



Permit Variation Application Report

Seletia (F) Limited
Flusco Landfill,
Newbiggin,
Penrith,
Cumbria,
CA11 0JB



PROVIDING SOLUTIONS, ENSURING COMPLIANCE

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Change log

Version	Changes	Produced by	Checked by	Date
1	Original document.	Sian Wilcox	Tracey Westbury	09 April 2025
2	Addition of proposed tonnage limit in Section 1.4. Addition of Appendix 3 Environmental Risk Assessment.	Sian Wilcox	Tracey Westbury	10 July 2025
3	Addition of Appendix 4 Market Assessment, Update to company details in 1.2, Table 1.4 and Table 1.5. Update to 1.1, TCM details in Table 4.1. Updates to Section 2, Section 3.	Sian Wilcox	Tracey Westbury	24 November 2025



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1. Introduction

- 1.1. Westbury Environmental Limited have been instructed to prepare this Environmental Permit Variation Application on behalf of Seletia (F) Limited (the Operator).
- 1.2. This application is a resubmission of the original application submitted on 22nd April 2025.
 - The Environment Agency issued a Request for Information (RFI) on 26th June 2025.
 - The requested information was provided on 10th July 2025.
 - The application was deemed “not duly made” and was returned by the Environment Agency on 22nd July.
- 1.3. The Environmental Permit Ref. EPR/BM5941IH (Permit) for Flusco Landfill, Newbiggin, Penrith, Cumbria CA11 0JB contains conditions allowing the landfilling of waste along with waste transfer and treatment activities under the Std. Rules Set 2022 No 4. The bespoke landfilling activities included in the permit are listed below.
- 1.4. This permit variation application only concerns changes to the bespoke landfilling permit conditions.

Table 1.1 Landfilling Activities

Activity reference	WFD Annex I and II operations (where applicable)	Activity listed in Schedule 1 of the EP Regulations	Description of specified activity	Limits of specified activity
A1	D5 –Specially engineered landfill; R5 - the recycling or reclamation of inorganic material and R10 – Land treatment resulting in benefit to agriculture or ecology	Section 5.2 Part A(1) (a) , The disposal of waste in a landfill.	Landfill for non-hazardous waste and landfill restoration	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in conditions 2.6, as an integral part of landfilling. Only inert waste shall be deposited in Phases 2 and 3 of the landfill.
A2	D5 – Specially engineered landfill; R5 – the recycling or reclamation of inorganic material and R10 Land treatment resulting in benefit to agriculture or ecology	Section 5.2 Part A(1) (a) , The disposal of waste in a landfill.	Landfill for hazardous waste in a separate cell for SNRHW and gypsum and landfill restoration	Receipt, handling, storage and disposal of wastes, consisting of the types and quantities specified in conditions 2.6 as an integral part of landfilling.
A3	D8 – Biological treatment of waste	Section 5.4, Part A(1)(a)(i), Biological treatment of non-hazardous waste	Treatment of leachate in a facility with a capacity of >50 tonnes/ day	Leachate arising from the landfill.

Table 1.2 Directly Associated Activities

Activity reference	WFD Annex I and II operations (where applicable)	Description of specified activity	Limits of specified activity
A4	R1 – use principally as a fuel to generate energy	Pre-treatment and utilisation of landfill gas for energy recovery in an appliance with a rated thermal input < 50MW	Treatment and utilisation of landfill gas arising from the landfill.
A5	N/A	Screening of waste prior to disposal for use for capping and restoration	Only as identified in Table S2.6
A6	N/A	Temporary storage of waste (leachate)	Leachate arising from the landfill.
A7	D6 – release to water body except seas/ oceans	Discharges of site drainage from the landfill.	From surface water management system to point of entry to controlled waters.
A8	N/A	Storage of fuel for operation of plant and equipment.	Fuel storage tank.



A9	N/A	Discharge of treated leachate from the landfill	From leachate treatment plant to point of entry to sewer.
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- 1.3 The permit also includes annual input limits for the permitted activities, see Table 1.3 Annual Waste Input Limits.

Table 1.3 Existing Annual Waste Input Limits for Landfill Activities

Category	Limit Tonnes/Year
Non-hazardous waste	66,000
Stable non-reactive hazardous waste	10,000
Gypsum waste	10,000
Inert Waste	25,000
Waste for restoration	25,000

- 1.4. The application seeks to vary the Annual Waste Input Limits for Inert Waste, Non-Hazardous Waste, and waste for Restoration to the proposed limits shown in the table below.

