Notice of variation and consolidation with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Breedon Southern Limited

Kettleby Quarry
Brigg Road
Kettleby
South Humberside
DN20 9HL

Variation application number

EPR/FB3536RP/V003

Permit number

EPR/FB3536RP

Kettleby Quarry
Permit number EPR/FB3536RP

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.

Kettleby Quarry is located within a predominantly rural setting roughly 3.5 km north-east of Brigg. The permit is to restore the former mineral workings. The site will be restored to a combination of agricultural, amenity and ecological benefit using a maximum of 670,000 m^3 of inert waste. The site is permitted to store and use waste as a deposit for recovery activity.

Following the determination of this variation the permitted area has been extended. The development of the extended area of the site will include the construction of an attenuation layer. Following this variation the site will also be subject to groundwater and surface water monitoring.

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 EPR/FB3536RP/A001	Duly made 06/02/2013	Application for a permit for the Deposit of waste to land as a recovery operation.
Additional information received	08/02/2013	Confirmation of Waste Acceptance Criteria and the total tonnage that the site will be accepting.
Permit determined	11/04/2013	Permit issued to Breedon Aggregates England Limited.
Notified of change of company name	28/12/2016	Name changed to Breedon Southern Limited.
Variation issued EPR/FB3536RP/V002	16/01/2017	Varied permit issued to Breedon Southern Limited.
Application EPR/FB3536RP/V003	Duly made 09/01/2018	Application to vary the current deposit of waste to land as a recovery operation.
Additional information received	26/06/2018	- Schedule 5 Notice response letter (reference: 180626_407.03253.00027_SCH5 L_toEA) - Groundwater Chemographs and Datasets - Waste Acceptance Procedures - LandSim Model and Results - LandSim Parameterisation Table
Additional information received	25/10/2018	- Kettleby Quarry Environmental Permit Variation Consolidated Hydrogeological Risk

Status log of the permit		
Description	**Date**	**Comments**
		Assessment - Kettleby Quarry Environmental Permit Variation Consolidated Hydrogeological Risk Assessment – Annex 1: HRA January 2018
Variation issued EPR/FB3536RP/V003	04/01/2019	Varied and consolidated permit issued to Breedon Southern Limited.

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/FB3536RP

Issued to

Breedon Southern Limited ("the operator")

whose registered office is

Pinnacle House
Breedon Quarry
Breedon On The Hill
Derby
DE73 8AP

company registration number 00156531

to operate a regulated facility at

Kettleby Quarry
Brigg Road
Kettleby
South Humberside
DN20 9HL

to the extent set out in the schedules.

The notice shall take effect from **04/01/2019.**

Name	Date
Louise Hann	**04/01/2019**

Authorised on behalf of the Environment Agency

Schedule 1

All conditions have been varied by the consolidated permit EPR/FB3536RP.

Schedule 2 – consolidated permit

Consolidated permit issued as a separate document.

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/FB3536RP

This is the consolidated permit referred to in the variation and consolidation notice for application EPR/FB3536RP/V003 authorising,

Kettleby Quarry ("the operator"),

whose registered office is

Pinnacle House
Breedon Quarry
Breedon On The Hill
Derby
DE73 8AP

company registration number 00156531

to operate waste operations at

Kettleby Quarry
Brigg Road
Kettleby
South Humberside
DN20 9HL

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

Name	Date
Louise Hann	**04/01/2019**

Authorised on behalf of the Environment Agency

Conditions

1 Management

1.1 General management

1.1.1 The operator shall manage and operate the activities:

(a) in accordance with a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, closure and those drawn to the attention of the operator as a result of complaints; and

(b) using sufficient competent persons and resources.

1.1.2 Records demonstrating compliance with condition 1.1.1 shall be maintained.

1.1.3 Any person having duties that are or may be affected by the matters set out in this permit shall have convenient access to a copy of it kept at or near the place where those duties are carried out.

