SZ	28/05/14	Varied and consolidated permit issued in modern condition format. Also incorporates an administrative application to reduce the annual tonnage of hazardous waste to zero but allow 9,400 tonnes per annum for restoration. Received on 07/03/14.	

Status log of the permit			
Description	Date	Comments	
Application EPR/RP3039SZ/V007 (variation and consolidation)	Duly made 21/04/15	Application to add a leachate treatment activity, amend leachate assessment levels and groundwater monitoring points. This application also incorporates an additional administrative application to change the operator name from Lafarge Tarmac Cement and Lime Limited to Tarmac Cement and Lime Limited. Received on 04/09/15.	
Additional Information - Response to Schedule 5 dated 01/07/15	Received 30/07/15	Additional details on the conceptual model, details of borehole EW7/14.	
Additional Information - Response to Schedule 5 date 29/07/15	Received 06/08/15	Detail of the design leachate treatment plant and leachate treatment.	
Variation determined EPR/RP3039SZ/V007 (Billing ref. DP3234AQ)	16/11/15	Varied and consolidated permit issued in modern condition format to Tarmac Cement and Lime Limited.	

End of introductory note

# Notice of variation and consolidation

## The Environmental Permitting (England and Wales) Regulations 2010

The Environment Agency in exercise of its powers under regulation 20 of the Environmental Permitting (England and Wales) Regulations 2010 varies and consolidates

#### **Permit number**

EPR/RP3039SZ

#### Issued to

Tarmac Cement and Lime Limited ("the operator")

whose registered office is

Portland House Bickenhill Lane Solihull Birmingham B37 7BQ

company registration number 00066558

to operate a regulated facility at

South Pit, Phase 3 Landfill Manor Way Swanscombe Dartford Kent DA10 0LL

to the extent set out in the schedules.

The notice shall take effect from 16/11/2015.

Name	Date
Claire Roberts	16/11/2015

Authorised on behalf of the Environment Agency

#### Schedule 1

All conditions have been varied by the consolidated permit as a result of an application made by the operator. The following table summarises the changes to the permit.

Condition	Description of change	
1.2.1	Financial provision condition is updated to reflect the requirements of this variation.	
2.1.1	Table S1.1 is amended to insert activity A2 – 5.3 (A1)(a)(ii) – physico-chemical treatment of leachate.	
2.3.1	Table S1.2 as referenced by condition 2.3.1 is updated to reference the operating techniques for the leachate treatment plant, assessment of leachate levels and groundwater compliance points.	
2.4.1	Table S1.3 as referenced by condition 2.4.1 is added to insert improvement condition IC8into the permit.IC8 requires a commissioning report to be submitted to the Environment Agency for approval.	
3.1.2	Condition 3.1.2, Table S3.2 and Table S3.4 are added to authorise a point source emission (AMP1) to air and a point source emission (S1) to sewer.	
3.5.1	Condition 3.5.1 is amended to insert the new point source emissions as described above.	
Schedules		
Table S1.1	Amended to include the leachate activity.	
	Storage of raw materials added to the Directly Associated Activities.	
Table 1.2	Operating Techniques from the application and additional information have been incorporated in to the permit as detailed in condition 2.3.1.	
Table 1.3	Improvement conditions are inserted as detailed in condition 2.4.1.	
Schedule 3	Monitoring and compliance tables have been re-ordered as we have added additional point source emission tables, so that those with compliance limits and point sources appear first.	
Table S3.2	Point source to air is inserted.	
Table S3.4	Point source to sewer is inserted.	
Table S3.9	Specific requirements for process monitoring of the leachate treatment to ensure compliance with the conditions of the permit and management systems.	
Table S4.1	Amended to require only regular reports of information that relate to compliance limits.	
Table S4.2	Amended to require details of leachate extracted for treatment or tankering off site.	
Table S4.3	Amended to include raw materials and treatment efficiency.	

#### Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

## Permit

## The Environmental Permitting (England and Wales) Regulations 2010

#### Permit number

#### EPR/RP3039SZ

This is the consolidated permit referred to in the variation and consolidation notice for application **EPR/RP3039SZ/V007** authorising,

Tarmac Cement and Lime Limited ("the operator"),

whose registered office is

Portland House Bickenhill Lane Solihull Birmingham B37 7BQ

company registration number 00066558

to operate an installation at

South Pit, Phase 3 Landfill Manor Way Swanscombe Dartford Kent DA10 0LL

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

Name	Date
Claire Roberts	16/11/2015

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 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 4<sup>th</sup> November 2005 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.
- 1.2.2 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 Energy efficiency

- 1.3.1 The operator shall:
  - (a) take appropriate measures to ensure that energy is used efficiently in the activities;
  - (b) Review and record at least every four years whether there are suitable opportunities to improve the energy efficiency of the activities; and
  - (c) Implement any appropriate measures identified by a review.