Table 1.4 Proposed Annual Waste Input Limits for Landfill Activities

Category	Limit Tonnes/Year
Non-hazardous waste	500,000
Stable non-reactive hazardous waste	10,000
Gypsum waste	10,000
Inert Waste	200,000
Waste for restoration	200,000

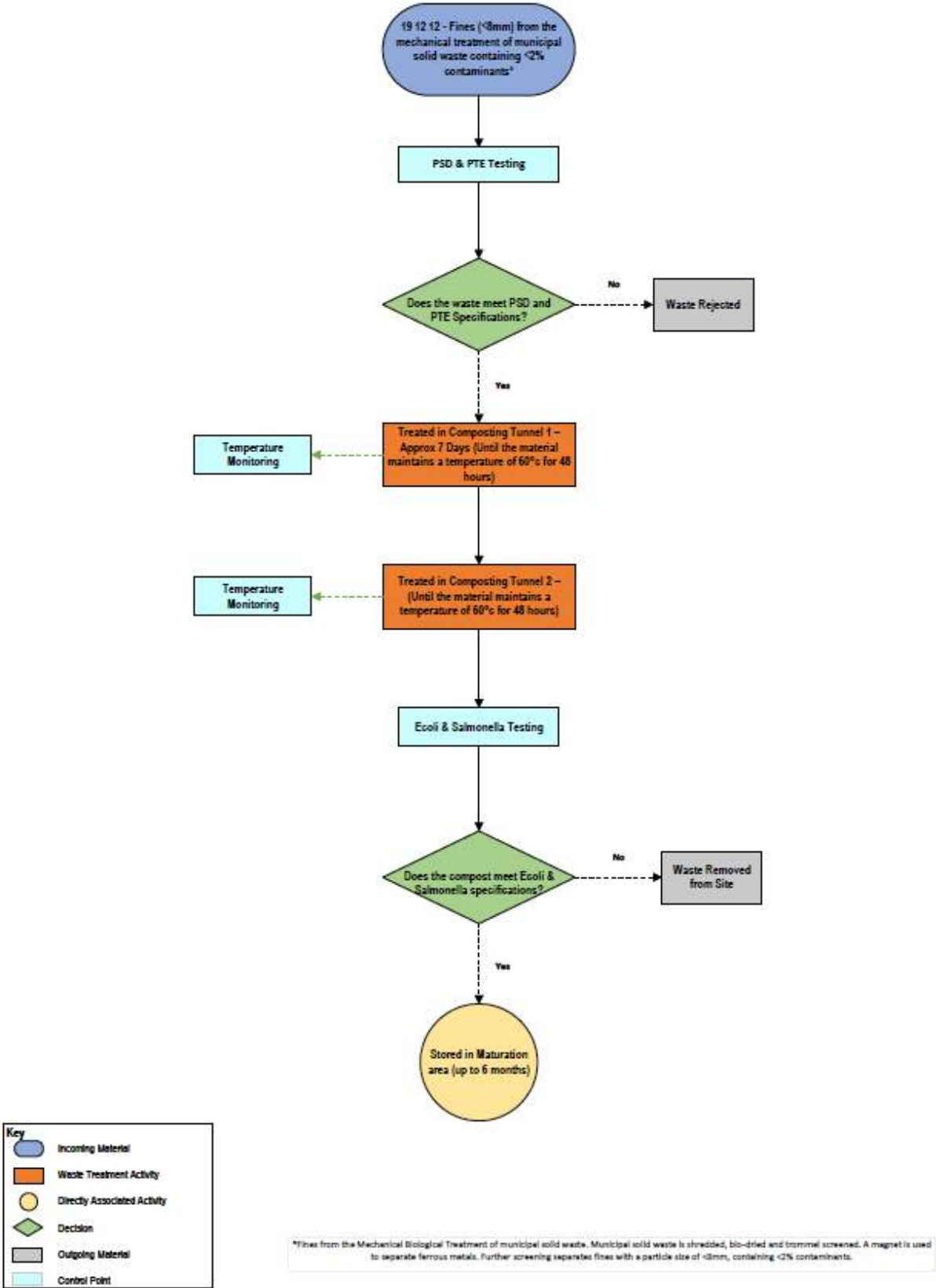
- 1.5. There are no proposed changes to the input limits for stable non-reactive hazardous waste or gypsum waste.