1.1.4 The operator shall comply with the requirements of an approved competence scheme

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

1.2.1 The operator shall take appropriate measures to ensure that:

(a) the waste hierarchy referred to in Article 4 of the Waste Framework Directive is applied to the generation of waste by the activities; and

(b) any waste generated by the activities is treated in accordance with the waste hierarchy referred to in Article 4 of the Waste Framework Directive; and

(c) where disposal is necessary, this is undertaken in a manner which minimises its impact on the environment.

1.2.2 The operator shall review and record at least every four years whether changes to those measures should be made and take any further appropriate measures identified by a review.

2 Operations

2.1 Permitted activities

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

2.2 The site

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

2.3 Operating techniques

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

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

2.4 Waste acceptance

2.4.1 Waste shall only be accepted if:

(a) it is of a type and quantity listed in schedule 2, table S2.1;

(b) it has been identified as a suitable waste in the approved waste recovery plan;

(c) its chemical, physical and biological characteristics make it suitable for its intended use on the site; and

(d) it fulfils the approved waste acceptance criteria; and

(e) all the approved waste acceptance procedures have been completed; and

(f) it conforms to the description in the documentation supplied by the producer and holder; and

(g) It is not waste consisting solely or mainly of dusts, powders or loose fibres; and

(h) It is not hazardous wastes; and

(i) It is not waste in liquid form.

2.4.2 The operator shall:

(a) visually inspect without unloading it, waste that is not in an enclosed container or enclosed vehicle on arrival at the site and waste at the point of deposit; and

(b) be satisfied that the waste conforms to the requirements of condition 2.4.1.

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

2.5 Site Engineering

2.5.1 (a) No construction of the attenuation layer in the area for waste deposit 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 the attenuation layer in the area for waste deposit 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 all the approved waste acceptance procedures have been completed; 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 6 month period of construction of the area for deposit. The operator shall submit the CQA validation report to the Environment Agency within 4 weeks following construction of the new development area.

2.5.4 No waste shall be recovered in the area for waste deposit 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 For the purposes of conditions 2.5.1, 2.5.2 and 2.5.3, the Environment Agency shall be deemed to be satisfied where it has not, within the period of 4 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.

2.5.6 Where the Environment Agency has required further information under condition 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 further information, either:

(a) confirmed whether or not it is satisfied; or

(b) informed the operator that it requires further information.

3 Emissions and monitoring

3.1 Emissions to water, air or land

3.1.1 There shall be no point source emissions to water, air or land except from the sources and emission points listed in schedule 3, table S3.1.

3.1.2 The limits given in schedule 3 shall not be exceeded.

3.1.3 Where a substance is specified in schedule 3, but no limit is set for it, the concentration of such substance in emissions from the site shall be no greater than the background concentration.

3.2 Emissions of substances not controlled by emission limits

3.2.1 Emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution. The operator shall not be taken to have breached this condition if appropriate measures, including, but not limited to, those specified in any approved emissions management plan, have been taken to prevent or where that is not practicable, to minimise, those emissions.

3.2.2 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 specified in the following tables in schedule 3 to this permit:

(a) groundwater specified in table S3.1 and S3.2;

(b) surface water specified in table S3.3.

3.5.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.

3.5.3 The operator shall undertake a topographical survey of the site referenced to ordnance datum that shall be used to produce a plan of a scale adequate to show the surveyed features of the site:

(a) prior to commencement of the recovery activity; and

(b) on completion of the recovery activity to show final waste levels.

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) off-site environmental effects;

(ii) matters which affect the condition of the land and groundwater;

(iii) waste types and quantities; and

(iv) the results of groundwater monitoring.

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

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

4.2 Reporting

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

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

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

(a) in respect of the parameters and emission points specified in schedule 4 table S4.1;

(b) for the reporting periods specified in schedule 4 table S4.1 and using the forms specified in schedule 4 table S4.2 ; and

(c) giving the information from such results and assessments as may be required by the forms specified in those tables.

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

4.3 Notifications

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

(a) inform the Environment Agency,

(b) take the measures necessary to limit the environmental consequences of such an incident or accident, and

(c) take the measures necessary to prevent further possible incidents or accidents;

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

(a) inform the Environment Agency, and

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

4.3.3 In the event of a breach of permit condition which poses an immediate danger to human health or threatens to cause an immediate significant adverse effect on the environment, the operator must immediately suspend the operation of the activities or the relevant part of it until compliance with the permit conditions has been restored.

