

Permit with introductory note

The Environmental Permitting (England & Wales) Regulations 2016

Hanson Quarry Products Europe Limited

Hanson Aggregates Cassington Quarry
Cassington
Oxfordshire
OX29 4ES

Permit number

EPR/KB3309MQ

Hanson Aggregates Cassington Quarry

Permit number EPR/KB3309MQ

Introductory note

This introductory note does not form a part of the permit

The main features of the permit are as follows.

The primary activity (AR1) is the deposit of waste in a recovery operation. 155,000m³ (Approximately 279,000 tonnes) of inert waste will be imported to achieve the approved restoration scheme for the quarry.

This permit also includes a second activity (AR2) consisting of an aggregates recycling facility (with no fixed location) which will treat waste to produce soil, soil substitutes and aggregates. This will treat up to 140,000 tonnes of waste per year. Some of the processed soils from this activity will be used for the restoration infill at the site.

If you need to deploy mobile plant under a mobile plant permit at a site that is subject to a site based permit to enable you to complete the recovery activity, there may be inconsistencies between the requirements of the two permits. In this situation those of this site based permit prevail.

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

Status log of the permit		
Description	Date	Comments
Application EPR/KB3309MQ/A001	Duly made 21/09/2022	Application for a permit including a deposit for recovery activity and an aggregates recycling facility.
Additional information received in response to request for information dated 1/11/2023	07/11/2023	Response consisting of information to support applicant's risk assessment of noise from the waste treatment activity
Additional information received in response to Schedule 5 Notice dated 8/12/2023	12/01/2024	Response consisting of: - revised monitoring proposals for groundwater and surface water - revised waste information form within Waste Acceptance Procedures - details of waste treatment process - details of Technically Competent Manager attendance - revised Dust Emissions Management Plan (C2)
Additional information received in response to request for information dated 14/03/2024	21/03/2024	Response consisting of: - details of phasing of deposit for recovery activity and associated timescales - details of surface water management - revised Dust Emissions Management Plan (C3)
Additional information received in response to request for information dated 11/04/2024	19/04/2024	Response consisting of: - revised Dust Emissions Management Plan (C4) - revised Amenity and Accidents Risk Assessment - revised annual treatment limit - revised Waste Acceptance Procedures

Status log of the permit		
Description	Date	Comments
Additional information received in response to request for information dated 21/05/2024	22/05/2024 06/06/2024 17/06/2024	Response consisting of: • confirmation that aggregates used for haul road maintenance will be produced in accordance with Quality Protocol to ensure end-of-waste criteria • revised Dust Emissions Management Plan (C5) • clarification of 19 12 12 waste description • revised technically competent manager details
Permit determined EPR/KB3309MQ	20/06/2024	Permit issued to Hanson Quarry Products Europe Limited.

End of introductory note

Permit

The Environmental Permitting (England and Wales) Regulations 2016

Permit number

EPR/KB3309MQ

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

Hanson Quarry Products Europe Limited (“the operator”),

whose registered office is

Second Floor

Arena Court

Crown Lane

Maidenhead

Berkshire

SL6 8QZ

company registration number 00300002

to operate waste operations at

Hanson Aggregates Cassington Quarry

Cassington

Oxfordshire

OX29 4ES

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

Name	Date
Claire Roberts	20/06/2024

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 The operator shall maintain records demonstrating compliance with condition 1.1.1.
- 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 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 Waste acceptance

- 2.5.1 Waste shall only be accepted if:
- (a) it is of a type and quantity listed in schedule 2, tables S2.1 or S2.2;
 - (b) for table S2.1 only, 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;
 - (d) it fulfils the approved waste acceptance criteria;
 - (e) all the approved waste acceptance procedures have been completed;
 - (f) it conforms to the description in the documentation supplied by the producer and holder;
 - (g) It is not waste consisting solely or mainly of dusts, powders or loose fibres;
 - (h) It is not hazardous wastes; and
 - (i) It is not waste in liquid form.
- 2.5.2 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 2.5.1.
- 2.5.3 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 C4/HAN/05/4 revision C, dated 04/06/2019.

