

Small Heath Inert Treatment Facility and Non-Hazardous Waste Transfer Station

784- B042739

Operating Techniques

Environmental Permit Application

CEMEX UK Materials Limited

December 2023

Document prepared on behalf of Tetra Tech Limited. Registered in England number: 01959704



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DOCUMENT CONTROL

Document:	Operating Techniques
Project:	Small Heath Inert Treatment Facility and Non-Hazardous Waste Transfer Station
Client:	CEMEX UK Materials Limited
Project Number:	784- B042739
File Origin:	X:\784-B042739_Small_Heath_Treatment_Facility\60 Project Output\61 Work in Progress\WRM\Finals\Appendix B - Operating Techniques\Operating Techniques v3.docx

Revision:		Prepared by:	Gemma Allan
Date:	December 2023	Checked by:	Lauren Stanger
Status:	Final to EA	Approved By:	Andrew Bowker
Description of Revision:			

Revision:		Prepared by:	
Date:		Checked by:	
Status:		Approved By:	
Description of Revision:			

Revision:		Prepared by:	
Date:		Checked by:	
Status:		Approved By:	
Description of Revision:			

Revision:		Prepared by:	
Date:		Checked by:	
Status:		Approved By:	
Description of Revision:			

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1.0 INTRODUCTION

1.1 REPORT CONTEXT

- 1.1.1 This Environmental Permit Application has been prepared by Tetra Tech on behalf of the Operator, CEMEX UK Materials Limited (CEMEX), to support an environmental permit application.
- 1.1.2 This application relates an area of land located off Lawden Road, Small Heath, Birmingham B11 1EX. The proposed location and permit boundary are identified on Drawing Number CEM/B043812/PER/01.
- 1.1.3 CEMEX are seeking to gain a bespoke environmental permit to operate a non-hazardous, physical treatment facility and non-hazardous waste transfer station at the site with an annual throughput of 250,000 tonnes. Physical treatment will comprise of inert waste via crushing and screening.
- 1.1.4 This document is an integrated document which describes both the operating techniques that will be implemented at the site to ensure compliance with the conditions of the Environmental Permit and also demonstrate that appropriate measures will be employed.
- 1.1.5 This report has been prepared to satisfy the requirements of the following: -
- Environment Agency - Develop a management system: environmental permits (August 2022);
 - Environment Agency - Control and monitor emissions for your environmental permit (May 2021); and,
 - Environment Agency - Non-hazardous and inert waste: appropriate measures for permitted facilities (December 2022).

2.0 SITE DESCRIPTION

2.1 OVERVIEW OF PERMITTED ACTIVITIES

- 2.1.1 CEMEX are seeking to gain a bespoke environmental permit to operate a non-hazardous, physical treatment facility and non-hazardous waste transfer station at the site with an annual throughput of 250,000 tonnes. Physical treatment will comprise of inert waste via crushing and screening.
- 2.1.2 It's considered that the proposal will fall under the Recovery and Disposal codes in Table 1 below, provided for in Annex II to Directive 2008/98/EC of the European Parliament and of The Council of 19th November 2008 Waste.

Table 1: Proposed R/D codes for Small Heath the Inert Waste Treatment Facility and Waste Transfer Station

R/D Code	Description
R3	Recycling/reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
R4	Recycling/reclamation of metals and metal compounds
R5	Recycling/reclamation of other inorganic materials.
R13	Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where the waste is produced).
D14	Repackaging prior to submission to any of the operations numbered D1 to D13
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced)

2.2 OPERATING HOURS

- 2.2.1 The operational hours will be restricted to those which are stipulated within the planning permissions.
- 2.2.2 Vehicle movements will be limited to a maximum of 76 lorry movements per day and 20,000 lorry movements per annum.

2.3 WASTE TYPES

- 2.3.1 The full list of waste codes permitted at the site for the inert waste treatment facility and the waste transfer station are listed in Appendix A.