#### **1.4 Efficient use of raw materials**

- 1.4.1 The operator shall:
  - (a) take appropriate measures to ensure that raw materials and water are used efficiently in the activities;
  - (b) maintain records of raw materials and water used in the activities;
  - (c) review and record at least every four years whether there are suitable alternative materials that could reduce environmental impact or opportunities to improve the efficiency of raw material and water use; and
  - (d) take any further appropriate measures identified by a review.

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

- 1.5.1 The operator shall:
  - 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 No construction of any new cell of the landfill shall commence until the operator has submitted construction proposals and the Environment Agency has confirmed that it is satisfied with the construction proposals.

- 2.5.2 Where the operator proposes to construct any new cell other than the first cell, but proposes no change from the design of the most recently approved cell which could have any impact on the performance of any element of the design, no construction of the new cell shall commence until the operator has submitted a cell layout drawing and the Environment Agency has confirmed that it is satisfied with the cell layout drawing.
- 2.5.3 The construction of a new cell 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.
- 2.5.4 No disposal of waste shall take place in a new cell 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 as soon as practicable following the construction of the relevant landfill infrastructure.
- 2.5.8 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.5.5 and 2.5.6 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, 2.5.2, 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 2.5.9(b), 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 hazardous waste, and
  - (c) they are not liquid waste (including waste waters but excluding sludge), and
  - (d) they are not waste which in the conditions of landfill is explosive, corrosive, oxidising, highly flammable or flammable, and

- (e) they are not hospital and other clinical infectious wastes from medical or veterinary establishments, and
- (f) they are not chemical substances from research and development or teaching activities, for example laboratory residues, which are unidentified and/or which are new and whose effects on man and/or the environment are unknown, and
- (g) all the relevant waste acceptance procedures have been completed, and
- (h) they fulfil the relevant waste acceptance criteria, and
- (i) they have not been diluted or mixed solely to meet the relevant waste acceptance criteria, and
- (j) they are wastes which have been treated, except for where treatment would not reduce its quantity or the hazards which it poses to human health or the environment.
- 2.6.2 Wastes shall only be accepted for restoration where:
  - (a) they are listed in schedule 2, table S2.2, and
  - (b) they are accepted in accordance with a restoration plan approved in writing by the Environment Agency.
- 2.6.3 The operator shall visually inspect waste at the point of dispatch and shall be satisfied that the waste conforms to the requirements of condition 2.6.1.
- 2.6.4 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.
- 2.6.5 The operator on accepting each delivery of waste shall provide a receipt to the person delivering it.
- 2.6.6 The total quantity of waste that shall be deposited or recovered in the landfill shall be limited by the pre-settlement levels shown on drawing ESID 4,6,7,8 October 2004.
- 2.6.7 The quantity of waste that is deposited or recovered in the landfill in any year shall not exceed the limits in schedule 1 table S1.4.
- 2.6.8 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 recovery 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.
- 2.6.9 The operator shall maintain and implement a system to record the disposal location of any hazardous waste.

#### 2.7 Leachate levels

2.7.1 The limits for the level of leachate listed in schedule 3 table S3.1 shall not be exceeded.

#### 2.8 Closure and aftercare

2.8.1 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 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3 tables S3.2 and S3.4.
- 3.1.3 The operator shall prevent the input of any hazardous substances from the activities into groundwater.
- 3.1.4 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
  - (a) between nine and six months prior to the fourth anniversary of the granting of the permit, and
  - (b) between nine and six months prior to every subsequent six years after the fourth 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.
- 3.2.3 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 and any other actions specified in the following tables in schedule 3 to this permit:
  - (a) leachate specified in tables S3.1 and S3.7;
  - (b) point source emissions specified in tables S3.2 and S3.4;
  - (c) groundwater specified in tables S3.3 and S3.5;
  - (d) landfill gas specified in tables S3.6;
  - (e) surface water specified in table S3.8; and
  - (f) process monitoring specified in table S3.9.
- 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 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.