2.6 Site Engineering

- 2.6.1 (a) No construction of site engineering 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.
- 2.6.2 The construction of site engineering 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
 - (b) a change has otherwise been agreed in writing by the Environment Agency.

- 2.6.3 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 of the completion of the works.
- 2.6.4 No waste shall be recovered in the area for waste deposit until the operator has submitted a CQA Validation Report for approval and the Environment Agency has confirmed that it is satisfied with the CQA Validation Report.
- 2.6.5 No construction of site 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.
- 2.6.6 The construction of the site 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.
- 2.6.7 The operator shall submit a CQA Validation Report for approval within 4 weeks following the construction of the site infrastructure.
- 2.6.8 Where pollution controls are immediately necessary to prevent an incident or accident, then conditions 2.6.4 and 2.6.5 do not apply and the relevant site infrastructure may be constructed, provided that the construction proposals are submitted to the Environment Agency as soon as practicable.
- 2.6.9 For the purposes of conditions 2.6.1, 2.6.4 and 2.6.6, 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.
- 2.6.10 Where the Environment Agency has required further information under condition 2.6.9(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.

3 Emissions and monitoring

3.1 Emissions to water, air or land

- 3.1.1 The operator shall prevent the input of any hazardous substances from the activities into groundwater.
- 3.1.2 The operator shall submit to the Environment Agency a review of the Hydrogeological Risk Assessment:
- (a) between nine and six months prior to the sixth anniversary of the granting of the permit, and
 - (b) between nine and six months prior to every subsequent six year 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 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 Noise and vibration

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

3.4 Monitoring

- 3.4.1 The operator shall, unless otherwise agreed in writing by the Environment Agency, undertake the monitoring specified in the following tables in schedule 3 to this permit:
- (a) Groundwater specified in table S3.1 and S3.4;
 - (b) Ground gas specified in table S3.2;
 - (c) Surface water specified in table S3.3;
- 3.4.2 The operator shall maintain records of all monitoring required by this permit including records of the taking and analysis of samples, instrument measurements (periodic and continual), calibrations, examinations, tests and surveys and any assessment or evaluation made on the basis of such data.
- 3.4.3 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 defined by condition 2.5.3.

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;
- (iv) the results of groundwater monitoring;
- (v) the results of ground gas monitoring; and
- (vi) the results of surface water 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 3.4.3 (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 operations;
 - (b) within 14 days of completion of operations.

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		
Activity reference	Description of activities for waste operations	Limits of activities
AR1	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.
AR2	R13: Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced) R5: Recycling/reclamation of other inorganic compounds	Treatment of wastes listed in table S2.2, consisting only of sorting, separation, screening, crushing and blending of waste for recovery as a soil, soil substitute or aggregate. Secure storage of wastes listed in Table S2.2 pending treatment. Storage of wastes listed in Table S2.2 shall be limited to three years. Storage of wastes shall not exceed 40,000 tonnes in total at any one time. No more than 140,000 tonnes of waste shall be treated per year. No more than 1,000 tonnes of waste shall be treated per day.

Table S1.2 Operating techniques		
Description	Parts	Date Received
Application	Approved waste recovery plan document 'Cassington Quarry – Waste Recovery Plan' dated November 2020 in response to section 1c of Part B4 of the application form.	20/12/2021
Response to request for information dated 12/10/2022	Section 1 of document reference 4656-CAU-XX-XX-CO-V-9101.A0.C1 dated 11 July 2023 detailing proposals for engineering of an attenuation layer	11/07/2023
Response to Schedule 5 Notice dated 08/12/2023	Sections 1-2 of document reference 4656-CAU-XX-XX-CO-V-9103.A0.C1 dated 12 January 2024, detailing groundwater and surface water monitoring plans	12/01/2024