- 1.6. This application also seeks to make the following additions to the lists of acceptable wastes:

- Addition of waste code 18 02 03 (Wastes whose collection and disposal is not subject to special requirements in order to prevent infection) to Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste, in the Permit.
 - This waste stream will consist of animal faeces.
 - This waste will be bagged before arrival on Site.
 - This waste will be stored on Site for less than one day prior to deposit in the landfill.
- Addition of waste code 19 05 03 (off specification compost) to Table S2.3 Permitted waste types for restoration, in the Permit.
 - This waste will be produced in accordance with the requirements of the Animal By-Products Regulations.
 - This waste will have been tested and evidenced to meet the specifications for pathogenic microorganisms.
 - A process flow containing information on the production of this waste is provided below.



Compost Like Output (CLO) Origin Flow Diagram





- 1.7. There is no change to the type of waste activities being carried out on Site or the permit boundary.
- 1.8. The relevant Environment Agency forms (Part A, Part C2, Part C4, and Part F1) and supporting information are included within this Environmental Permit Application Report.

Background

- 1.9. The original permit for this Site was issued to Lakeland Waste Management Limited in July 2006. The permit was varied in August 2010 to add Standard Rules set SR2008 No.7_75k and was consolidated in June 2016.
- 1.10. An administrative variation was issued on 20th August 2025, updating the company name to Seletia (F) Limited.



2. Non-Technical Summary

- 2.1. This Environmental Permit Variation Application seeks to vary the Permit Ref. EPR/BM5941IH to increase the annual waste input limits for non-hazardous waste, inert waste and waste for restoration.
- 2.2. This application proposes the addition of waste code 18 02 03 consisting of animal faeces to the waste codes for landfilling and the addition of waste code 19 05 03 to the waste that can be used in the restoration of the landfill
- 2.3. There are no other proposed changes to the permitted activities being carried out on Site.
- 2.4. The increase of the annual tonnage limits for incoming waste for landfilling will enable efficient and prompt completion and restoration of the landfill.
- 2.1. A report outlining the market demand and justification for the increase to annual waste input limits has been provided, see Appendix 1 Market Assessment.
- 2.2. The following certificates for the Technically Competent Manager (TCM) for this Site are provided in Appendix 2, Technically Competent Management.
 - Original Certificate of Technical Competency (COTC)
 - Continued Competency Certification
- 2.3. A comprehensive Environmental Risk Assessment has been prepared to identify risks associated with the proposed changes and provide information on the proposed mitigation for these risks, see Appendix 3 Environmental Risk Assessment.
- 2.4. Within Application Form C2 question 3c: *Finances* we have responded "Other". The landfill will already have Financial Provision in place.



3. Environmental Risk

- 3.1. This permit variation application seeks to increase the annual waste input limits for non-hazardous and inert wastes, and add two waste codes. A Site specific Environmental Risk Assessment (ERA) has been prepared to assess the potential impact to environmental risk associated with these changes, see Appendix 3 Environmental Risk Assessment.
- 3.2. The key environmental risk factors that have been considered in the ERA include:
 - Dust
 - Noise
 - Odour
 - Landfill Gas
 - Leachate
 - Litter
 - Mud on local roads
- 3.3. While no new sources of environmental risk have been identified, the increased annual throughput and additional waste codes are expected to impact existing environmental risk factors. This due to the impact that the changes are expected to have on existing Site operations, such as:
 - An increase in vehicle movements due to higher volumes of waste being delivered to and handled on site.
 - More frequent waste handling and tipping activities.
 - Accelerated cell competition and infrastructure installation, such as landfill gas extraction systems and capping works.
- 3.4. These operational changes have been considered when assessing the impact of the proposed changes on environmental risk.
- 3.5. The ERA considers the potential impact of the proposed changes on sensitive receptors, including nearby residential areas, leisure facilities and local roads.
- 3.6. Mitigation measures currently in place, including odour control, dust suppression and litter management, are expected to remain effective, however may require more frequent application as a result of the proposed changes.