2.4 WASTE QUANTITIES

- 2.4.1 It is proposed that there would be a maximum annual throughput of 250,000 tonnes of inert waste per year.

2.5 SITE LAYOUT

- 2.5.1 The proposed waste activities will be undertaken within the confines of a building and an indicative site layout is provided on Drawing Number TD 22088.

3.0 WASTE ACCEPTANCE PROCEDURES

3.1 PRE-ACCEPTANCE

- 3.1.1 Both the Inert Treatment Facility and Non-Hazardous Waste Transfer Station will utilise the same pre-acceptance protocols detailed below.
- 3.1.2 Prior to waste being accepted onto the site, the waste producer will be required to provide the following information of their waste to CEMEX: -
- Details of the waste producer/holder including their organization name, address and contact details;
 - The source of the waste;
 - A description of the waste including composition and quantity;
 - The waste classification code;
 - Any hazardous properties or presence of any regulated chemicals (e.g. Persistent Organic Pollutants/POPs); and,
 - Confirmation that the waste does not contain a radioactive source.
- 3.1.3 As specified in the EAs “Non-hazardous and inert waste: appropriate measures for permitted facilities,” CEMEX will acquire the following information for commercial and industrial waste prior to acceptance: -
- Details of the waste producer including their organisation name, address and contact details;
 - A description of the waste;
 - The waste classification code (also referred to as a list of waste (low) or European Waste Classification code);
 - The source of the waste (the producer’s business and the specific process that has created the waste);
 - Information on the nature and variability of the waste production process;
 - Information about the history of the producer site if it may be relevant to the classification of the waste (for example soils and other construction and demolition arisings from a site contaminated by previous industrial uses);
 - The waste’s physical form;
 - The waste’s composition (based on representative samples if necessary);
 - A description of the waste’s odour and whether it is likely to be odorous; and,
 - An estimate of the quantity you expect to receive in each load and in a year.
- 3.1.4 For mirror entry List of Waste (LoW) codes, if the information provided by the waste producer/holder indicates that the waste has not been properly assessed, CEMEX will contact the waste producer and request for further information to verify the waste assessment. If the waste producer is unable to verify the assessment, CEMEX will assume that the waste is not in line with the EWC codes accepted on site and therefore will not be accepted.
- 3.1.5 CEMEX will not accept wastes onto the site unless the above information is established.
- 3.1.6 If the information provided demonstrates that the waste is acceptable, the Site Manager will assess the waste’s suitability for storage and treatment at the site.

- 3.1.7 If the waste is deemed suitable for storage and treatment, arrangements will be made to deliver the waste to the site.
- 3.1.8 All records relating to the pre-acceptance will be kept for cross-reference a verification at the waste acceptance stage. These records will be kept for a minimum of 3 years.
- 3.1.9 CEMEX will reassess the information required at pre-acceptance on an annual basis or if the following apply:
- - Waste changes;
 - Process giving rise to the waste changes; and,
 - Waste received does not to conform to the pre-acceptance information.

3.2 ACCEPTANCE PROCEDURES

- 3.2.1 Both the Inert Treatment Facility and Non-Hazardous Waste Transfer Station will utilise the same acceptance protocols detailed below.
- 3.2.2 Wastes will only be accepted onto the site if they comply with the list of wastes included in the environmental permit. All vehicles delivering waste will be licensed waste carriers and each delivery must be accompanied by a relevant Waste Transfer Note, consistent with fulfilling the company's responsibilities under the provisions of the Duty of Care.
- 3.2.3 Upon acceptance, the Site Manager will determine whether the waste received is verified against the pre-acceptance criteria through rigorous visual assessment of the waste to ensure compliance.
- 3.2.4 All staff whom carry out waste acceptance checks will be trained to effectively to identify and manage any non-conformances in the loads received, in order to comply with the Duty of Care for waste and the permit conditions.
- 3.2.5 The waste acceptance procedures will follow a risk-based approach which considers: -
- The source, nature and age of the waste;
 - Potential risks to process safety, occupational safety and the environment (for example, from odour and other emissions);
 - The potential for self-heating; and,
 - Knowledge about the previous waste holder(s).
- Basic Characterisation (Level 1)
- 3.2.6 Basic characterisation will ensure that the waste is suitable for acceptance at the regulated facility. The information to be supplied at this stage includes: -
- Source and origin of the waste;
 - Information on the process producing the waste;
 - Appearance of the waste, e.g. physical form; and,
 - The List of Wastes (England) Regulations 2005 code.
- 3.2.7 The inert wastes detailed in Appendix A will be accepted at the site without testing, provided that there is confirmation that they are single stream loads from known and reliable sources and that they are accompanied with the required information. Different wastes contained in the list will be accepted together provided they are from the same source.