4.3.4 Any information provided under condition 4.3.1 shall be confirmed by sending the information listed in schedule 5 to this permit within the time period specified in that schedule.

4.3.5 Where the Environment Agency has requested in writing that it shall be notified when the operator is to undertake monitoring and/or spot sampling, the operator shall inform the Environment Agency when the relevant monitoring and/or spot sampling is to take place. The operator shall provide this information to the Environment Agency at least 14 days before the date the monitoring is to be undertaken.

4.3.6 The Environment Agency shall be notified within 14 days of the occurrence of the following matters, except where such disclosure is prohibited by Stock Exchange rules:

Where the operator is a registered company:

(a) any change in the operator's trading name, registered name or registered office address; and

(b) any steps taken with a view to the operator going into administration, entering into a company voluntary arrangement or being wound up.

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

(a) any change in the operator's name or address; and

(b) any steps taken with a view to the dissolution of the operator.

In any other case:

(a) the death of any of the named operators (where the operator consists of more than one named individual);

(b) any change in the operator's name(s) or address(es); and

(c) any steps taken with a view to the operator, or any one of them, going into bankruptcy, entering into a composition or arrangement with creditors, or, in the case of them being in a partnership, dissolving the partnership.

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

(a) the Environment Agency shall be notified at least 14 days before making the change; and

(b) the notification shall contain a description of the proposed change in operation.

4.3.8 The operator shall notify the Environment Agency in writing:

(a) at least 14 days before the commencement of the recovery activity;

(b) within 14 days of completion of the recovery activity.

4.4 Interpretation

4.4.1 In this permit the expressions listed in schedule 6 shall have the meaning given in that schedule.

4.4.2 In this permit references to reports and notifications mean written reports and notifications, except where reference is made to notification being made ‘immediately’, in which case it may be provided by telephone.

Schedule 1 – Operations

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

Table S1.2 Operating techniques		
Description	**Parts**	**Date Received**
Application	Application forms; Table 1a part B4, Table 3a part B4 and Document KQ/OT. Documents listed in response to section 3a – technical standards, Part B4 of the application form.	03/01/2013 09/01/2018
Application (EPR/FB3536RP/A001)	Approved Waste Recovery Plan reference: Kettleby Quarry Waste Recovery Plan November 2012-11-28 & SLR REST PLAN KQ-1 151112 & SLR KQ-2 sections 151112, for the area permitted under the original application.	03/01/2013
Additional information (EPR/FB3536RP/V003)	Approved Waste Recovery Plan in response to section 1c of Part B4 of the application form reference: Kettleby Quarry Extension Waste Recovery Plan (v3), for the area permitted by this variation.	13/03/2018
Application	Final levels contour plan (reference 170103_03523.00007.29.EP1_TO_EP3).	09/01/2018
Application	Environmental Monitoring locations (reference ESSD-7)	09/01/2018
Additional information	Waste Acceptance Criteria as per Table 6 in Section 5 of the Hydrogeological Risk Assessment (reference: Kettleby Quarry Environmental Permit Variation Consolidated Hydrogeological Risk Assessment Version No: 2, December 2018).	11/12/2018
Additional information	Environmental Monitoring Plan document reference: Kettleby Quarry Environmental Permit Variation Consolidated Hydrogeological Risk Assessment Version No: 2, December 2018 including Annex 1: HRA January 2018, Table 7 (reference: Kettleby Quarry Environmental Permit Variation Consolidated Hydrogeological Risk Assessment – Annex 1 – HRA January 2018, Table 7).	11/12/2018