Table S1.2 Operating techniques		
Description	Parts	Date Received
Response to Schedule 5 Notice dated 08/12/2023	Section 4 of document reference 4656-CAU-XX-XX-CO-V-9103.A0.C1 dated 12 January 2024, detailing the waste treatment processes to produce soils, soil substitutes and aggregates.	12/01/2024
Response to request for information dated 14/03/2024	Section 1 of document reference 4656-CAU-XX-XX-CO-V-9104.A0.C1 dated 21 March 2024 detailing proposed phasing of deposit for recovery activity.	21/03/2024
Response to request for information dated 11/04/2024	Waste Acceptance Procedures Revision 2 dated 18 April 2024, submitted as Appendix 1 to the Dust and Emissions Management Plan Revision C4 and also included in Revision C5	19/04/2024
Response to request for information dated 21/05/2024	Dust and Emissions Management Plan Revision C5, dated 6 June 2024	06/06/2024

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
IC1a	The operator shall install an upgradient groundwater monitoring borehole (approximate location as detailed on figure 1, section 1 of document reference 4656-CAU-XX-XX-CO-V-9103.A0.C1 dated 12/01/2024). A CQA Plan shall be submitted to the Environment Agency for assessment and approval and the borehole shall be constructed and recorded in accordance with the approved CQA Plan as per condition 2.6. The proposal shall be in accordance with Environment Agency Guidance: <u>Engineering construction proposals for deposit for recovery</u> - GOV.UK (www.gov.uk).	Submission of CQA Plan to EA for approval: 20/07/2024 Borehole installation 20/09/2024
IC1b	The operator shall commence routine groundwater monitoring at an initial frequency of monthly for the first 12 months, unless otherwise agreed in writing with the Environment Agency. During this period, the operator shall maintain an inward hydraulic gradient into the site, relative to the external groundwater levels with the monitoring borehole installed under IC1a and the existing monitoring boreholes WR17 and BR10 as detailed on figure 1, section 1 of document reference 4656-CAU-XX-XX-CO-V-9103.A0.C1 dated 12/01/2024.	Immediately, following completion of IC1a
IC1c	The operator shall submit a written report that includes the following information to the Environment Agency for technical assessment and approval: - recommendations for groundwater monitoring parameters, compliance limits and monitoring frequency to appear in table S3.1 and the corresponding action levels, based on a minimum of 12 monthly monitoring data sets, unless otherwise agreed in writing with the Environment Agency - full justification for the selection and suitability of the monitoring parameters in accordance with our guidance <u>Groundwater risk assessment for your environmental permit</u> - GOV.UK (www.gov.uk)	14 months after commencing groundwater monitoring in accordance with IC1b
IC2	The operator shall submit a written report that includes the following to the Environment Agency for technical assessment and approval:	20/08/2025

Table S1.3 Improvement programme requirements		
Reference	Requirement	Date
	- a proposed surface water action level for sulphate based on a minimum of 12 monthly monitoring data sets, unless otherwise agreed in writing with the Environment Agency - a corresponding surface water action plan that sets out measures the operator shall take in response to exceeding the action level	
IC3	On reaching final waste levels and/or following placement of the final restoration surface, the operator shall progressively install in-waste gas monitoring points at a minimum density of 2 points per hectare and commence routine in waste gas monitoring unless otherwise agreed in writing with the Environment Agency. The in-waste gas monitoring boreholes shall be constructed and recorded in accordance with a Construction Quality Assurance (CQA) Plan as per condition 2.6, covering all elements of the ground gas monitoring system. The proposal shall be in accordance with Environment Agency Guidance: <u>Engineering construction proposals for deposit for recovery - GOV.UK (www.gov.uk)</u>.	Within 6 months following the restoration of the site.

Schedule 2 – Waste types

Table S2.1 Permitted waste types and quantities for use in deposit for recovery	
Maximum quantity	The total quantity of waste accepted at the site shall be less than 279,000 tonnes per year. The total quantity of waste to be accepted at the site shall not exceed 155,000 m ³
Waste code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	wastes from mineral excavation
01 01 02	wastes from non metalliferous excavation
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
10	WASTES FROM THERMAL PROCESSES
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 14	waste concrete only
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 other than those mentioned in 17 01 06
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03 (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 gypsum from recovered plasterboard*
19 12 12	crushed bricks, tiles, concrete and ceramics, soils and fines from treated inert wastes from the on-site aggregates recycling facility only*
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)
*A more detailed description of these wastes is set out within the Waste Acceptance Procedures Revision 2, as referenced in Schedule 1, Table S1.2 of this permit	