On Site Verification

- 3.2.8 Each load of waste delivered to the site will be weighed on arrival to confirm the quantity of waste against the accompanying paperwork.
- 3.2.9 Each load of waste delivered to the site shall be, where possible, visually inspected before unloading. Each load will be inspected after unloading. These inspections will ensure that the waste conforms to the description provided in the Waste Transfer Note.
- 3.2.10 Loads containing wastes from multiple streams may be accepted together, provided they are from the same source, are in compliance with the waste types specified in the environmental permit and are accompanied by the required information.
- 3.2.11 If there is uncertainty regarding the acceptance of wastes at the site, testing may be required. No wastes will be accepted onto the site if there is uncertainty as to its source, conformance with the conditions of the environmental permit and/or its suitability for the intended use.
- 3.2.12 All site staff will be made aware of the waste acceptance procedures in place at the site and will be trained in the procedures with dealing with non-conformances. The Site Manager will be responsible for ensuring that the procedures are implemented appropriately.

3.3 WASTE REJECTION

- 3.3.1 In the event that a load is identified as unacceptable upon discharge of the load, the waste shall be reloaded into the container if possible and isolated.
- In the event that any load is identified as unacceptable upon discharge of the load when the haulier has exited the site, the waste shall be isolated or quarantined on the site, the relevant customer/waste producer shall be notified and a summary of the justification for acceptance.
- 3.3.2 If necessary, the Environment Agency will be contacted to agree the most appropriate course of action.
- 3.3.3 If a load is rejected, the following information shall be recorded: -
- Time and date of incident;
 - Haulier and vehicle registration number;
 - Customer;
 - Waste type; and,
 - Reason for rejection.
- 3.3.4 Records will be kept of all rejected loads and these will be made available to the Environment Agency.

4.0 WASTE TREATMENT

4.1 PROCESS DESCRIPTION

Inert Treatment Facility

- 4.1.1 Vehicles delivering waste loads will enter the site via the weighbridge, where the waste acceptance procedures mentioned above will be undertaken. If the waste is deemed acceptable, the driver will be directed to the waste treatment area as shown on the Site Layout Plan (Drawing Number TD 22088).
- 4.1.2 Waste will only be handled by competent staff. It is proposed that a significant proportion of the waste handled at the site will be transported via the railway network which is situated adjacent to the site.
- 4.1.3 A variety of waste treatment methods will be applied on site which is subject to the nature of the waste. Depending on the particle size of the material, a crusher may be employed to crush the waste and processed via a screener a second time to reduce the particle size of the material. Alternatively, wastes that originally comprise finer particles will not require crushing and therefore will only be processed via a screener.
- 4.1.4 Following treatment, the waste will be unloaded into clearly defined stockpiles located adjacent the waste treatment area. Processed materials will be stored on the existing site hardstanding.
- 4.1.5 Materials which are classified as inert in advance of receipt, and which are identified within the WRAP Quality Protocol for Aggregates from Inert Waste, will be treated in accordance with this guidance. The resultant materials will be tested in accordance with the WRAP Quality Protocol in order to determine whether they have met end of life test and as such cease to be classified as waste. These materials will be stored on hardstanding.
- 4.1.6 The results of the testing will determine the destination of the material in accordance with the Quality Protocol.
- 4.1.7 The stockpile will remain on site until such time as sufficient volume is acquired for it to be removed from site to the receiving site and in any case no longer than the period identified within the Environmental Permit.
- 4.1.8 CEMEX will maintain details of the measures to be taken during abnormal operating conditions to make sure they continue to comply with permit conditions. Abnormal operating conditions include the following: -
- Unexpected releases;
 - Start-up;
 - Momentary stoppages; and,
 - Shutdown.