Schedule 2 – Waste types, raw materials and fuels

Table S2.1 Permitted waste types and quantities for use of waste in deposit for recovery	
Maximum quantity	**The total quantity of waste accepted at the site shall be no more than 670,000 m^3 imported to site at a rate of no more than 99,000 tonnes per annum.**
Waste code	**Description**
01	**WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS**
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**
01 04 08	waste gravel and crushed rocks other than those containing dangerous substances
01 04 09	waste sand and clays
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 01	**concrete, bricks, tiles and ceramics**
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics
17 05	**soil (including excavated soil from contaminated sites), stones and dredging spoil**
17 05 04	soil and stones (excluding topsoil and peat)
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE**
19 12	**wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified**
19 12 09	minerals (for example sand, stones) from the treatment of waste aggregates that are otherwise naturally occurring minerals - excludes fines from treatment of any non-hazardous waste or gypsum from recovered plasterboard.
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 02	**garden and park wastes (including cemetery waste)**
20 02 02	soil and stones (excluding topsoil and peat)

Schedule 3 – Emissions and monitoring

Table S3.1 Groundwater – emission limits and monitoring requirements					
Emission point ref. & location	**Parameter**	**Limit (mg/l)**	**Reference period**	**Monitoring frequency**	**Monitoring standard or method**
BH12/10 (504780, 408640) BH12/11 (505090, 408560) M2 (505235, 408952) M3 (504643, 408894) Locations as shown on drawing ESSD-7.	Chloride	125	Spot Sample	Quarterly	Undertaken in accordance with Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), risk assessments for your environmental permit (www.gov.uk), or such other subsequent guidance as may be agreed in writing with the Environment Agency.
	Sulphate	BH12/10 = 233 BH12/11 = 130 M2 = 130 M3 = 142		Quarterly	
	Arsenic	BH12/10 = 0.0036 BH12/11 = 0.0036 M2 = 0.0036 M3 = 0.0042		Annually	
	Lead	0.0002		Annually	
	Mercury	BH12/10 = 0.0012 BH12/11 = 0.0005 M2 = 0.0005 M3 = 0.0007		Annually	

Table S3.2 Groundwater – other monitoring requirements				
Location or description of point of measurement	**Parameter (total as dissolved)**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
BH12/01 (505250, 408720) BH12/10 (504780, 408640) BH12/11 (505090, 408560) M2 (505235, 408952) M3 (504643, 408894) Locations as shown on drawing ESSD-7.	Ammoniacal nitrogen; Electrical conductivity; Chloride; Sulphate; pH; Water level.	Quarterly	Undertaken in accordance with Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), risk assessments for your environmental permit (www.gov.uk), or such other subsequent guidance as may be agreed in writing with the Environment	All analysis will be undertaken at laboratories that are MCERTS accredited.
	Antimony; Aromatic C10-12; Arsenic; Benzo(a)pyrene; Boron; Cadmium;	Annually		

Table S3.2 Groundwater – other monitoring requirements				
Location or description of point of measurement	**Parameter (total as dissolved)**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
	Chloride; Chromium; Copper; Dissolved Organic Carbon; Fluoride; Lead; Mercury; Molybdenum; Nickel; Phenol; Selenium; Sulphate; Total Dissolved Solids; Xylene; Zinc.		Agency.	

Table S3.3 Surface water – other monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter (reported as total)**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**

SWA (504843, 409239)
SWB (504653, 409055)
SWC (504327, 408706)
Locations as shown on drawing ESSD-7.
	Ammoniacal nitrogen;
	Electrical conductivity;
	Chloride;
	Sulphate;
	pH;
	Suspended solids;
	Visual oil and grease.
		Quarterly	Undertaken in accordance with Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), risk assessments for your environmental permit (www.gov.uk), or such other subsequent guidance as may be agreed in writing with the Environment Agency.	All analysis will be undertaken at laboratories that are MCERTS accredited.

	Antimony; Aromatic C10-12; Arsenic; Benzo(a)pyrene; Boron; Cadmium; Chloride; Chromium; Copper; Dissolved Organic Carbon; Fluoride;	Annually		

Table S3.3 Surface water – other monitoring requirements				
Emission point reference or source or description of point of measurement	**Parameter (reported as total)**	**Monitoring frequency**	**Monitoring standard or method**	**Other specifications**
	Lead; Mercury; Molybdenum; Nickel; Phenol; Selenium; Sulphate; Total Dissolved Solids; Total Organic Carbon; Xylene; Zinc.			