#### 3.6 Pests

- 3.6.1 The activities shall not give rise to the presence of pests which are likely to cause pollution, hazard or annoyance outside the boundary of the site. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved pests management plan, have been taken to prevent or where that is not practicable, to minimise the presence of pests on the site.
- 3.6.2 The operator shall:
  - (a) if notified by the Environment Agency, submit to the Environment Agency for approval within the period specified, a pests management plan which identifies and minimises risks of pollution hazard or annoyance from pests;
  - (b) implement the pests management plan, from the date of approval, unless otherwise agreed in writing by the Environment Agency.

## 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) sub-surface landfill gas monitoring;
  - (iii) leachate levels, quality and quantities;
  - (iv) waste types and quantities;
  - (v) the location of hazardous waste deposits; and
  - (vi) the specification and as built drawings of the basal, sidewall and capping engineering systems.
- 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, with the exception of 4.2.2(c) that must be provided by the end of February each year. 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 installation 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 energy consumed at the site, reported in the format set out in schedule 4 table S4.3
  - (c) the annual production/treatment set out in schedule 4 table S4.2;
  - (d) the topographical surveys required by condition 3.5.3 other than those submitted as part of a CQA validation report;
  - 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;
  - (f) 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;
  - (g) a calculation of the remaining capacity (reported in cubic metres) derived from the presettlement contours and the most recent topographical survey;
  - (h) a plan(s) ('the monitoring and extraction point plan MEPP') showing the locations of leachate and landfill gas extraction and all monitoring points.
- 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) using the forms specified in schedule 4 table S4.4 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 (a) 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—
  - (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) in the event 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) 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.
- 4.3.2 Any information provided under condition 4.3.1 (a)(i), or 4.3.1 (b)(i) where the information relates to the breach of a limit specified in the permit, 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 a	Table S1.1 activities				
Activity reference	WFD Annex I and II operations (where applicable)	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity	
A1	D5 –Specially engineered landfill; R5 - the recycling or reclamation of inorganic material; and R10 – Land treatment resulting in benefit to agriculture or ecology	Section 5.2 Part A(1) (a), The disposal of waste in a landfill.	Landfill for hazardous waste and landfill restoration	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in condition 2.6, as an integral part of landfilling.	
A2	D9 – Physico- chemical treatment of waste	Section 5.3, Part A(1) (a)(ii), Physico-chemical treatment of hazardous waste	Treatment of leachate in a facility with a capacity of >10 tonnes/day	Leachate arising from the landfill only.	
Directly Ass	sociated Activities				
A3	N/A		Storage of raw material used for leachate treatment	Storage of Carbon Dioxide for use in the treatment of leachate.	

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	<ul> <li>The response to questions 2.1, 2.2, 2.3, 2.4 and 2.5 given in Part B of the Application Form with the following exclusions;</li> <li>Response to question B2.2.16 insofar that it states the site is not leachate generating.</li> </ul>	10/11/04

Description	Parts	Date Received
	<ul> <li>Response to question 2.2.42 insofar that the proposed groundwater control and trigger levels are not satisfactory.</li> </ul>	
	<ul> <li>The hydrogeological risk assessment section 4.2 insofar as it states that List 1 substances were not present in leachate above laboratory detection limits</li> </ul>	
	Responses insofar as they have been superseded by operating techniques that have been subsequently specified in Table S1.2 or agreed in writing in accordance with condition 2.3.1.	
Revised Landfill Gas Management Plan submitted in accordance with improvement condition 1a.	Landfill Gas Management Plan excluding those parts that have been superseded by operating techniques that have been subsequently specified in Table S1.2 or agreed in writing in accordance with condition 2.3.1.	04/05/06
Revised Surface Water Monitoring Plan submitted in accordance with improvement condition 2a.	Surface Water Monitoring Plan excluding those parts that have been superseded by operating techniques that have been subsequently specified in Table S1.2 or agreed in writing in accordance with condition 2.3.1.	03/02/06
Proposals for a Surface Water Management Strategy submitted in accordance with improvement condition 3a.	Surface Water Management Strategy excluding those parts that have been superseded by operating techniques that have been subsequently specified in Table S1.2 or agreed in writing in accordance with condition 2.3.1.	04/05/06
Revised Groundwater Management and Monitoring Plan submitted in accordance with improvement condition 5a.	Groundwater Management and Monitoring Plan excluding those parts that have been superseded by operating techniques that have been subsequently specified in Table S1.2 or agreed in writing in accordance with condition 2.3.1.	24/03/06
Submission in compliance with Table 1.3 Improvement Condition Requirements. Landfill Gas Baseline and Control Values	Landfill Gas Baseline and Control Values - Section 2.4 excluding those parts that have been superseded by operating techniques that have been subsequently specified in Table S1.2 or agreed in writing in accordance with condition 2.3.1.	04/09/08
Submission in compliance with Table 1.3 Improvement Condition Requirements Leachate Levels	Leachate Levels - Sections 4.5.1 to 5.2 excluding those parts that have been superseded by operating techniques that have been subsequently specified in Table S1.2 or agreed in writing in accordance with condition 2.3.1.	08/10/08