5.0 EMISSIONS CONTROL

5.1 POINT SOURCE EMISSIONS TO AIR

5.1.1 There will be no point source emissions to air as a result of this application.

5.2 FUGITIVE EMISSIONS TO AIR

5.2.1 Fugitive emissions to air have been identified as a potential environmental risk resulting from the proposal, as detailed in the Environmental Risk Assessment that accompanies this application as Appendix C.

5.3 POINT SOURCE EMISSIONS TO GROUNDWATER

5.3.1 There will be no point source emissions to groundwater as a result of this application.

5.4 POINT SOURCE EMISSIONS TO LAND AND WATER (INCLUDING INDIRECT DISCHARGE TO SEWER)

5.4.1 There will be no point source emissions to land and water (including indirect discharge to sewer) as a result of this application.

5.5 FUGITIVE EMISSIONS LAND AND WATER

5.5.1 Fugitive emissions to land and water have been identified as a potential environmental risk resulting from the proposal, as detailed in the Environmental Risk Assessment that accompanies this application as Appendix C.

5.6 PESTS

5.6.1 Due to the inert nature of wastes accepted at the site, it is determined that the risk of pests is negligible.

5.7 NOISE

5.7.1 All noise and vibration generating activities will be confined to the operating hours stipulated in the planning permission, with the exception of emergency repairs.

5.7.2 All equipment and vehicles will have effective silencers where practicable and will be maintained in accordance with the manufacturer's requirements. Further, all equipment and vehicles will be switched off when not in regular use.

5.7.3 All noise generating activity will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.

6.0 GENERAL MANAGEMENT

6.1 ENVIRONMENTAL MANAGEMENT SYSTEM

- 6.1.1 As noted in the EA's 'Develop a Management System: Environmental Permits' guidance, all permitted facilities are required to have an EMS to describe the procedures in place to minimise the risk of pollution from the activities covered in the environmental permit. In addition, the BAT conclusion for Waste Treatment includes a requirement for an EMS.
- 6.1.2 CEMEX have an EMS in place meets the requirements of ISO14001 and the EA's 'Develop a management system: environmental permits' guidance. A copy of the ISO 14001 certificate is provided in Appendix C.
- 6.1.3 All site operatives would be adequately trained in health, safety, and environmental issues. Staff would only be permitted to undertake activities that they have been trained for. They would be made aware of the procedures they must follow in the event of an accident or incident and would be able to access any relevant documentation that they may require. All training, experience and qualifications of staff would be noted, and these records would be maintained and kept up to date.

6.2 INSPECTION, MAINTENANCE AND MONITORING

- 6.2.1 All plant and equipment will be visually inspected on a daily basis by the Site Manager (or a nominated deputy) prior to use. The purpose of this inspection is to identify any signs of defects that may affect the integrity and operational efficiency of the plant.
- 6.2.2 Only personnel who are trained and licensed to operate equipment and carry out maintenance will do so.
- 6.2.3 All plant and equipment will be maintained in accordance with a preventative maintenance programme which will be defined by the manufacturer's requirements. This will ensure that the integrity and operational efficiency of all plant and equipment is maintained and therefore minimise the risk of mechanical failure which may result in increased dust emissions. This particular programme forms part of the site's Environmental Management System (EMS).
- 6.2.4 In the event that a defect is identified on any item of plant or equipment, the use of the plant/equipment will be suspended until the necessary remedial works have been undertaken.