Management Plans and Procedures

- 3.7. An Odour Management Plan (OMP) has been produced, see Appendix 4 Odour Management Plan. This OMP considers the impact of odour emissions on nearby receptors as a result of the proposed changes, and details how odour emissions will be managed.
- 3.8. To manage any potential risk of an increase in odour emissions as a result of the proposed changes, a self-imposed limit on sulphur content will be applied to incoming waste loads. This will be implemented through the Waste Acceptance Procedure in the EMS, see Appendix 5 Waste Acceptance Procedure.
- 3.9. The increased risk of mud being tracked on to local roads will be managed in accordance with a Mud, Litter and Debris Procedure in the EMS, see Appendix 6 Mud, Litter and Debris Procedure.
- 3.10. A Fire Prevention Plan has been produced addressing the risk of fire as a result of waste being stored on Site prior to landfilling, see Appendix 7, Fire Prevention Plan.
- 3.11. A Gas Management Plan (GMP) was produced in September 2023. This GMP provides a framework for the management of landfill gas at Flusco Landfill, see Appendix 8 Gas Management Plan. Due to the changes in Operator at the Site and over tipping of existing waste an updated Gas Management Plan is being prepared at this time by SLR Consulting Ltd.
- 3.12. A Dust Management Plan (DMP) has been produced, see Appendix 9 Dust Management Plan. This DMP considers the impact of dust emissions on nearby receptors as a result of the proposed changes, and details how dust emissions will be managed.



- 3.13. A Noise Management Plan (NMP) has been produced, see Appendix 10 Noise Management Plan. This NMP considers the impact of noise emissions on nearby receptors as a result of the proposed changes, and details how noise will be managed.
- 3.14. A Pest Management Plan (PMP) has been produced, see Appendix 11 Pest Management Plan. This PMP considers the impact of pests on nearby receptors as a result of the proposed changes, and details how pests will be managed

Assessments and Management Plans Not Impacted

- 3.15. The proposed increase in annual tonnage limits impacts the rate of waste disposal rather than the total volume of waste deposited in the landfill. As such, there are no proposed changes to restoration contours, settlement levels, engineering infrastructure, or environmental control systems for gas, leachate, and surface water.
- 3.16. The following assessments and management plans have not been revised or included within this application for the proposed increase in annual tonnage limits:
- **Environmental Setting and Installation Design (ESID)**
 - There are no proposed changes to restoration contours, engineering design, or monitoring infrastructure.
 - The increase in annual tonnage limits will only impact the rate of waste disposal, not the total volume of waste disposed of in the landfill.
 - The additional waste types will not pose any risks not already included in the ESID assessments completed for the landfill.
 - **Hydrogeological Risk Assessment (HRA), Stability Risk Assessment (SRA), and Gas Risk Assessment (GRA)**
 - There is no proposed change to the total volume of waste to be landfilled. Therefore, no change to the above assessments are considered to be required.
 - The proposed waste code (18 02 03 including animal faeces) for landfilling is not considered to pose additional risks compared to the wastes already in the permit and therefore would not change the above assessments.
 - **Leachate Management Plan (LMP)**
 - It is not considered that the proposed changes will have a significant impact on leachate management.
 - Since there is no additional waste proposed, there are no proposed changes to leachate management infrastructure.
 - **Surface Water Management Plan (SWMP)**
 - Since there are no proposed changes to restoration contours, it is not considered that there will be any changes to surface water runoff management measures already in place.



4. Operating Techniques

Environmental Management System

- 4.1. The Site will be operated in accordance with a written Environmental Management System (EMS).
- 4.2. A hard copy of the EMS will be kept on Site at all times. Each member of staff at the Site will have access to the EMS.
- 4.3. The EMS folder shall include a copy of the Environmental Permit and will contain the following sections:

EMS Report

This report contains a description of the purpose and scope of the EMS, all Site details including the location of the Site, receptors located in close proximity to the Site boundary, waste storage, any plant and equipment that is used on the Site, the different types of waste activities carried out on Site, the Site security measures, information on the competence of the staff working on Site, roles and responsibilities for each member of staff and details for Site closure, where appropriate.

Site Condition Report

This records the condition of land covered by the Environmental Permit at various stages during the life of the permit.

Climate Change Risk Assessment and Adaptation Plan

This report identifies how climate change will impact the Site and what will be done to mitigate the impacts of climate change.

Odour Management Plan

This report considers the potential impact of Site operations on local receptors and details relevant mitigation measures.

Technical Competence

This section of the EMS includes details of the competence status of the Technical Competent Manager(s) (TCM), the operational hours for the Site, the minimum attendance requirements for the TCM and copies of relevant certificates.