Table S1.2 Operating techniques			
Description	Parts	Date Received	
Submission in compliance with Table 1.3 Improvement Condition Requirements Groundwater Monitoring	Groundwater Monitoring - Sections 2.4 and 3.2 excluding those parts that have been superseded by operating techniques that have been subsequently specified in Table S1.2 or agreed in writing in accordance with condition 2.3.1.	29/04/08	
Waste Restoration Plan Version 3 May 2014	All	15/05/14	
Application (variation	Sections:	21/04/15	
EPR/RP3039SZ/V007)	04 CMS.LTCLLtd.RP3039SZ.ProposedChanges.April2015;		
	04a CMS.LTC&LLtd.SouthPit.Phase 3.LeachateManagementPlan.Issue2.April2015 and all appendices; and		
	08 CMS.LTCLLtd.RP3039SZ.V7.OperatingStatement.April2015, of the application document in response to section 3a – technical standards, Part C3 of the application form.		
Response to Schedule 5 Notice dated 01/07/15	Response to all questions.	30/07/15	
Response to Schedule 5 Notice dated 29/07/15	Response to all questions.	06/08/15	
Point Source Emission Plan, Drawing No. SPIT3.LTP.01, dated October 2015	All	06/08/15	

Table S1.3 Improvement programme requirements				
Reference	Reference Requirement Date			
IC 1- IC 7b have been completed.				

Table S1.3 Improvement programme requirements			
Reference	Requirement	Date	
IC8	Commissioning Report for the Leachate Treatment Plant and collection system	1 month after commissioning has been completed	
	The operator shall submit a written report to the Environment Agency on the commissioning of the leachate treatment plant and collection system. The report shall summarise the environmental performance of the plant as installed against the design parameters set out in the CQA Plan.		
	The report shall also include a review of the performance of the facility against the conditions of this permit. The report shall include details of procedures developed during commissioning for achieving and demonstrating compliance with permit conditions.		

Table S1.4 Annual waste input limits		
Category	Limit Tonnes/ Year	
Hazardous waste	0	
Inert Waste for cover	0	
Waste for restoration	9,400	
Total	9,400	

# Schedule 2 – List of permitted wastes

Table S2.1 Permittee	Table S2.1 Permitted waste types for disposal at a landfill for hazardous waste		
Waste code	Description		
10	WASTES FROM THERMAL PROCESSES		
10 13	Wastes from the manufacture of cement, lime and plaster and articles and products made from them		
10 13 12*	Solid wastes from gas treatment containing hazardous substances		

Table S2.2 Permi	tted waste types accepted for restoration
Waste code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	Waste from mineral non-metalliferous excavation
01 01 02	Waste overburden
01 04	Wastes from physical and chemical processing of non-metalliferous minerals
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
02	WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING
02 01	wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
02 01 03	plant-tissue waste
02 04	wastes from sugar processing
02 04 01	soil from cleaning and washing beet
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 05	soils (excluding soils from excavated sites), stones and dredgings
17 05 04	soils and stones including chalk other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OFF SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION / INDUSTRIAL WASTE
19 12	wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
19 12 09	minerals (for example sand, stones)
19 13	wastes from soil and groundwater remediation

Table S2.2 Permit	Table S2.2 Permitted waste types accepted for restoration					
Waste code	Description					
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01					
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	soils and stones					

# Schedule 3 – Emissions and monitoring

Monitoring point reference/ Description	Limit	Monitoring frequency	Monitoring standard and method
Operational Cells or Phases (Any cells or p	phases that do not have a final en	gineered cap ag	reed in accordance with the existing 'landfill engineering' condition
Leachate compliance points	-	Monthly	As specified in Environment Agency Guidance LFTGN02 (February 2003) or such other subsequent guidance as may be agreed in writing with the Environment Agency. Or otherwise agreed with the Agency as part of a leachate monitoring plan.
Non Operational Cells or Phases (Any cell	s or phases that have a final engi	neered cap agre	ed in accordance with the existing 'landfill engineering' condition)
	1	1	
Leachate compliance points	2.5m above the average	Monthly	As specified in Environment Agency Guidance LFTGN02
	2.5m above the average (arithmetic mean) groundwater potentiometric	Monthly	As specified in Environment Agency Guidance LFTGN02 (February 2003) or such other subsequent guidance as may be agreed in writing with the Environment Agency. Or otherwise
IW3AR/14	(arithmetic mean) groundwater potentiometric level calculated from	Monthly	(February 2003) or such other subsequent guidance as may be
Leachate compliance points IW3AR/14 IW3BR/14 IW3CR/14	(arithmetic mean) groundwater potentiometric	Monthly	(February 2003) or such other subsequent guidance as may be agreed in writing with the Environment Agency. Or otherwise

Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
AMP1 on Plan shown in Schedule 7	-	From the methane stripping as part of leachate treatment via the "bio filter"	-	-	-	-

Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
Groundwater monitoring point G11 as shown on MEPP dated 01/05/15	Chromium (Total) Potassium (Total) Sulphate (as SO <sub>4</sub> ) Selenium (Total)	0.007 mg/l 201 mg/l 770 mg/l 0.32 mg/l	Spot Sample	Quarterly	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, Annex J, version 2,
Groundwater monitoring point EW7/14 as shown on MEPP dated 01/05/15	Chromium (Total) Potassium (Total) Sulphate (as SO <sub>4</sub> ) Selenium (Total)	0.050 mg/l 311 mg/l 842 mg/l 0.166 mg/l	Spot sample	Quarterly	<ul> <li>(April 2010) or such other subsequent guidance as may be agreed in writing with the Environment Agency.</li> </ul>

Table S3.4 Point source emissions to sewer, effluent treatment plant or by tankering or other transfer off-site – emission limits and monitoring requirements

Emission point Ref. & Location	Parameter	Source	Limit (including unit)	Reference Period	Monitoring Frequency	Monitoring Standard or Method
S1on Plan shown in Schedule 7		Effluent from Leachate Treatment Plant				

Table S3.5 Groundwate	er – other monitoring requiremer	nts			
Monitoring Point Ref./Description	Parameter	Monitoring frequency	Monitoring standard or method		
Up gradient MEPP	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), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, (Annex J3,		
	Total alkalinity, magnesium, potassium, total sulphates, calcium, sodium, chromium, copper, iron, lead, nickel, zinc, manganese	Annually	version 2.1, Dec 2011), or such other subsequent guidance as may be agreed ir writing with the Environment Agency.		
	Hazardous substances, plus barium, molybdenum, antimony, selenium, fluoride, DOC	Annually for first six years of operation			
Down or cross gradient	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), Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, (Annex J3,		
	Total alkalinity, magnesium, potassium, total sulphates, calcium, sodium, chromium,	Annually	version 2.1, Dec 2011), or such other subsequent guidance as may be agreed in writing with the Environment Agency.		

Monitoring Point Ref./Description	Parameter	Monitoring frequency	Monitoring standard or method
zinc, mar	copper, iron, lead, nickel, zinc, manganese		After the initial 6 year monitoring period for hazardous substances, if the results of quarterly or annual monitoring suggest an increase in contamination, the
	Hazardous substances detected in leachate, plus barium, molybdenum, antimony, selenium, fluoride, DOC	Annually for first six years of operation then every two years	operator shall also undertake a full leachate hazardous substances screen.
MEPP	Base of monitoring point (mAoD)	Annually	

Table S3.6 Landfill gas	- other monitoring	requirements		
Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
One in waste borehole or one leachate well per cell	Methane Carbon Dioxide Oxygen Carbon Monoxide Differential pressure Atmospheric pressure	Quarterly	Calibrated handheld monitoring instrument	
	Hydrogen sulphide Hydrogen	Quarterly	Calibrated handheld monitoring instrument or Tedlar Bag sample in accordance with LFTGN04 (version 3.0: 2010) or other such subsequent guidance as may be agreed in writing with the Environment Agency or a method agreed with the Environment Agency.	Concentrations of hydrogen sulphide shall be assessed in accordance with the gas and odour management plans.

Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
One in waste borehole or one leachate well per cell	Trace gas	Annually	Trace gas analysis in accordance with LFTGN04 (version 3.0: 2010) or a trace gas characterisation method agreed with the Environment Agency or such other subsequent guidance as may be agreed in writing with the Environment Agency	The concentration of trace gas components shall be assessed against the assumptions made in the Landfill gas risk assessment and dispersion modelling.