Table S2.2 Permitted waste types and quantities for treatment to produce soils, soil substitutes and aggregates	
Maximum quantity	The total quantity of waste accepted for treatment shall not exceed 140,000 tonnes per year
Waste code	Description
01	WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING, AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS
01 01	wastes from mineral excavation
01 01 02	wastes from non metalliferous excavation
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
10	WASTES FROM THERMAL PROCESSES
10 12	wastes from manufacture of ceramic goods, bricks, tiles and construction products
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 14	waste concrete only
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 other than those mentioned in 17 01 06
17 03	bituminous mixtures, coal tar and tarred products
17 03 02	road base and road planings (other than those containing coal tar) only
17 05	soil (including excavated soil from contaminated sites), stones and dredging spoil
17 05 04	soil and stones other than those mentioned in 17 05 03 (excluding topsoil and peat)
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					
Monitoring point reference	Parameter	Limit (including unit)	Reference Period	Monitoring frequency	Monitoring standard or method
WR17 and BR10 as detailed on figure 1, section 1 of document reference 4656-CAU-XX-XX-CO-V-9103.A0.C1	*	*	Spot Sample	*	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), risk assessments for your environmental permit (www.gov.uk), or such other subsequent guidance as may be agreed in writing with the Environment Agency.
*Groundwater compliance parameters, limits and monitoring frequency to be set upon completion of Improvement Programme Condition IC1c					

Table S3.2 Ground gas - monitoring requirements			
Location or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method
All in-waste ground gas monitoring points*	Methane	Monthly	As per LFTGN03 (September 2004) or such other subsequent guidance as may be agreed in writing with the Environment Agency.
*As installed in accordance with Improvement Programme Condition IC3			

Table S3.3 Surface water – other monitoring requirements			
Emission point reference or source or description of point of measurement	Parameter	Monitoring frequency	Monitoring standard or method
Surface water discharge point (down-stream) associated with permit WR 840	Ammoniacal Nitrogen, Suspended Solids, pH, Sulphate, Visible oil and grease	Monthly	As specified in Environment Agency Guidance LFTGN02 'Monitoring of Landfill Leachate, Groundwater and Surface Water' (February 2003), risk assessments for your environmental permit (www.gov.uk), or such other subsequent guidance as may be agreed in writing with the Environment Agency.

Table S3.4 Groundwater – other monitoring requirements			
Monitoring Point Ref./Description	Parameter	Monitoring frequency	Monitoring standard or method
Up gradient Groundwater monitoring borehole*	Water level, Ammoniacal Nitrogen, Chloride, Sulphate, pH, Electrical conductivity	Monthly for first year of operation then quarterly	As specified in Environment Agency Guidance TGN02 '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.
	Cadmium, Chromium, Copper, Nickel, Lead, Zinc, Mercury	Monthly for first year of operation then annually	
	PAHs, Total Petroleum, Hydrocarbons	Monthly for first year of operation then annually	
Down or cross gradient MPP	Water level, Ammoniacal Nitrogen, Chloride, Sulphate, pH, Electrical conductivity	Monthly for first year of operation then quarterly	As specified in Environment Agency Guidance TGN02 '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.
	Cadmium, Chromium, Copper, Nickel, Lead, Zinc, Mercury	Monthly for first year of operation then annually	
	PAHs Total Petroleum Hydrocarbons	Monthly for first year of operation then annually	
MPP	Base of monitoring point (mAoD)	Annually	
*As installed in accordance with Improvement Programme Condition IC1a			

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 monitoring Parameters as required by schedule 3, table S3.1	Every 3 months	31 March, 30 June, 30 September, 31 December
Ground gas monitoring Parameters as required by schedule 3, table S3.2	Every 3 months	31 March, 30 June, 30 September, 31 December
Other surface water monitoring Parameters as required by schedule 3, table S3.3	Every 3 months	31 March, 30 June, 30 September, 31 December
Other groundwater monitoring Parameters as required by schedule 3, table S3.4	Every 3 months	31 March, 30 June, 30 September, 31 December