Authorisations

A copy of the permit and any EA Registrations for the Site will be located in the EMS.

Technical Competence

This section of the EMS includes details of the competence status of the Technical Competent Manager(s) (TCM), the operational hours for the Site, the minimum attendance requirements for the TCM and copies of relevant certificates.

Procedures and Forms

The EMS contains a number of procedures, covering: implementation, operational control, waste acceptance and rejection, environmental protection, emergency provisions and reporting. Records to be produced in accordance with these procedures are provided in the EMS as forms. The associated completed forms provide records that evidence the implementation of the EMS. The following list details procedures that are included in the EMS:

Implementation

- Environmental Training, Awareness and Competence
- Compliance with Legal requirements
- Staff Organogram
- Reviewing and Auditing Documentation that outlines how reviewing of the EMS and associated documentation is undertaken. This procedure contains a list of how frequently documents within the EMS should be reviewed / audited.



Operational Control

- Housekeeping, litter, pests and vermin
- Noise Control
- Waste storage and Handling
- Site Security
- Reporting and Investigation of Accidents, Incidents and Complaints
- Dust, Fibres and Particulates
- Maintenance
- Waste Storage procedure including information on the following:
 - Identification of wastes stored on site.
 - Storage times of waste on site.
 - Quantity of Waste Stored on site.

Waste Acceptance and Rejection

- Waste Acceptance
- Waste Rejection and Non-compliance
- Waste Reporting
- Duty of Care

Environmental Protection

- Dust Fibres and Particulate
- Mud and Debris
- Noise Control
- Odour
- Surface Water Management

Environmental Monitoring

- Groundwater
- Landfill Gas
- Surface Water

Emergency Provisions

- Environmental Accidents /Incidents / Complaints and associated forms
- Fire
- Flood
- Spillages
- Utility Failure

Reporting

- Waste Returns
 - Notifications to the Environment Agency
- This list is not exhaustive.*



5. Technically Competent Manager

- 5.1. George Brown will be the Technically Competent Manager for this Site, See Table 5.1 TCM Details.
- 5.2. The following certificates for the Technically Competent Manager (TCM) for this Site have been provided, see Appendix 2 Technically Competent Management.
- Original Certificate of Technical Competency (COTC)
 - Continued Competency Certification

Table 5.1 TCM Details

First Name	George
Last Name	Brown
Date of Birth	■■■■■■■■■■
Phone	07950278280
Email	george@seletia.eco



Application form

Part A

Application for an environmental permit

Part A – About you



You will need to complete this part of the application form if you are applying:

- for a new permit
- to vary (change) an existing permit
- to surrender your permit
- to transfer an existing permit to yourself

Visit our website to check this is the latest version of the form: <https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-a-about-you>.

Please read through the form before completing it. We expect it will take less than 1 hour to complete if you have all the necessary information available.

The form can be:

1. Saved onto a computer and then filled in.

We recommend you use an Adobe Acrobat product to complete the form. You may not be able to complete the form using different software, such as a PDF reader built into your internet browser.

2. Printed off and filled in by hand. Please write clearly in the answer spaces.

Contents

Section 1: About you

Section 2: Applications from an individual

Section 3: Applications from groups of individuals

Section 4: Applications from public bodies or public corporations

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Section 8: How to contact us

Section 9: Where to send your application

Section 10: Feedback

Appendix 1: Date of birth information for installation and waste activities (applications for a new permit or transferring a permit and variations to a waste activity) only

Section 1: About you

About you

Tick the box that describes you as the applicant.

- ☐ An individual. Now go to **section 2**.
- ☐ A group of individuals. Now go to **section 3**.
- ☐ A public body or public corporation. Now go to **section 4**.
- ☐ A government department. Now go to **section 5**.
- ☒ A registered company, limited liability partnerships or other incorporated body. Now go to **section 6**.

To apply, you must be the legal operator of the activity or facility. See: <https://www.gov.uk/guidance/legal-operator-and-competence-requirements-environmental-permits#what-a-legal-operator-is>

Section 2: Applications from an individual

2.1 Name of applicant

Title (optional)

First name

Last name

2.2 Address of applicant

Address

Postcode

Use a business address where possible. Otherwise use a personal address. Individuals based overseas must provide an address for service in the UK.