Monitoring point reference or description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Operational Cells or Phases		-		
(Any cell or phases that do not ha	ive a final engineered cap agreed in ac	cordance with c	condition 2.5)	
MEPP	pH, EC, total alkalinity, ammoniacal nitrogen, chloride, COD, BOD, cadmium, chromium, copper, lead, nickel, iron, arsenic, magnesium, potassium, total sulphates, calcium, sodium, zinc, manganese	Quarterly	At leachate compliance points as listed in table S3.1. As specified in Environment Agency Guidance LFTGN02 (February 2003) and Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, (Annex J3, version 2.1, Dec 2011) with one sampling point per cell / phase or such other subsequent guidance as may be agreed in writing	None
MEPP	Hazardous substances, plus barium, molybdenum, antimony, selenium, fluoride, DOC	Annually	with the Environment Agency.	None
MEPP	Depth to base (mAoD)	Annually		None

Table S3.7 Leachate – other monitoring requirements				
Monitoring point reference or description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
MEPP	pH, EC, total alkalinity, ammoniacal nitrogen, chloride, COD, BOD, cadmium, chromium, copper, lead, nickel, iron, arsenic, magnesium, potassium, total sulphates, calcium, sodium, zinc, manganese	Annually	At leachate compliance points as listed in table S3.1. As specified in Environment Agency Guidance LFTGN02 (February 2003) and Horizontal Guidance Note H1 – Environmental Risk Assessment for	
MEPP	Hazardous substances, plus barium, molybdenum, antimony, selenium, fluoride, DOC	Once every four years	permits, (Annex J3, version 2.1, Dec 2011) with one sampling point per cell / phase or such other subsequent	None
MEPP	Depth to base (mAoD)	Annually	guidance as may be agreed in writing with the Environment Agency.	

Monitoring Point Ref. /Description	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
MEPP	Ammoniacal nitrogen Chloride Suspended Solids Visual Oil and Grease pH electrical conductivity	Monthly	Spot sample	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003) and Horizontal Guidance Note H1 – Environmental Risk Assessment for permits, (Annex J3, version 2.1, Dec 2011) or such other subsequent guidance as may be agreed in writing with the Environment Agency.

#### Table S3.9 Process monitoring requirements

Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method	Other specifications
Leachate levels in sumps	Alarm status	Continuous	None specified	
Leachate collection system, sumps, pumps and pipework	Integrity checks	Monthly	Visual assessment	As per manufactures recommendations.
Leachate	рН	Continuous	None specified	pH monitors to be calibrated every 6 months or in accordance with the manufacturer's recommendations.
	Flow	Continuous	None specified	-
Treatment and storage tanks, pipework, containment bunds.	Integrity checks	Monthly	Visual assessment	As per manufactures recommendations.
Biofilter	Odour	Monthly	Olfactory monitoring	Odour detection at the site boundary.
	Temperature	As required	Temperature probe	Biofilter shall be regularly checked and maintained to ensure
	Moisture	As required	None specified	appropriate temperature and moisture content.
	Thatching/compaction	As required	None specified	Odour abatement system shall be
	Key process parameters to include temperature and air flow	In accordance with manufacturer's recommendations.	None specified	regularly checked and maintained to ensure appropriate temperature and moisture content.

# 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	
Leachate and/ or groundwater level As specified by schedule 3, table S3.1	Every 3 months	31 March, 30 June, 30 September, 31 December	
Emission to groundwater As specified by schedule 3, table S3.3	Every 3 months	31 March, 30 June, 30 September, 31 December	
Other groundwater monitoring As specified by schedule 3, table S3.5	Every 3 months	31 March, 30 June, 30 September, 31 December	
Other Landfill gas monitoring As specified by schedule 3, table S3.6	Every 3 months	31 March, 30 June, 30 September, 31 December	
Trace gas monitoring	Every 12 months	31 December	
Other leachate monitoring As specified by schedule 3, table S3.7	Every 12 months	31 December	
Other surface water monitoring As specified by schedule 3, table S3.8	Every 12 months	31 December	
Process monitoring As specified by schedule 3 table S3.9	Every 12 months	31 December	
Meteorological data Landfill Directive, annex III, section 2	Every 12 months	31 December	

\* - where the reporting period is 12 months, you may submit this information as part of the 'annual report' required by condition 4.2.2.

Table S4.2: Annual production/treatment		
Leachate: Cubic metres/year		
Disposed of offsite;		
Disposed of to any onsite leachate treatment plant.		

