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

784-B042739

Environmental Risk Assessment

Environmental Permit Application

CEMEX UK Materials Limited

June 2024

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



Tetra Tech Manchester, 11 York Street, Manchester, United Kingdom, M2 2AW

Tetra Tech Limited. Registered in England number: 01959704 Registered Office: 3 Sovereign Square, Sovereign Street, Leeds, United Kingdom, LS1 4ER

DOCUMENT CONTROL

| Document: | Environmental Risk Assessment |
|-----------------|--|
| 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\63 Published\WRM\EA Request for Further Information\Environmental Risk Assessment.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: | Gemma Allan | |
|--------------------------|--------------------------------------|------------------|----------------|--|
| Date: | June 2024 | Checked by: | Lauren Stanger | |
| Status: | Final To EAApproved By:Andrew Bowker | | Andrew Bowker | |
| Description of Revision: | Edits to satisfy further in | formation reques | t | |

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

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

TABLE OF CONTENTS

| 1.0 2.0 | INTRODUCTION | |
|------------|-------------------------------------|---|
| | OF TABLES | |
| Table | 1: Potential Pathways | 3 |
| Table | 2: Receptors within 1km of the Site | 3 |

APPENDICES

Appendix A: Environmental Risk Assessment Appendix B: Nature and Heritage Conservation Screen (EPR/MB3000KQ/A001)

DRAWINGS

Proposed Site Layout – TD 22088 Permit Boundary Drawing - CEM/B043812/PER/01

1.0 INTRODUCTION

1.1 REPORT CONTEXT

- 1.1.1 This section of the Environmental Permit application corresponds to Section 6 of Part B2 of the Environmental Permit application forms and has been prepared by Tetra Tech on behalf of the Operator, CEMEX UK Materials Limited (CEMEX) in accordance with the requirements of the Environmental Permitting (England and Wales) Regulations 2016 as amended.
- 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 an inert 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 Environmental Risk Assessment (ERA) is limited to a qualitative assessment of the potential risks to the environment and human health specifically related to the proposed activity. This report will identify any significant risk and demonstrate that the risk of pollution will be acceptable by taking the appropriate measures to manage the risk.

2.0 ENVIRONMENTAL RISK ASSESSMENT

2.1 METHODOLOGY

- 2.1.1 This report has been prepared following the Environment Agency's (EA) Risk Assessment guidance. It specifically relates to the potential risks associated with the following risk types: -
 - Odour;
 - Noise and vibration;
 - Fugitive emissions; and,
 - Accidents and incidents.
- 2.1.2 This risk assessment addresses the above, and is based on the following methodology: -
 - Identification of potential sources of risks;
 - Identification of all potential receptors to risk; and,
 - Risk assessment of each risk type.
- 2.1.3 The ERA is a tool used to identify the pollutant linkage i.e., source-pathway-receptor. For most risks, the atmosphere is the main pathway and will always exist. Therefore, the ERA deals primarily with the sources and receptors and is provided in Appendix A and summarised below.

2.2 SOURCES

2.2.1 The potential sources of risks have been considered for each risk type, as provided in Appendix A and summarised below: -

<u>Odour</u>

• Waste Materials.

Noise and vibration

- Engine noise from vehicles;
- Use of reverse vehicle warnings;
- Use of plant and machinery; and,
- Engineering works.

Fugitive emissions

- Particulate matter i.e. dust;
- Scavenging birds;
- Mud; and,
- Litter.

<u>Accidents</u>

- Fire or failure to contain firewater;
- Leaks and spillages;

- Flooding; and,
- Vandalism.

2.3 PATHWAYS

2.3.1 The pathways have been identified for each risk type as shown in Table 1: -

Table 1: Potential Pathways

| Risk Type | Pathway | | |
|---------------------|-----------------------|--|--|
| Odour | Atmosphere | | |
| Noise and Vibration | Atmosphere | | |
| Fugitive Emissions | Atmosphere | | |
| | Atmosphere | | |
| Accidents | Surface water run-off | | |
| Accidents | Infiltration | | |
| | Percolation | | |

2.4 RECEPTORS

- 2.4.1 A 'Nature and Heritage Conservation Screen' (EPR/MB3000KQ/A001), was requested from the EA. The screen determines the presence of any site of nature and heritage conservation, or protected species or habitats that may be impacted by the proposal. The results of this screen identified the Grand Union Canal Local Wildlife Site and a protected area of Deciduous Woodland 50m north of the site. A copy of the results is in Appendix B of this document.
- 2.4.2 Receptors within 1km of the proposed application boundary, including those identified in the Nature and Heritage Screen (EPR/MB3000KQ/A001), have been listed in Table 2 and are shown on Drawing Number CEM/B042739/REC/01. The main pathway for the identified sources will be atmosphere and as such, atmospheric conditions can affect dispersion rates and hence potential risk. As a result, the location of each receptor in relation to the site may influence the potential impact of the risk.