6.3 ACCIDENT MANAGEMENT PLAN

- 6.3.1 CEMEX recognise the importance of the prevention of accidents that may have environmental consequences and that it is crucial to limit those consequences.
- 6.3.2 An Accident Management Plan will be implemented and maintained at the site to ensure the site's staff are fully prepared for such incidents. The accident management plan will form part of the EMS and will be reviewed on an annual basis or as soon as practicable after any reportable incident on site. The document will be continually improved in these reviews to include best practice and minimise the risk of accidents occurring.
- 6.3.3 An initial assessment of the risk of accidents and abnormal operating conditions posed to the environment and site personal are identified in the Environmental Risk Assessment provided as Appendix C of the Environmental Permit Application.
- 6.3.4 The mitigation measures identified within the Environmental Risk Assessment will be implemented to limit the consequences of accidents on the environment and site personnel.

6.4 STAFF COMPETENCE

- 6.4.1 The facility will be managed by a Site Supervisor who holds a valid and relevant Certificate of Technical Competence (Appendix B).
- 6.4.2 All site staff will be trained in the site operating procedures, including waste acceptance, storage, treatment and emergency procedures, and records of all training provided will be maintained.

6.5 FIRE AND EXPLOSION PREVENTION

- 6.5.1 Fires from the acceptance of inert waste are considered unlikely due to the nature of the waste material. However, the operation and/or maintenance of mobile plant do pose a potential fire hazard if precautions are not taken.
- 6.5.2 Firefighting equipment of a suitable type shall be kept at appropriate locations as advised by the Health and Safety Manager or the local Fire Service. Where appropriate, mobile plant will be fitted with firefighting equipment. All firefighting equipment shall be kept in good condition, unobstructed and be serviced at least once a year by a competent person. The site will be designated as a “no smoking area” and signed accordingly.
- 6.5.3 Any fire on the site will be treated as an emergency and will be extinguished at the earliest opportunity. If necessary, the Fire Service will be summoned. Any incidents of fire will be reported to the Environment Agency and recorded in the Site Diary.

6.6 RECORD KEEPING

- 6.6.1 CEMEX have a Management System which is compliant with ISO 14001:2015 and this includes procedures for the management of documentation.
- 6.6.2 A record will be kept that provides details on all wastes deposited at the site. This will include details on waste types, quantities, and the date of deposition. This will be provided to the Environment Agency at three-monthly intervals, within one month of the end of each period. A record of basic waste characterisation and any compliance testing or on-site verification will be maintained in the site office.
- 6.6.3 A site diary will be kept in the site office, and this will be updated daily. The diary will be used to record any accidents, incidents, or complaints. This will provide an ongoing record throughout the period of operation at the site, and this will enable any investigative or corrective action that may be required.
- 6.6.4 The Environmental Permit and other documents containing information regarding the operation of the site will be kept in a convenient location, allowing access for any person that may be working at or visiting the site.

DRAWINGS

Proposed Site Layout – TD 22088

Permit Boundary Drawing - CEM/B043812/PER/01

APPENDIX A - WASTE TYPES

Table A1: Waste Types for the Inert Waste Treatment Facility and Non-hazardous Waste Transfer Station

Waste Code	Description
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)
17 01	concrete, bricks, tiles and ceramics
17 01 01	concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	wood, glass and plastic
17 02 02	clean glass only
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
17 05 08	track ballast other than those mentioned in 17 05 07
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 02	garden and park wastes
20 02 02	soil and stones
20 01	separately collected fractions
20 01 02	clean glass only
20 02	garden and park wastes
20 02 02	soil and stones

APPENDIX B: CERIFICATE OF TECHNICAL COMPETENCE

APPENDIX C – ISO 14001 CERTIFICATE