Table S4.3 Performance Parameters			
Parameter	Frequency of assessment	Annual total	Unit
Energy used (including for leachate treatment)	Annually		MWh of electricity or natural gas
Raw material usage	Annually		tonnes or m3

Table S4.3 Performance Parameters			
Parameter	Frequency of assessment	Annual total	Unit
Treatment efficiency	Annually		%

Table S4.4 Reporting Forms			
Media/parameter	Reporting Format	Date of Form	
Leachate	Form leachate 1 or other reporting format to be agreed in writing with the Environment Agency	16/11/15	
Groundwater	Form Groundwater 1 or other reporting format to be agreed in writing with the Environment Agency	16/11/15	
Sewer	Form Sewer 1 or other reporting format to be agreed in writing with the Environment Agency	16/11/15	
Waste Return	Waste Return Form RATS2E	-	
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 malfunction, breakdown or failure of equipment or techniques, accident, or emission of a substance not controlled by an emission limit which has caused, is causing or may cause significant pollution		
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		

(b) Notification requirements for the breach of a limit		
To be notified within 24 hours of detection unless otherwise specified below		
taken, to stop the emission		

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

(c) Notification requirements for the detection of any significant adverse environmental effect					
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.	

Name*	
Post	
Signature	
Date	

\* 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.
  - (a) "Cell layout drawing" means: A drawing or drawings of the proposed new cell that illustrate(s) in sufficient detail:
    - (i) the location of the new cell on the site;
    - (ii) the proposed level (Above Ordnance Datum) of the base of the excavation;
    - (iii) the proposed finished levels of all containment and leachate drainage layers;
    - (iv) the positions of leachate management infrastructure; and
    - (v) the positions of landfill gas infrastructure (if appropriate).
- (b) A detailed written explanation of any minor design changes from the most recently approved cell that result from the new cell layout. This would include, for example:
  - (i) changes to slope length and gradient within the cell;
  - (ii) new leachate or landfill gas infrastructure construction design;
  - (iii) slope stability issues such as new basal excavation level; and/or
  - (iv) depth of waste.

"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 New Cell or Landfill Infrastructure.

"CQA Validation Report" means the final "as built" construction and engineering details of the New Cell or 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 New Cell or Landfill Infrastructure;
- Validation by a qualified person that all of the construction has been carried out in accordance with the Construction Proposals.

"emissions to land" includes emissions to groundwater.

"EP Regulations" means The Environmental Permitting (England and Wales) Regulations 2010, SI 2010 No.675. Words and expressions used in this permit which are also used in those Regulations have the same meanings as in those Regulations.

"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 or background concentration limit.

"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.

"Hazardous property" has the meaning in Annex III of the Waste Framework Directive.

"Hazardous substances" as defined by the Environmental Permitting (England and Wales) Regulations 2010, SI 2010 No.675, schedule 22 and listed in our Hydrogeological risk assessment guidance, annex J to our H1 risk assessment guidance.

"Hazardous waste" has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended).

"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.

"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:

- permanent capping;
- temporary capping (i.e. engineered temporary caps not cover materials);
- leachate abstraction systems;
- leachate transfer, treatment and storage systems;
- surface water drainage systems;
- leachate monitoring wells;
- groundwater monitoring boreholes;
- landfill gas monitoring boreholes;
- landfill gas management systems;
- lining within the installation;

#### within the site

"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.

"Liquids" means any liquid other than leachate within the engineered landfill containment system.

"LFTGN 02" means Environment Agency Guidance: Monitoring of landfill leachate, groundwater and surface water: LFTGN 02.

"LFTGN 03" means Environment Agency Guidance on the management of landfill gas.

"LFTGN 04" means Environment Agency Guidance for monitoring trace components in landfill gas.

"LFTGN 07" means Environment Agency Guidance on monitoring landfill gas surface emissions.

"LFTGN 08" means Environment Agency Guidance for monitoring landfill gas engines.

"Medicinal product" means any medicine licensed by the Medicines and Healthcare products Regulatory Agency (MHRA) or their predecessors under the Medicines Act 1968, section 130.

"M2" means Environment Agency Guidance Monitoring of stack emissions to air.

"New Cell" means any new cell, part of a cell or other similar new area of the site where waste deposit is to commence after issue of this permit and can comprise:

- groundwater under-drainage system;
- permanent geophysical leak location system;
- leak detection layer;
- sub-grade;
- barriers;
- liners;
- leachate collection system;
- leachate abstraction system;
- separation bund/layer;
- cell or area surface water drainage system;
- side wall subgrade and containment systems;

#### for the New Cell.

"MEPP" Monitoring and extraction point plan, required by condition 4.2.2(h) to specify extraction points and 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.