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**
Groundwater – emission limits and monitoring requirements Parameters as required by schedule 3, table S3.1	Every 3 months	31 March, 30 June, 30 September, 31 December
Groundwater – other monitoring requirements Parameters as required by schedule 3, table S3.2	Every 3 months	31 March, 30 June, 30 September, 31 December
Surface water – other monitoring requirements Parameters as required by schedule 3, table S3.3	Every 3 months	31 March, 30 June, 30 September, 31 December

Table S4.2 Reporting forms		
Media/parameter	**Reporting format**	**Date of form**
Groundwater – emission limits and monitoring requirements	Form Groundwater 1 or other form as agreed in writing by the Environment Agency	04/01/2019
Groundwater – other monitoring requirements	Form Groundwater 2 or other form as agreed in writing by the Environment Agency	04/01/2019
Surface water – other monitoring requirements	Form Surface Water 1 or other form as agreed in writing by the Environment Agency	04/01/2019

Schedule 5 – Notification

These pages outline the information that the operator must provide.

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

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

Part A

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

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

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

Time periods for notification following detection of a breach of a limit	
Parameter	**Notification period**
Groundwater	24 hours
Other Surface Water	24 hours

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

Part B – to be submitted as soon as practicable

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

Name*	
Post	
Signature	
Date	

* authorised to sign on behalf of the operator

Schedule 6 – Interpretation

‘accident’ means an accident that may result in pollution.

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

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

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

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

‘background concentration’ means such concentration of that substance as is present in:

- For emissions to surface water, the surface water quality up-gradient of the site; or
- For emissions to groundwater, the groundwater quality up-gradient of the site; or

‘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 site or new phase of the site.

‘CQA Validation Report’ means the final ‘as built’ construction and engineering details of the area of the site for deposit or of the Site 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 engineering of the site or new Phase of the site or Site 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 or background concentration limit.

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

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

‘hazardous waste’ has the meaning given in the Hazardous Waste (England and Wales) Regulations 2005 (as amended)

‘list of wastes’ means the list of wastes established by Commission Decision 2000/532/EC replacing Decision 94/3/EC establishing a list of wastes pursuant to Article 1(a) of Council Directive 75/442/EEC on

waste and Council Decision 94/904/EC establishing a list of hazardous waste pursuant to Article 1(4) of Council Directive 91/689/EEC on hazardous waste, as amended from time to time.

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

‘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.

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

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

‘Site infrastructure’ means any specified element of the:

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

within the site.

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

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

‘year’ means calendar year ending 31 December.

Schedule 7 – Site plans

Figure 1: site plan showing the overall site boundary in green and monitoring points for groundwater (12/01, 12/10, 12/11, M2 and M3) and surface water (SWA, SWB, and SWC) monitoring**:**