Now go to **section 7: Contact details**

Section 3: Applications from groups of individuals

Examples of groups of individuals include:

- individuals acting jointly
- individuals that are partners in a general or limited partnership (but not a limited liability partnership)
- unincorporated charities, trusts and associations, (unless recognised as a legal person)

3.1 Trading or organisation name (if any)

Note: we can only issue and transfer permits to named individuals and not to trading or organisation names

3.2 Organisation type

For example, individuals acting jointly (e.g. a club), general partnership, unincorporated charity

3.3 Charity Commission registration number (if any)

Some individuals or groups of individuals with recognised charitable status are entitled to reduced permit fees for certain water discharge activities. We need the Charity Commission registration number to check if this applies to this application.

3.3 Companies House or Limited Liability Partnership number

3.4 Names and addresses of individuals

Provide the names and addresses of all individuals acting jointly, or in a general or limited partnership. Enter the name and address of the first individual. Provide a continuation sheet for all remaining individuals.

For corporate partners in a general or limited partnership, provide the company name and registration number on the continuation sheet.

For unincorporated trusts, charities and associations, provide the name and address of the nominated representative who will hold the permit in the organisation's name and all individuals that form the governing body, for example trustees. Use a continuation sheet as necessary.

Section 3: Applications from groups of individuals, continued

3.4a Name of first individual

Title (optional)

First name

Last name

3.4b Address of first individual

Address

Postcode

Use a business address where possible. Otherwise use a personal address. Individuals based overseas must provide an address for service in the UK.

3.4c Continuation sheet

Document reference of continuation sheet (if any):

Now go to **section 7: Contact details**

Section 4: Applications from public bodies or public corporations

4.1 Name of public body or corporation

4.2 Type of public body or corporation

For example, local government body, executive agency, non-departmental public body

4.3 Charity Commission number (if any)

Section 4: Applications from public bodies or public corporations, continued

4.4 Address of public body or corporation

Address

Postcode

Now go to **section 7: Contact details**

Section 5: Applications from government departments

5.1 Title of Secretary of State for relevant department

Title

For example, Secretary of State for Environment, Food and Rural Affairs

5.2 Address of the government department

Address

Postcode

Now go to **section 7: Contact details**

Section 6: Applications from registered companies, limited liability partnerships and other corporate bodies

6.1 Name of company, limited liability partnership or other incorporated body

Seletia (F) Limited

6.2 Type of incorporated body

Private Limited Company

For example, private limited company, public limited company, limited liability partnership, incorporated society, charitable incorporated organisation or community interest company

6.3 Companies House registration number (if any)

02728867

6.4 Charity Commission number (if any)

6.5 Additional information if not registered with Companies House or The Charity Commission

If you are not registered with Companies House or The Charity Commission, supply:

- evidence that your company or corporate body is a legal entity
- a description of how you will be the legal operator if you are an overseas company without a UK presence.

This does not apply to variations or surrender applications.

Document reference for evidence/description:

Evidence of legal entity could, for example, include:

- a copy of your Certificate of Incorporation for companies.
- a copy of your Memorandum and Articles of Association for incorporated charities and trusts

Section 6: Applications from registered companies, limited liability partnerships and other corporate bodies, continued

6.6 Principal address or Registered Office of registered company, limited liability partnership or other incorporated body

Address

10 James Nasmyth Way,
Eccles,
Manchester,
England,

Postcode

M30 0SF

For registered companies and limited liability partnerships this is the office address registered with Companies House. For other incorporated bodies use your principal business address or the address registered with The Charity Commission.

6.7 Main business address of registered company, limited liability partnerships or other incorporated body

Address

Postcode

Your main UK business address is required only if your principal or registered office address is overseas.

Now go to **section 7: Contact details**

Section 7: Contact details

7.1 Application contact

Provide the details of someone we can contact about your application. The person must have the authority to act on your behalf.

Title (optional)

Ms

First name

Tracey

Last name

Westbury

Position

Director

Address

Westbury Environmental
Agriculture House
Southwater Way
Telford
Shropshire

Postcode

TF3 4NR

Phone number

01952 879705

Email

info@westburyenv.co.uk

- ☒ Tick if you would like all general communication about this application sent to the above email address.

7.2 Contact for receipt of official documents

This question does not apply to applications from individuals acting jointly

Provide the details of someone we can send official documents to, such as notices and copies of permits. For companies this must be a company secretary, clerk or a director.

For partnerships, this must be a person with control or management of the partnership.

- ☐ Tick if the contact is the same as in question 7.1 (application contact). Otherwise complete the details below.