"Pests" means Birds, Vermin and Insects.

"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.

"Sustainably extracted" means where suction can be applied to the extraction wells such that a flow rate of landfill gas, with a methane content capable of either being combusted, or treated by bio-oxidation, can be extracted without increasing the risk of air ingress to the waste or inducing aerobic degradation within the waste.

"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.

Unless otherwise stated, any references in this permit to concentrations of substances in emissions into air means the standards included in Environment Agency Guidance for Monitoring Enclosed Landfill Gas Flares LFTGN 05 or Guidance for Monitoring Landfill Gas Engine Emissions LFTGN 08

Where the following terms appear in the waste code list in Tables S2.1 or S2.2 they have the meaning given below:

"hazardous substance" means a substance classified as hazardous as a consequence of fulfilling the criteria laid down in parts 2 to 5 of Annex I to Regulation (EC) No 1272/2008;

"heavy metal" means any compound of antimony, arsenic, cadmium, chromium (VI), copper, lead, mercury, nickel, selenium, tellurium, thallium and tin, as well as these materials in metallic form, as far as these are classified as hazardous substances;

"polychlorinated biphenyls and polychlorinated terphenyls" ('PCBs') means PCBs as defined in Article 2(a) of Council Directive 96/59/EC'.

Article 2(a) says that 'PCBs' means:

- polychlorinated biphenyls
- polychlorinated terphenyls
- monomethyl-tetrachlorodiphenyl methane, Monomethyl-dichloro-diphenyl methane, Monomethyldibromo-diphenyl methane
- any mixture containing any of the above mentioned substances in a total of more than 0,005 %by weight;

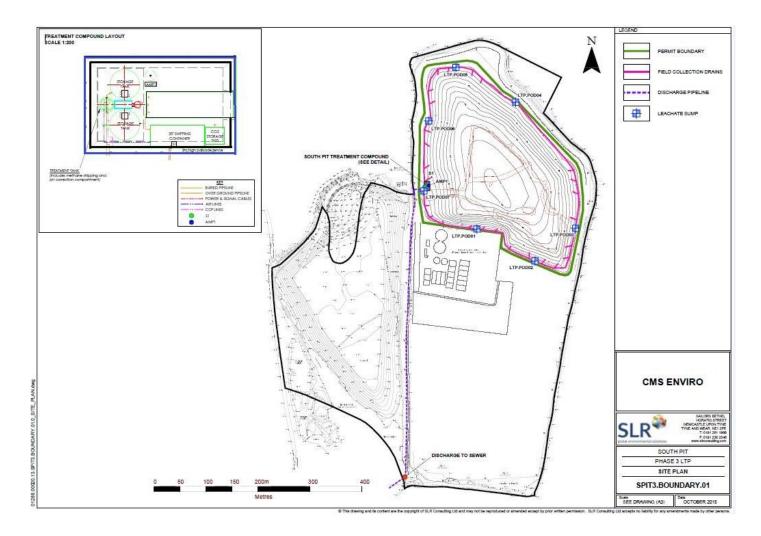
"transition metals" means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified as hazardous substances;

"stabilisation" means processes which change the hazardousness of the constituents in the waste and transform hazardous waste into non-hazardous waste;

"solidification" means processes which only change the physical state of the waste by using additives without changing the chemical properties of the waste;

"partly stabilised wastes" means wastes containing, after the stabilisation process, hazardous constituents which have not been changed completely into non-hazardous constituents and could be released into the environment in the short, middle or long term.

# Schedule 7 – Site plan



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END OF PERMIT

Permit Number:

EPR/RP3039SZ

**Operator:** 

Tarmac Cement and Lime Limited

Facility:

South Pit, Phase 3

Form Number:

Leachate 1/16/11/15

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

Monitoring Point	Substance / Parameter	Compliance limit	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	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:** 

EPR/RP3039SZ

**Operator:** 

Tarmac Cement and Lime Limited

Facility:

South Pit, Phase 3

Form Number:

Groundwater 1/16/11/15

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

Monitoring Point	Substance / Parameter	Trigger level	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	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:

EPR/RP3039SZ

**Operator:** 

Tarmac Cement and Lime Limited

Facility:

South Pit, Phase 3

Form Number:

Sewer 1/16/11/15

## Reporting of emissions to sewer for the period from DD/MM/YYYY to DD/MM/YYYY

Emission Point	Substance / Parameter	Emission Limit Value	Reference Period	Result <sup>[1]</sup>	Test Method <sup>[2]</sup>	Sample Date and Times <sup>[3]</sup>	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)