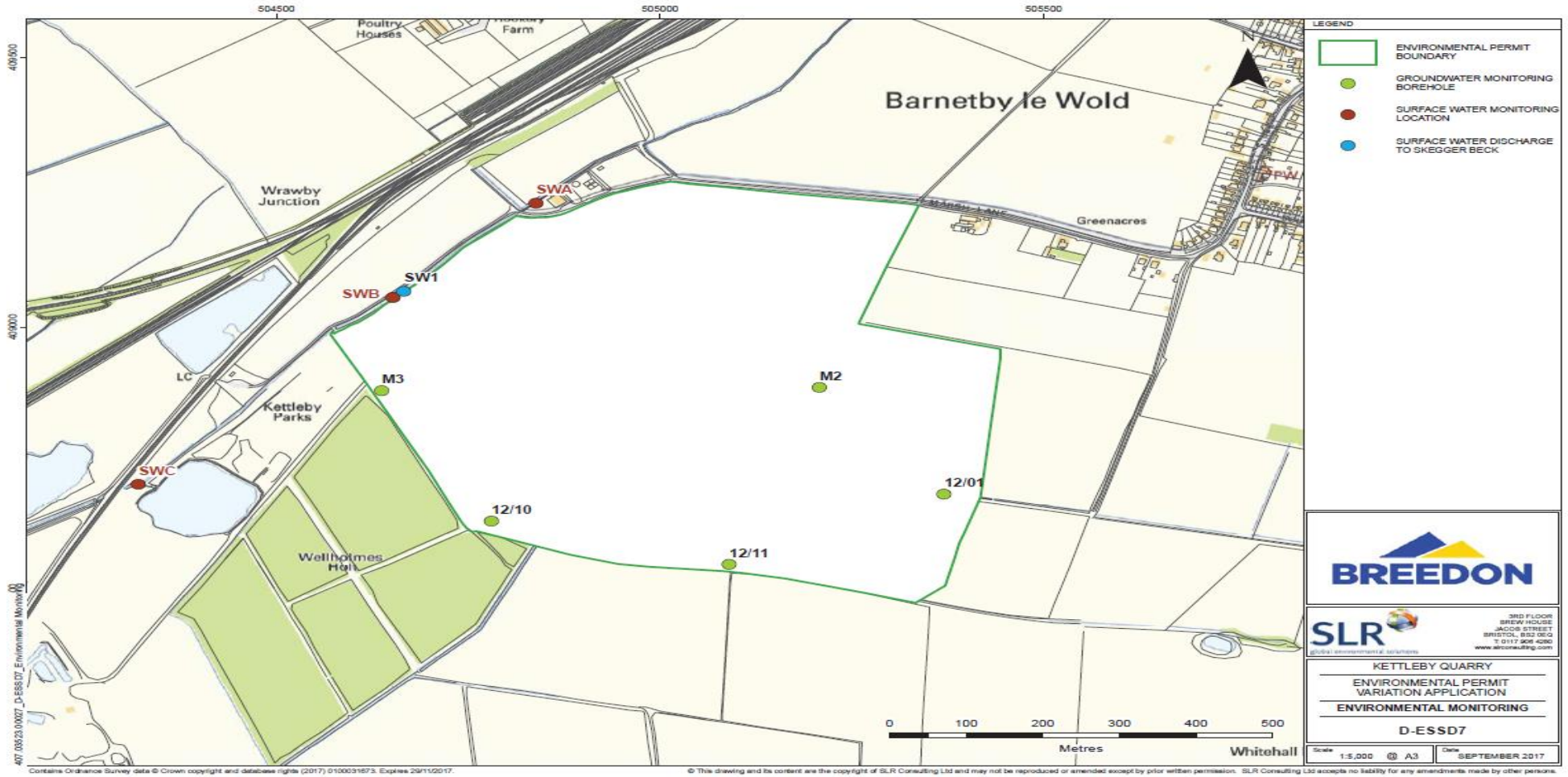
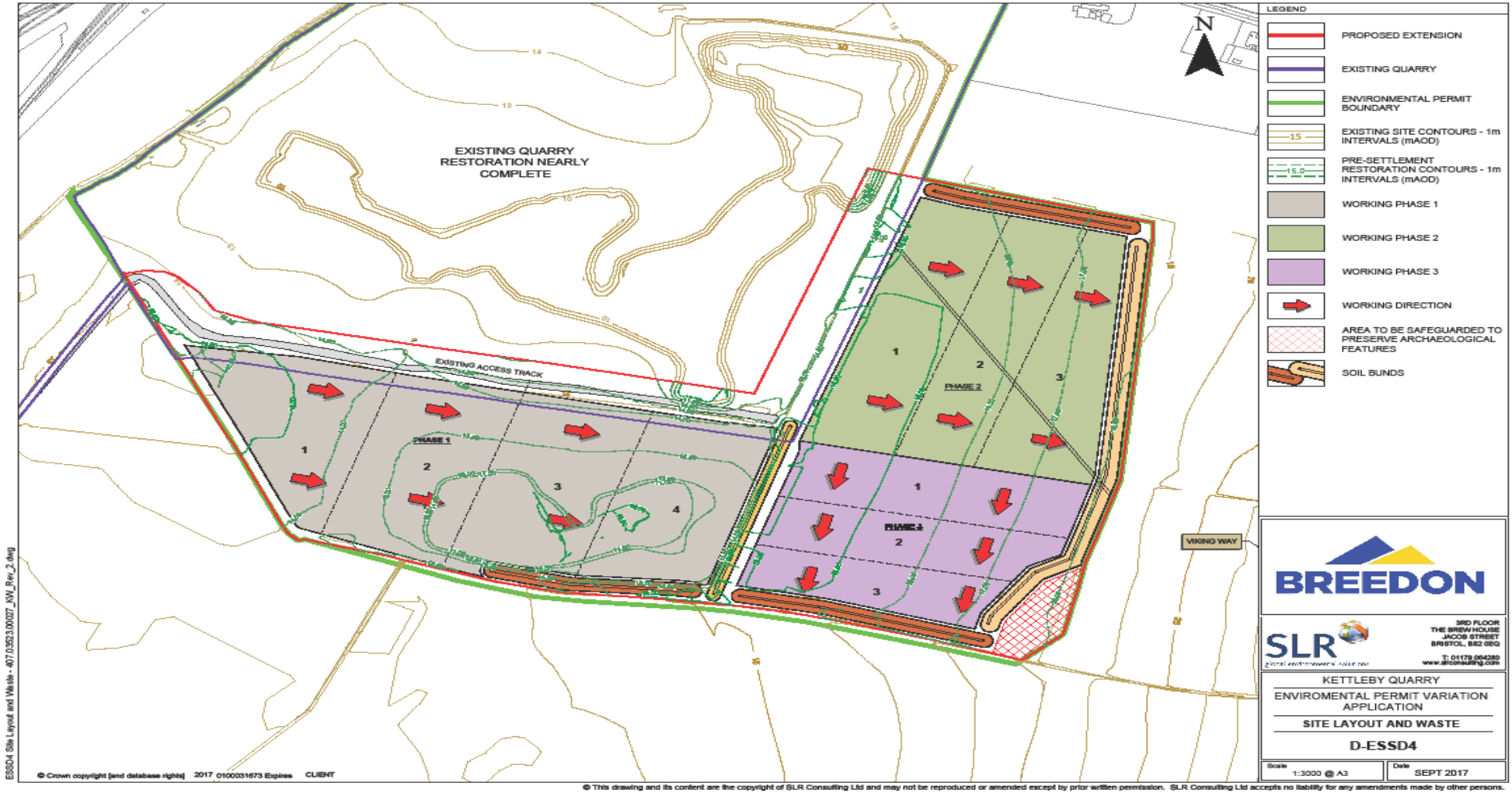