Table 2: Receptors within 1km of the Site

| | Receptor | Direction from Operational Area | Minimum Distance from Proposed Boundary (approx.) (m) |
|------|--|------------------------------------|--|
| Dome | stic Dwellings | | |
| 1 | Residential Properties north of A45 | N | 135 |
| 2 | Residential Properties of Sparbrook | S | 100 |
| 3 | Residential Properties west of A4540 Camp Hill Middleway | W | 485 |
| 4 | Properties of Highgate | S | 492 |
| Comr | nercial and Industrial Properties | | |
| 5 | Commercial and Industrial properties west of Bordesley Middleway | NW/W | 360 |
| 6 | Commercial and Industrial properties south of Warwick/Birmingham canal | S | 15 |
| 7 | Commercial Properties and Industry of Small Heath Highway | NW | 25 |

| 8 | Commercial and Industrial properties north of A45 | Ν | 100 | | | | |
|-------|---|----|------|--|--|--|--|
| 9 | Commercial and Industrial properties east of Small Heath Bridge | E | 15 | | | | |
| 10 | Commercial and Industrial properties southwest of Sampson Road | SW | 125 | | | | |
| 11 | Commercial and Industrial properties southwest of Stratford Road SW 385 | | | | | | |
| Recre | ation/ Open Spaces | | | | | | |
| 12 | Farm Park | S | 175 | | | | |
| 13 | Sara Park Play Area | NW | 340 | | | | |
| 14 | Tennis Court | Ν | 250 | | | | |
| 15 | Football Court | NE | 270 | | | | |
| 16 | Larches Green Park | SW | 705 | | | | |
| 17 | Highgate Park | W | 565 | | | | |
| 18 | Golden Hillock Sports Park | SE | 940 | | | | |
| 19 | Small Heath Park | E | 830 | | | | |
| 20 | Football Pitch | NE | 995 | | | | |
| 21 | Tennis Court of White Road | SE | 450 | | | | |
| 22 | Kingston Hill Local Park | NW | 650 | | | | |
| Schoo | ols, Hospitals and Amenities | | | | | | |
| 23 | Sparkbrook Health Centre | S | 405 | | | | |
| 24 | RYAN Education Academy | SW | 420 | | | | |
| 25 | Christ Church CE Primary School | SW | 460 | | | | |
| 26 | Montgomery Primary Academy | SE | 455 | | | | |
| 27 | Khattak Memorial Surgery | E | 370 | | | | |
| 28 | Holy Trinity Catholic School | E | 305 | | | | |
| 29 | Hazrat Khadijatul Kubra Girls School & Madrasah | N | 215 | | | | |
| 30 | Regents Park Community Primary | N | 380 | | | | |
| 31 | Saint Annes Catholic Primary School | W | 465 | | | | |
| 32 | Elite Carehomes | W | 590 | | | | |
| 33 | Al-Rasool School and Community Centre | SW | 1000 | | | | |
| 34 | Greencoat Nursery | S | 775 | | | | |
| 35 | Ladypool Primary School | S | 725 | | | | |
| 36 | Gracelands Nursery | SE | 550 | | | | |
| 37 | Montgomery Primary Academy | SE | 465 | | | | |
| 38 | City of Birmingham School | NE | 555 | | | | |
| 39 | Green Heath School | NE | 500 | | | | |
| 40 | Greenfields Primary School | NE | 795 | | | | |
| 41 | Small Heath Leadership Academy | NE | 885 | | | | |
| 42 | Bordesley Village Primary School | Ν | 790 | | | | |
| 43 | Birmingham City Football Club | Ν | 745 | | | | |
| 44 | Conway Primary School | SE | 800 | | | | |
| 45 | The Kids Niche Nursery | SE | 435 | | | | |
| 46 | Calthorpe Academy | SW | 605 | | | | |
| 47 | South and City College Birmingham | E | 735 | | | | |
| 48 | The Olive School Small Heath | SE | 835 | | | | |

| Habit | ats | | |
|-------|---|----|----------|
| 49 | Deciduous Woodland (Small Heath Highway) (N&H Screen) | N | 50 |
| 50 | Deciduous Woodland | NE | 110 |
| 51 | Small Heath Park Deciduous Woodland | E | 810 |
| 52 | Highgate Park Deciduous Woodland | W | 625 |
| 53 | Small Heath Park BAP Priority Habitat | E | 810 |
| Railw | ays | | |
| 54 | Railway line to the north | N | Adjacent |
| Train | Station | | |
| 55 | Bordesley | NW | 515 |
| 56 | Small Heath | SE | 850 |
| Main | Roads | | · |
| 57 | A45 Small Heath Hwy | N | 60 |
| 58 | Bordesley Middlesway | W | 310 |
| 59 | A34 Stratford Road | SW | 385 |
| 60 | A4540 Camp Hill Middleway | SW | 430 |
| 61 | A4540 Highgate Middleway | SW | 505 |
| 62 | Watery Lane Middleway | NW | 550 |
| 63 | A41 Highgate Road | S | 920 |
| Surfa | ce Water | | |
| 64 | Grand Union Canal (Warwick/Birmingham) | S | 10 |
| Desig | nated Ecological Habitats | | |
| | Local Wildlife Site Grand Union Canal (N&H Screen) | S | 10 |

According to the Multi-Agency Geographic Information for the Countryside's (MAGIC) website, the site is located over a Secondary B aquifer and is not situated within a Groundwater Source Protection Zone

2.5 RISK ASSESSMENT

2.5.1 The ERA (Appendix A) looks at each specific hazard identified and assesses the likelihood of those hazards impacting on the receptors. This is achieved by fulfilling the following objectives: -