Table S4.2 Reporting forms		
Media/parameter	Reporting format	Date of form
Surface water	Form Surface Water and/or Groundwater Monitoring version 1 or other form as agreed in writing by the Environment Agency	20/06/2024
Groundwater	Form Surface Water and/or Groundwater Monitoring version 1 or other form as agreed in writing by the Environment Agency	20/06/2024
Ground gas	Form Gas 1 or other form as agreed in writing by the Environment Agency	20/06/2024
Topographical surveys and interpretation	Reporting format to be agreed in writing with the Environment Agency	-

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 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	

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

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

(c) Notification requirements 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 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.

‘area for waste deposit’ is the part of the site where waste material is to be deposited.

‘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.

‘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 to land’ includes emissions to groundwater.

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

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

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

‘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.

'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 engineering' means the engineered attenuation layer, geological barrier or other construction proposals that are required before waste can be deposited.

'site infrastructure' means any specified element of the:

- permanent capping;
- surface water drainage systems;
- groundwater monitoring boreholes;
- ground gas monitoring boreholes;
- ground gas management systems;

within the site.

'soil substitute' means a material that serves as a direct replacement for soil and can only be used on a site where there is no existing soil profile.

No hazardous waste or dangerous substances may be included and the soil substitute must be free from contaminants such as asbestos fragments, plastics, glass, metals, treated timber, foils and films.

"Waste code" means the six digit code referable to a type of waste in accordance with the List of Wastes (England) Regulations 2005, or List of Wastes (Wales) Regulations 2005, as appropriate, 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.

When the following terms appear in the waste code list in Schedule 2, table S2.1 and S2.2, for those tables, 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.

"PCBs" means

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

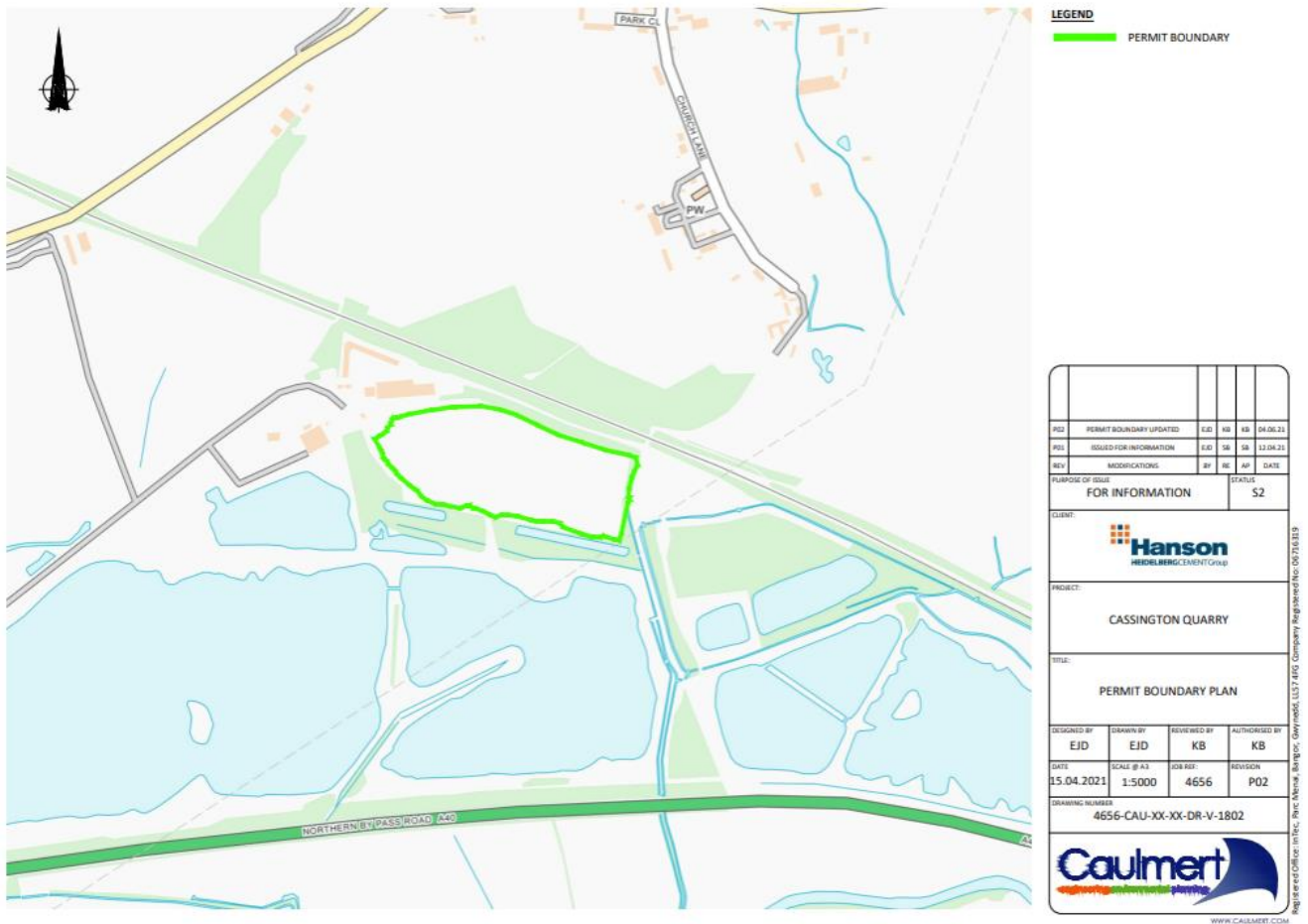
“transition metals” means any of the following metals: any compound of scandium, vanadium, manganese, cobalt, copper, yttrium, niobium, hafnium, tungsten, titanium, chromium, iron, nickel, zinc, zirconium, molybdenum and tantalum, as well as these materials in metallic form, as far as these are classified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