Section 7: Contact details, continued

Title (optional)

First name

Steven

Last name

Nimmo

Position

Director

Email

steve@seletia.eco

Telephone number

07913 235 624

7.3 Operational contact

This is optional for variations and surrenders. We use this information to help us know who to contact about operations at the site, returns and reporting.

- ☐ Contact details are the same as question 7.1 (application contact)
- ☒ Contact details are the same as question 7.2 (contact for receipt of official documents)

Otherwise complete the details below.

Title (optional)

First name

Last name

Address

Postcode

Phone number

Section 7: Contact details, continued

Email

7.4 Billing contact

Provide a billing contact where we can send invoices, such as the annual subsistence charge

- ☐ Contact details are the same as question 7.1 (application contact)
- ☒ Contact details are the same as question 7.2 (contact for receipt of official documents)
- ☐ Contact details are the same as question 7.3 (operational contact)

Otherwise complete the details below.

Title (optional)

First name

Last name

Position

Address

Postcode

Phone number

Email

Now fill in Appendix 1 if you are applying for a new permit or transferring a permit for an installation or waste activity.

This does not apply to applications from public bodies, statutory corporations or government departments.

Section 8: How to contact us

If you have difficulty filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

Email: enquiries@environment-agency.gov.uk

Website: www.gov.uk/government/organisations/environment-agency

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve it. More information on how to do this is available at: www.gov.uk/government/organisations/environment-agency/about/complaints-procedure

Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.

Section 9: Where to send your application

Send one electronic copy of your completed application via email to:

- PSC-WaterQuality@environment-agency.gov.uk for water discharge activities
- PSC@environment-agency.gov.uk for waste or installation activities
- flood.permitting@environment-agency.gov.uk for flood risk activities

Alternatively send one paper copy of your application to:

Integrated Permitting Services
Environment Agency
Quadrant 2
99 Parkway Avenue
Parkway Business Park
Sheffield
S9 4WF

Section 10: Feedback

We want to make our forms easy to fill in and easy to understand. Please use the space below to give us any comments that you may have about this form. (You don't have to answer this part of the form, but it will help us improve our forms if you do.)

How long did it take you to fill in this form?

We will use your feedback to improve our form. Would you like a reply to your feedback?

- ☐ Yes please
- ☐ No thank you

Appendix 1: Date of birth information for installation and waste activities (applications for a new permit or transferring a permit and variations to a waste activity) only

This appendix applies to installation and waste operation activities. Only complete if you are applying for a new permit or to transfer an existing one. This does not apply to applications from public bodies, public corporations and government departments

Dates of birth information in this appendix will not be put onto our Public Register

1 Are you applying as an individual; group of individuals; or a registered company, Limited liability partnership or other incorporated body?

- ☐ An individual. Now go to 2.
- ☐ A group of individuals. Now go to 3.
- ☐ A registered company, limited liability partnership or other incorporated body. Now go to 4.

2 Applications from an individual

Title (optional)

First name

Last name

Date of birth (DD/MM/YY)

3 Applications from a group of individuals

Provide the names and dates of birth of all individuals acting jointly, or in a general or limited partnership.

For unincorporated trusts, charities and associations provide the name and date of birth of all individuals that are part of the group's controlling or guiding mind. For example:

- trustees
- chairperson
- treasurer
- secretary
- or a person with a similar position

Provide a continuation sheet where necessary.

First individual

Title (optional)

First name

Last name

Date of birth (DD/MM/YY)

Second individual

Title (optional)

First name

Last name

Date of birth (DD/MM/YY)

Third individual

Title (optional)

First name

Last name

Date of birth (DD/MM/YY)

Fourth individual

Title (optional)

First name

Last name

Date of birth (DD/MM/YY)

Continuation sheet for additional individuals or corporation

Document reference of continuation sheet (if any):

4 Applications from registered companies, limited liability partnership or other incorporated bodies

For registered companies provide the names and dates of birth of all directors and any company secretary.

For limited liability partnerships provide the names and dates of birth of all partners.

For other incorporated bodies provide the name and date of birth of all individuals that are part of the body's controlling or guiding mind. For example:

- trustees
- chairperson
- treasurer
- secretary
- or a person with a similar position

Use a continuation sheet where necessary.