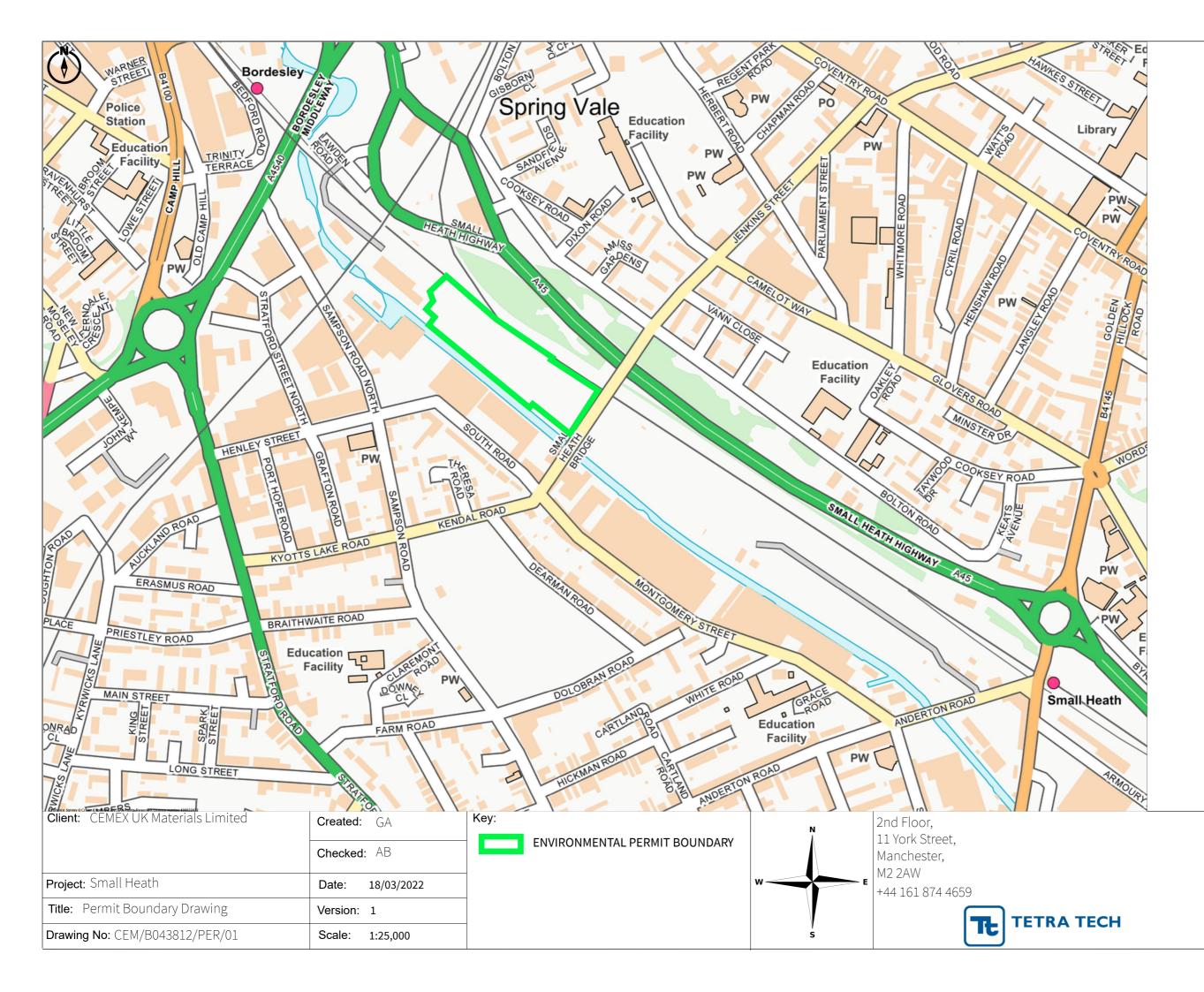
- Identify the location and nature of each hazard;
- Identify the specific receptors potentially at risk and assess the sensitivity of each receptor;
- Provide a qualitative assessment of the risk posed to each sensitive receptor;
- Identify management and monitoring techniques; and,
- Provide recommendations for more detailed assessments where necessary.