Figure 2: site plan showing phases of development at the site. The area labelled “Existing Quarry Restoration Nearly Complete” (labelling within plan) is the area permitted for waste operations under the original application (EPR/FB3536RP/A001). The areas labelled “Phase 1”, “Phase 2” and Phase 3” are the extended areas of the site permitted for waste operations following variation (EPR/FB3536RP/V003).



END OF PERMIT

Appendix 1 – Reporting Forms

Form: Groundwater 1

Permit Number:	**EPR/FB3536RP**	**Operator:**	**Breedon Southern Limited**
Facility:	**Kettleby Quarry**	**Form Number:**	**Groundwater 1 / *DD/MM/YYYY***

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

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

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

Signed …… Date……..

(Authorised to sign as representative of Operator)

Form: Groundwater 2

Permit Number:	**EPR/FB3536RP**	**Operator:**	**Breedon Southern Limited**
Facility:	**Kettleby Quarry**	**Form Number:**	**Groundwater 2 / *DD/MM/YYYY***

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

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

5. 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.
6. 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.
7. 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.
8. The uncertainty associated with the quoted result at the 95% confidence interval, unless otherwise stated.

Signed …… Date……..

(Authorised to sign as representative of Operator)

Form: Surface water 1

Permit Number: **EPR/FB3536RP**

Operator: **Breedon Southern Limited**

Facility: **Kettleby Quarry**

Form Number: **Surface water 1 / *DD/MM/YYYY***

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

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

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

Signed …… Date……..

(Authorised to sign as representative of Operator)