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END OF PERMIT

Surface Water and/or Groundwater Monitoring Form:
20/06/2024

Permit number: EPR/KB3309MQ

Operator: Hanson Quarry Products Europe Limited

Facility name: Hanson Aggregates Cassington Quarry

Reporting of surface water and/or groundwater monitoring for the period from *[DD/MM/YY]* to *[DD/MM/YY]*

Monitoring point	Substance / parameter	Trigger level	Reference period	Test method ¹	Result ²	Sample dates and times ³	Uncertainty ⁴
<i>[e.g. GW1]</i>	<i>[e.g. pH]</i>	<i>[e.g. >5 and <9 pH units]</i>	<i>[e.g. instantaneous]</i>	<i>[e.g. BS ISO 5667-11:200]</i>	<i>[State result]</i>	<i>[State relevant dates and time periods]</i>	<i>[State uncertainty if not 95% confidence interval]</i>

Signed: *[Name]*

Date: *[DD/MM/YY]*

(Authorised to sign as representative of the operator)

Guidance for use: Use this form to report your monitoring results.

Example text is shown in bracketed grey italics. Replace the example text by entering your own site specific information. Complete columns 1 to 5 using the information from schedule 3 of your permit. Complete columns 6 to 8 with your monitoring data. Add additional rows as necessary.

- ¹ Where an internationally recognised standard test method is used, give the reference number. Where another method that has been formally agreed with the Environment Agency, give the appropriate identifier. In other cases state the principal technique, for example gas chromatography.
- ² Give the result as 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, give the result as the 'minimum to maximum' of the measured values.
- ³ For non-continuous measurements give the date and time of the sample that produced the result. For continuous measurements give the percentage of the process operating time covered by the result.
- ⁴ Complete if the uncertainty associated with the result is not a 95% confidence interval. Leave blank for 95% confidence intervals.

Permit Number: EPR/KB3309MQ

**Operator: Hanson Quarry Products
Europe Limited**

**Facility: Hanson Aggregates
Cassington Quarry**

Form Number: Gas 1 / 20/06/2024

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

Monitoring Point	Substance / Parameter	Compliance limit	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)