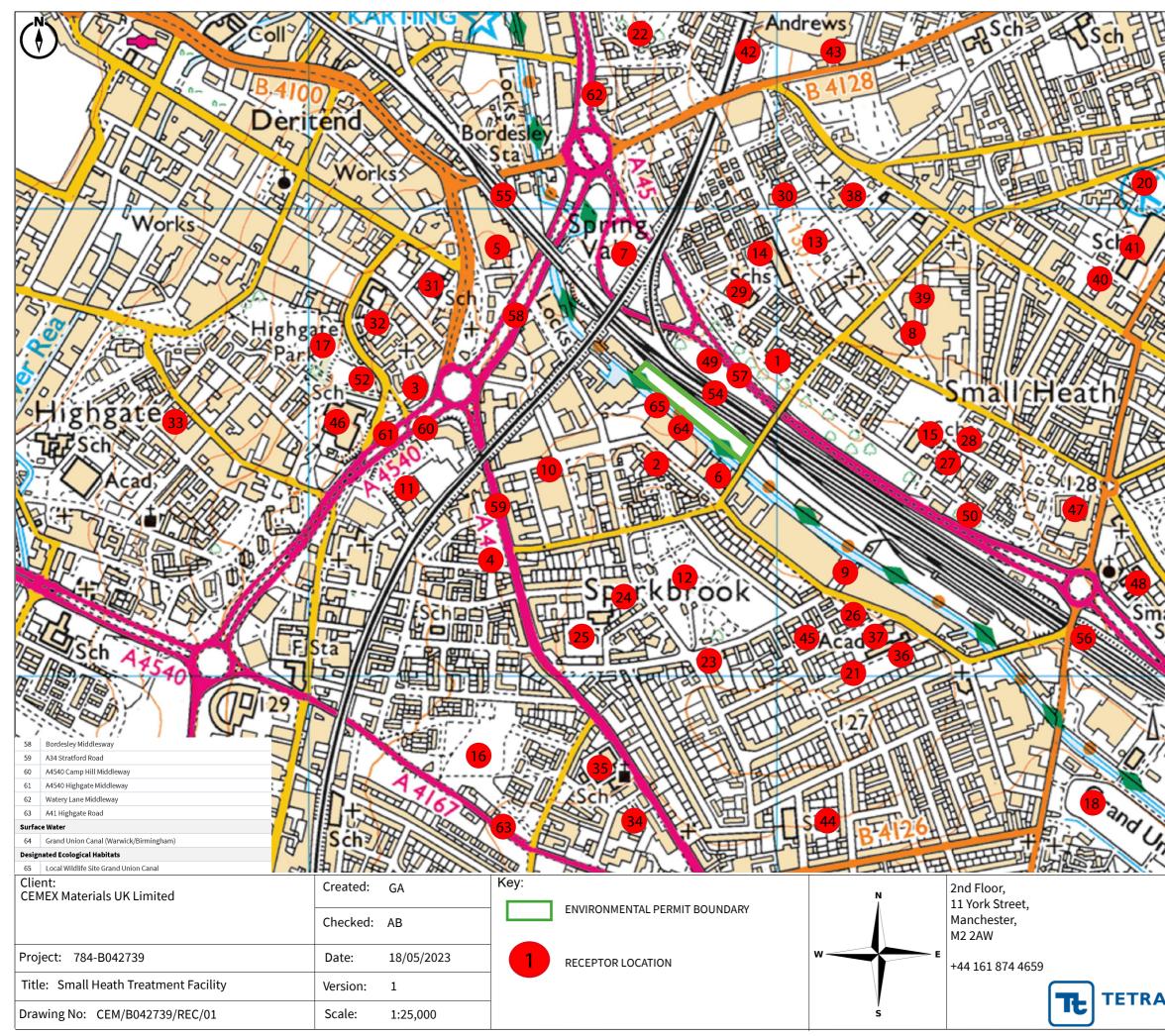
2.6 SUMMARY OF ERA

2.6.1 The ERA (Appendix A) indicates that the proposed development will have no significant impact in terms of odour, noise and fugitive emissions, and the likelihood of accidents is minimal.

DRAWINGS

Permit Boundary Drawing - CEM/B043812/PER/01 Receptor Plan - CEM/B042739/REC/01





| | | Receptor |
|-----------------------------------|--------------|--|
| | Dome | tic Dwellings |
| | | stic Dwellings Residential Properties north of A45 |
| E THILL | 1 | |
| ETT IHI | 2 | Residential Properties of Sparbrook |
| H III | 3 | Residential Properties west of A4540 Camp Hill Middleway |
| 1 W AY | 4 | Properties of Highgate |
| TA | | ercial and Industrial Properties |
| GLU & | 5 | Commercial and Industrial properties west of Bordesley Middleway |
| 5 | 6 | Commercial and Industrial properties south of Warwick/Birmingham canal |
| SE | 7 | Commercial Properties and Industry of Small Heath Highway |
| | 8 9 | Commercial and Industrial properties north of A45 Commercial and Industrial properties east of Small Heath Bridge |
| S. CD | 10 | Commercial and Industrial properties southwest of Sampson Road |
| | 11 | Commercial and Industrial properties southwest of Stratford Road |
| K m | | ation/ Open Spaces |
| SALA | 12 | Farm Park |
| SX V | 13 | Sara Park Play Area |
| | 14 | Tennis Court |
| $\langle \langle \rangle \rangle$ | 15 | Football Court |
| | 16 | Larches Green Park |
| 20xo | 10 | Highgate Park |
| (CA) | 18 | Golden Hillock Sports Park |
| the sol | 10 | Small Heath Park |
| 1 Sta | 20 | Small Heath Park Football Pitch |
| NTR. | | Football Pitch Tennis Court of White Road |
| YXXX | 21 | |
| N/V | 22 School | Kingston Hill Local Park |
| | | ls, Hospitals and Amenities |
| St Cro | 23 | Sparkbrook Health Centre |
| Tix | 24 | RYAN Education Academy |
| | 25 | Christ Church CE Primary School |
| Sma | 26 | Montgomery Primary Academy |
| A 10 | 27 | Khattak Memorial Surgery |
| 57 🛡 | 28 | Holy Trinity Catholic School |
| Sch | 29 | Hazrat Khadijatul Kubra Girls School & Madrasah |
| Sch | 30 | Regents Park Community Primary |
| 111 | 31 | Saint Annes Catholic Primary School |
| 11 1 | 32 | Elite Carehomes |
| all Heat | 33 | Al-Rasool School and Community Centre |
| tak | 34 | Greencoat Nursery |
| 180% | 35 | Ladypool Primary School |
| in the | 36 | Gracelands Nursery |
| Ares 6 | 37 | Montgomery Primary Academy |
| 1.1.1 | 38 | City of Birmingham School |
| SIL ?? | 39 | Green Heath School |
| | 40 | Greenfields Primary School |
| | 41 | Small Heath Leadership Academy |
| | 42 | Bordesley Village Primary School |
| Y/V | 43 | Birmingham City Football Club |
| | 44 | Conway Primary School |
| | 45 | The Kids Niche Nursery |
| X Si | 46 | Calthorpe Academy |
| Y: / / | 47 48 | South and City College Birmingham The Olive School Small Heath |
| 1.32 0 | 48 Habita | |
| ion C | 49 | Deciduous Woodland |
| | 50 | Deciduous Woodland |
| | 51 | Small Heath Park Deciduous Woodland |
| | 52 | Highgate Park Deciduous Woodland |
| | 53 | Small Heath Park BAP Priority Habitat |
| | Railwa | • |
| | 54 | Railway line to the north |
| | | itation |
| | 55 | Bordesley |
| TECH | 56 Main R | Small Heath |
| | mant R | ~~~~ |
| | 57 | A45 Small Heath Hwy |

APPENDIX A: ENVIRONMENTAL RISK ASSESSMENT

Table A1: Odour Risk Assessment and Management Plan

| What do y | What do you do that can harm and what could be harmed? | | Managing the risk | Assessing the risk | | | |
|---|--|---|---|---|--|---|--|
| Hazard | Receptor | Pathway | Risk Management | Probability of Exposure | Consequence | What is the overall risk? | |
| What has the potential to cause harm? | What is at risk? What do I wish to protect? | How can the hazard get to the receptor? | What measures will you take to reduce the risk? If it occurs – who is responsible for what? | How likely is this contact? | What is the harm that can be caused? | What is the risk that still remains? The balance of probability and consequence. | |
| Storage and treatment of odorous waste streams. | Occupiers of domestic dwellings identified in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Amenities identified in Table 2. Habitats identified in Table 2. | Atmosphere. | The proposed waste types are not putrescible and therefore will not biodegrade to produce offensive odours. The nearest receptors to the site are the Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath Highway. There will be strict waste acceptance procedures in place to minimise the risk of non-compliant wastes being accepted. Details of the waste acceptance procedures are provided in the Operating Techniques (Appendix B of the Environmental Permit Application). All site operatives will be vigilant with regard to identifying noncompliant wastes and any non-conformances or odour issues will be reported to the Site Manager. | Unlikely due to the nature of the proposed waste type and the measures in place. | Odour annoyance. | Very little risk due to nature of the proposed waste types. Not significant due to management techniques employed. | |



Table A2: Noise Risk Assessment and Management Plan

| What do you o | lo that can harm and harmed? | what could be | Managing the risk | Assessing the ri | | risk | |
|--|---|---|--|---|--|--|--|
| Hazard | Receptor | Pathway | Risk Management | Probability of Exposure | Consequence | What is the overall risk? | |
| What has the potential to cause harm? | What is at risk? What do I wish to protect? | How can the hazard get to the receptor? | What measures will you take to reduce the risk? If it occurs – who is responsible for what? | How likely is this contact? | What is the harm that can be caused? | What is the risk that still remains? The balance of probability and consequence. | |
| Vehicle movements to and from the site. Noise from reverse vehicle warnings. | Occupiers of domestic dwellings identified in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Habitats identified in Table 2. Amenities identified in Table 2. | Atmosphere. | Load will only be delivered to the site during the existing site operating hours in the planning permission. Vehicle movements will be limited to a maximum of 76 lorry movements per day and 20,000 lorry movements per annum. Vehicle speeds will be limited to 10mph on site to minimise the generation of excessive noise arising from higher vehicle speeds. Clear signage will be established across the site to reinforce the vehicle speed limit. Further, it is proposed that a significant quantity of the material delivered to the site will be transported via the adjacent rail line. This reduces the impact to road traffic noise generated via the movement of HGVs. All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer's requirements to minimise the generation of noise. An anti-idling policy will be employed on site which will require all vehicle users to switch off their engines when not in use. All vehicles will utilise low level reversing signals where possible. | Intermittent during operating hours. | Intermittent noise and vibration disturbance. | Not significant if managed correctly. | |

| Drop heights will be minimised as much as practicable. |
|--|
|--|

| | Amenities identified in Table 2. | | It is not anticipated that the noise produced onsite will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath Highway or domestic dwellings, the workforce in commercial and industrial premises, environmental receptors, and local amenities. This is due to the activities onsite not producing excessive noise, the surrounding area comprising primarily of industrial premises also producing noise and the limited working hours during which noise will be produced. In addition to the above, a Noise Impact Assessment (NIA) and a Noise Management Plan (NMP) have been prepared which provides an assessment of noise from the proposed activities and how noise will be managed at the site. The NIA and NMP are provided as Appendix E of the Environmental Permit Application. | | | |
|--|---|-------------|--|---|---------------------------------------|---------------------------------------|
| Noise and vibrations from waste treatment. | Occupiers of domestic dwellings identified in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Habitats identified in Table 2. Amenities identified in Table 2. | Atmosphere. | All noise generating activities will only take place during the hours stipulated in the planning permission. All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer's requirements to minimise the generation of noise. An anti-idling policy will be employed on site which will require all plant and equipment to be switched off when not in use. The use of modern plant and equipment shall be practiced and will be maintained in accordance with the manufacturer's requirements. This will minimise the risk of mechanical failure which could result in increased noise emissions. All noise and vibration generating activity will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager. It is not anticipated that the noise produced onsite will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous | Intermittent during operating hours. | Intermittent noise disturbance. | Not significant if managed correctly. |

| dwellings, the workforce environmental receptors, activities onsite not prod area comprising primarily noise and the limited wo produced. In addition to the above, Noise Management Plan (N an assessment of noise fro will be managed at the s | rth on Small Heath Highway, or domestic e in commercial and industrial premises, , and local amenities. This is due to the ducing excessive noise, the surrounding ly of industrial premises also producing orking hours during which noise will be , a Noise Impact Assessment (NIA) and a NMP) have been prepared which provides om the proposed activities and how noise site. The NIA and NMP are provided as immental Permit Application. |
|---|--|
|---|--|

Table A3: Fugitive Emissions Risk Assessment and Management Plan

| What do you do that can harm and what could be harmed? | | hat could be | Managing the risk | Assessing the risk | | | |
|---|---|---|---|---|--|--|--|
| Hazard | Receptor | Pathway | Risk Management | Probability of Exposure | Consequence | What is the overall risk? | |
| What has the potential to cause harm? | What is at risk? What do I wish to protect? | How can the hazard get to the receptor? | What measures will you take to reduce the risk? If it occurs – who is responsible for what? | How likely is this contact? | What is the harm that can be caused? | What is the risk that still remains? The balance of probability and consequence. | |
| To Air | | | | | | | |
| Dust from vehicle/mobile plant movements. | Occupiers of domestic dwellings listed in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Habitats identified in Table 2. Amenities identified in Table 2. | Atmosphere. | Vehicles delivering waste to the site will be covered or sheeted to prevent the generation of dust whilst the waste is in transit. Any vehicles, mobile plant or haul roads that gather visible dust will be dampened or washed. The site will benefit from a 10mph speed limit to prevent the suspension and entrainment of dust. Clear signage will be established across the site to reinforce the vehicle speed limit. It is further proposed that a significant quantity of the material delivered to the site will be transported via the adjacent rail line. This reduces the impact of dust to sensitive receptors generated via the movement of HGVs. Regular housekeeping, including the cleaning, spraying, or sweeping of all site surfaces and items of plant and machinery will be undertaken to minimise the build-up of dust on surfaces. The Site Manager will undertake a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the Site Manager. | Unlikely due to measures in place. Management actions should prevent this happening. | Smothering. Potential respiratory health risk to public and staff. Nuisance – dust on cars, clothing, vegetation, etc. | Not significant due to management techniques employed. | |

| | | | It is not anticipated that the dust produced onsite will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath Highway, or domestic dwellings, the workforce in commercial and industrial premises, environmental receptors, and local amenities. This is due to the measures outline above. Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix D of the environmental permit application. | | | |
|--|---|-------------|--|---|---|--|
| Dust generated during loading/unloading of waste. | Occupiers of domestic dwellings listed in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Habitats identified in Table 2. Amenities identified in Table 2. | Atmosphere. | The loading/unloading of wastes would be undertaken in a controlled manner to keep dust emissions to a minimum. Extra care would be taken with the deposit of waste during periods of prolonged dry weather or high winds. Drop heights would be minimised as much as practicable to reduce the generation of dust from loading/unloading activities. In terms of the waste stockpiles, loading/unloading will take place at sheltered points around the stockpile to prevent entrainment of dust in the wind. The Site Manager will undertake a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the Site Manager. Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix D of the environmental permit application. | Unlikely due to measures in place. Management actions should prevent this happening. | Local nuisance. Potential respiratory health risk to public and staff. Smothering. | Not significant due to management techniques employed. |
| Dust emissions from stockpiles. | Occupiers of domestic dwellings listed in Table 2 above. Workforce in commercial and industrial | Atmosphere. | All waste stockpiles will be suitably profiled and dampened with water according to weather conditions. The Site Manager will undertake daily visual assessments of dust levels and all site operatives will be vigilant and report any problems to the Site Manager. | Unlikely due to measures in place. Management actions should prevent this happening. | Local nuisance. Potential respiratory health risk to public and staff. | Not significant due to management techniques employed. |

| | properties identified in Table 2. Habitats identified in Table 2. Amenities identified in Table 2. | | It is not anticipated that the dust produced onsite will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath Highway, or domestic dwellings, the workforce in commercial and industrial premises, environmental receptors, and local amenities. This is due to the measures outline above. Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix D of the environmental permit application. | | Smothering. | |
|---|---|-------------|--|---|---|--|
| Dust emissions from the treatment of waste. | Occupiers of domestic dwellings listed in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Habitats identified in Table 2. Amenities identified in Table 2. | Atmosphere. | The brand, make, model and specification of the treatment plant is expected to vary throughout the operational life of the facility due to ongoing changes and development in technology. Nevertheless, all treatment plant and equipment will typically be covered which will minimise the risk of dust during treatment. Depending on the model that is used, some items of plant and equipment may be fitted with a dust suppression system and therefore a water source (mains supply) will be made available to accommodate the suppression system. Further, some items of plant and equipment may be fitted with a drop chute which will minimise the risk of wind whipping at the point of discharge. Modern plant and equipment will be used, including the crusher, which will be maintained in accordance with the manufacturer's requirements. This will minimise the risk of mechanical failure which may result in increased dust emissions. All plant and equipment will be inspected on a daily basis (prior to use (by the Site Manager. The purpose of this inspection is to identify any signs of defects that may affect the integrity or operational efficiency of the plant/equipment. If any defects are identified, the defective plant/equipment will not be used until the necessary remedial works have been undertaken. All wastes will be processed using mobile crushers and screeners. As such, the plant can be moved at any time to the required waste | Unlikely due to measures in place. Management actions should prevent this happening. | Local nuisance. Potential respiratory health risk to public and staff. Smothering. | Not significant due to management techniques employed. |

| | | | stockpile which minimises waste handling on site and therefore minimise the risk of dust emissions from the handling of waste. It is not anticipated that the dust produced onsite will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath Highway, or domestic dwellings, the workforce in commercial and industrial premises, environmental receptors, and local amenities. This is due to the measures outline above. Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix D of the environmental permit application. | | | |
|------------------------------------|---|--|--|---|--|--|
| To Water | | | | <u> </u> | | |
| Contaminated rainwater run-off. | Groundwater. Habitats identified in Table 2. Surface water features identified in Table 2. | Direct surface water run-off from site. Infiltration. Percolation. | The proposed waste types are inert and therefore non-hazardous. As such, any runoff that is generated on site will simply be rainwater which has passed through inert soils and therefore is not likely to be hazardous. It is not anticipated that the dust produced onsite will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath Highway. This is due to the nature of wastes accepted on site. There will be strict waste acceptance procedures in place at the site to prevent the acceptance of non-conforming waste types. Details of these procedures are detailed in the Operating Techniques (Appendix B of the Environmental Permit Application). | Unlikely due to the nature of the proposed waste types and the measures in place. | Contamination of surface water bodies and groundwater. | Not significant due to the nature of waste received and management techniques employed. |

| Birds and Pests. | Occupiers of domestic dwellings listed in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Habitats identified in Table 2. Amenities identified in Table 2. | Air. Ground. | The proposed waste types are not putrescible and will not attract pests, vermin and/or scavenging birds. Strict waste acceptance procedures will be in place to ensure only permitted waste types are accepted. Details of these procedures are provided in the Operating Techniques (Appendix B of this Environmental Permit Application). The Site Manager will undertake regular reviews of pests and scavenging birds at the site. All site operatives will be vigilant and report any problems to the Site Manager. It is not anticipated that the pests will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath Highway, or domestic dwellings, the workforce in commercial and industrial premises, environmental receptors, and local amenities. This is due to the measures outline above. | Very unlikely. | Nuisance to local residents. Predation of species within statutory and non-statutory ecological sites. | Not significant due to the nature of waste received and management techniques employed. |
|--------------------------------|---|----------------------------------|---|---------------------------------------|---|--|
| Mud | | | | | | |
| Mud from vehicle movements. | Users of local highways. | Tracked on vehicle wheels. | The site will be inspected on a daily basis by the site management staff, and this will include a visual inspection of the access to the facility and the local highways. In the event that mud is noted to be present on the internal roads or the site entrance and highway, a road sweeper or bowser will be utilised as necessary. Further, it is proposed that a significant quantity of the material delivered to the site will be transported via the adjacent rail line. This reduces the impact of mud generated via the movement of HGVs. Vehicle checks will also be carried out. Should any of the vehicles have waste entrained on the external body or wheels, it will be dry brushed or hosed down. | Unlikely due to measures in place. | Mud on roads is unsightly and can increase the risk of road traffic incidents. | Not significant due to management techniques employed. |

| Litter | | | There will be a routine programme of housekeeping which will include the sweeping and cleaning of the routes around the site. It is therefore highly unlikely that any mud will be tracked onto the highways. It is not anticipated that the mud produced onsite will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath Highway, or domestic dwellings, the workforce in commercial and industrial premises, environmental receptors, and local amenities. This is due to the measures outline above. | | | |
|--------------------|--|------|--|--|--------------------|--|
| Wind-blown litter. | Receptors identified in Table 2. | Air. | Due to the nature of the proposed waste types, litter will not be generated at the site. The proposed waste types are not considered to represent a significant risk of litter. Strict waste acceptance procedures will be in place to ensure only permitted waste types are accepted. Details of these procedures are provided in the Operating Techniques (Appendix B of this Environmental Permit Application). A vigilant watch for litter will be undertaken by site operatives. In the unlikely event that litter is generated by the activity, the Site Supervisor will implement a litter collection as necessary. It is not anticipated that litter will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath Highway, or domestic dwellings, the workforce in commercial and industrial premises, environmental receptors, and local amenities. This is due to the measures outline above. | Very unlikely due to measures in place. | Local nuisance. | Not significant due to the nature of waste received and management techniques employed. |



Table A4 – Accident Risk Assessment and Management Plan

| What do you do that can harm and what could be harmed? | | Managing the risk | Assessing the risk | | | |
|---|--|---|--|--|--|---|
| Hazard | Receptor | Pathway | Risk Management | Probability of Exposure | Consequence | What is the overall risk? |
| What has the potential to cause harm? | What is at risk? What do I wish to protect? | How can the hazard get to the receptor? | What measures will you take to reduce the risk? If it occurs – who is responsible for what? | How likely is this contact? | What is the harm that can be caused? | What is the risk that still remains? The balance of probability and consequence. |
| Fire or failure to contain firewater. | Groundwater. Occupiers of domestic dwellings listed in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Habitats identified in Table 2. Amenities identified in Table 2. Surface water features identified in Table 2. | Infiltration. Contaminated rainwater runoff. | The risk of fire is considered to be low as the proposed waste types are not flammable. There will be strict waste acceptance procedures in place to minimise the risk of non-compliant wastes being accepted which may be combustible in nature. Details of the waste acceptance procedures are provided in the Operating Techniques (Appendix B of this Environmental Permit Application). The Operator will undertake routine maintenance of all equipment in accordance with the manufacturer's guidance. This will minimise the risk of mechanical failure which may result in an increased risk of combustion. Site notices and training will be undertaken regarding fire hazards. The Site Manager will be responsible for actions undertaken in the event of a fire. It is not anticipated that firewater will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath | Very unlikely due to the nature of the waste types and the measures in place. | Contamination of local groundwater and/or surface water. Local nuisance from smoke. | Not significant due to nature of waste types and likelihood of a fire on site. |

| | | | Highway, or domestic dwellings, the workforce in commercial and industrial premises, environmental receptors, and local amenities. This is due to the measures outline above. | | | |
|---------------------------------|---|--|--|---------------------------------------|---|--|
| Leaks/spillages of fuel/oil. | Groundwater. Occupiers of domestic dwellings listed in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Habitats identified in Table 2. Amenities identified in Table 2. | Surface run- off. Infiltration. Percolation. | The operator will undertake regular maintenance of plant equipment in accordance with manufacturer's guidance. This will minimise the risk of mechanical failure which may result in leaks. All fuel, oil and lubricants will be contained within appropriate 110% bunded tanks. The tanks will be maintained and inspected in accordance with the manufacturer's recommendations. Daily vehicle / plant checks to ensure any fuel/oil leaks etc. are repaired as soon as possible. The Site Manager will be responsible for ensuring effective remediation and documenting any incident. It is not anticipated that leakages/spillages will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath Highway, or domestic dwellings, the workforce in commercial and industrial premises, environmental receptors, and local amenities. This is due to the measures outline above. | Unlikely due to measures in place. | Contamination of land and watercourses. | Not significant due to management techniques employed. |
| Plant failure and breakdown. | Groundwater. Occupiers of domestic dwellings | Atmosphere. Percolation. Surface water run-off. | There will be a programme of planned preventative maintenance of all plant and equipment. All plant and equipment will be maintained in accordance with the manufacturer's guidance. | Unlikely due to measures in place. | Air pollution. Contamination of local groundwater and/or surface water. | Not significant due to measures in place. |

| | listed in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Habitats identified in Table 2. Amenities identified in Table 2. | | The preventative maintenance programme is designed to avoid unscheduled down time, maximising plant availability, ability to abate emissions and maintain an efficient level of operation. As such, this will minimise the risk of plant failure and breakdown. All plant and equipment will be switched off when not in regular use. It is not anticipated that plant failure will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath Highway, or domestic dwellings, the workforce in commercial and industrial premises, environmental receptors, and local amenities. This is due to the measures outline above. | | Smothering. | |
|-----------|---|---|---|---------------------------------------|--|--|
| Flooding. | Groundwater. Occupiers of domestic dwellings listed in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Amenities identified in Table 2. | Infiltration. Contaminated surface water runoff. | The site is not located in an area at risk of flooding from Rivers. The waste is unlikely to cause contamination of groundwater through infiltration due to the nature of the proposed waste types. Due to the nature of the waste types which are proposed to be used, in the event that a flood occurs or surface water comes into contact with the wastes, significant pollution or contamination of groundwater or surface water is considered unlikely. It is not anticipated that flooding will cause disruption to the nearest receptors to the site comprising of Local Wildlife Site Grand Union Canal 10m to the south and the Deciduous Woodland 50m to the north on Small Heath | Unlikely due to measures in place. | Disruption to works on site. Contamination of local groundwater and/or surface water. | Not significant due to management techniques employed. |



| | | | Highway, or domestic dwellings, the workforce in commercial and industrial premises, environmental receptors, and local amenities. This is due to the measures outline above. | | | |
|------------|---|---------------------------------------|--|---------------------------------------|---|---|
| Vandalism. | Groundwater. Occupiers of domestic dwellings listed in Table 2 above. Workforce in commercial and industrial properties identified in Table 2. Habitats identified in Table 2. Amenities identified in Table 2. | Unauthorised entry to the site. | The site is surrounded by security fencing and site entrances are protected by lockable gates, which are kept locked outside of operating hours. The security fencing and gates will be inspected on a regular basis. Any identified damage to the fence or gates that could compromise the site security will be recorded and temporarily repaired as necessary before the end of that working day. Permanent repair or replacement will be undertaken as soon as practicable. There will be procedures in place which will require all visitors to the site to sign in on arrival and sign out on departure. | Unlikely due to measures in place. | Release of polluting materials to air (smokes or fumes) water or land. | Not significant due to management techniques employed |

APPENDIX B: NATURE AND HERITAGE CONSERVATION SCREEN (EPR/MB3000KQ/A001)

Nature and Heritage Conservation

Screening Report: Bespoke Waste

| Reference | EPR/MB3000KQ/A001 |
|-------------------------|-------------------|
| NGR | SP 08838 85565 |
| Buffer (m) | 140 |
| Date report produced | 20/04/2023 |
| Number of maps enclosed | 2 |

The nature and heritage conservation sites and/or protected species and habitats identified in the table below must be considered in your application.

ironment

| Nature and heritage conservation sites | Screening distance (m) | Further Information |
|---|---------------------------|--|
| Local Wildlife Sites (LWS) | 200 | Appropriate Local Record Centre (LRC) |
| Grand Union Canal | | <u></u> |
| Protected Habitats | Screening distance (m) | Further Information |
| Deciduous woodland | up to 50m | Natural England |

The relevant Local Records Centre must be contacted for information on the features within local wildlife sites. A small administration charge may also be incurred for this service.

Please note we have screened this application for protected and priority sites, habitats and species for which we have information. It is however your responsibility to comply with all environmental and planning legislation, this information does not imply that no other checks or permissions will be required.

Please note the nature and heritage screening we have conducted as part of this report is subject to change as it is based on data we hold at the time it is generated. We cannot guarantee there will be no changes to our screening data between the date of this report and the submission of the permit application, which could result in the return of an application or requesting further information.

incident hotline 0800 80 70 60 floodline 0845 988 1188

www.environment-agency.gov.uk