Provide the company name and registration number on a continuation sheet for any corporate:

- directors
- company secretaries
- partners

First person

Title (optional)

First name

Last name

Position

Date of birth (DD/MM/YY)

Second person

Title (optional)

First name

Last name

Position

Date of birth (DD/MM/YY)

Third person

Title (optional)

First name

Last name

Position

Date of birth (DD/MM/YY)

Fourth person

Title (optional)

First name

Last name

Position

Date of birth (DD/MM/YY)

Continuation sheet for additional people

Document reference of continuation sheet (if any):



Application form

Part C2

Application for an environmental permit

Part C2 – General – varying a bespoke permit



Fill in this part of the form, together with part A and the relevant parts of C3 to C7 and part F1 or F2, if you are applying to vary (change) the conditions or any other part of the permit. Please check that this is the latest version of the form available from our website.

You only need to give us details in this application for the parts of the permit that will be affected (for example, if you are adding a new facility or changing existing ones).

Waste operation changing to installation or vice versa?

If your changes mean that a waste operation becomes an installation (or vice versa) you also need to fill in either part C3 (waste to installation) or part C4 (installation to waste).

You do not need to resend any information from your original permit application if it is not affected by your proposed changes.

Please read through this form and the guidance notes that came with it.

The form can be:

- 1) saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.
- 2) printed off and filled in by hand. Please write clearly in the answer spaces.

It will take less than two hours to fill in this part of the application form.

Contents

- 1 About the permit
 - 2 About your proposed changes
 - 3 Your ability as an operator
 - 4 Consultation
 - 5 Supporting information
 - 6 Environmental risk assessment
 - 7 How to contact us
- Appendix 1 – Low impact installation checklist
Appendix 2 – Date of birth information for Relevant offences and/or Technical ability questions only

1 About the permit

Note: If you are applying to convert your existing permit to a standard permit or add a standard facility you need to fill out form C1.

1a Discussions before your application

If you have had discussions with us before your application, give us the permit reference or details on a separate sheet. Tell us below the reference you have given this extra sheet.

Permit or document reference

1b Permit number

What is the permit number that this application relates to?

1c Site details

What is the name, address and postcode of the site?

Site name

Address

Postcode

2 About your proposed changes

2a Type of variation

What type of variation are you applying for?

Minor technical

☐

Normal variation

☒

Substantial

☐

2 About your proposed changes, continued

2b Changes or additions to existing activities

Please give us brief details in the box below. More detailed information can be given in Table 1 below.

The application seeks to vary the annual waste input limits in the environmental permits to the following proposed limits:
Non-hazardous waste - 500,000 tonnes. Inert Waste - 200,000 tonnes. Waste for restoration - 200,000 tonnes.

Addition of waste code 18 02 03 (Wastes whose collection and disposal is not subject to special requirements in order to prevent infection) to the list of permitted waste types for disposal at a landfill for non-hazardous waste.

Addition of waste code 19 05 03 (off specification compost) to the list of permitted waste types for restoration.

Fill in Table 1 with details of all the proposed changes to current activities. In the final column of the table, give us the document reference for the proposed changes and send them to us with your filled in application form.

Fill in a separate table for each activity you are applying to vary or add. Use a separate sheet if you have a long list and send it to us with your application form. Tell us below the reference you have given this document.

Document reference

Application Report V3

You only need to fill in one table for your mining waste operations.

2c Consolidating (combining) or updating existing permits

If your proposed change is to modernise (update) your permit, now answer 2c1; otherwise go to 2d.

If your proposed change is to consolidate (combine) a number of permits, now answer 2c2; otherwise go to 2d.

Note: In both cases we may require additional information from you about, for example, your management system. Therefore we would always advise you to talk to us before you submit any application to modernise or consolidate permits.

2c1 Do you want to have a modern style permit?

No ☐

Yes ☐

2c2 Identify all the permits you want to consolidate (combine) by listing the permit numbers in Table 2 below

Table 2 – Permit numbers

2d Treating batteries

2d Are you proposing to treat batteries?

No ☒

Yes ☐ Tell us how you will do this and send us a copy of your explanation and tell us below the reference you have given this explanation

Document reference for the explanation

2e Ship recycling

2e1 Is your activity covered by the Ship Recycling Regulations 2015? (See the guidance notes on part C2.)

No ☒

Yes ☐ Tell us how you will do this. Please send us a copy of your explanation and your facility recycling plan, and tell us below the reference numbers you have given these documents

Document reference for the explanation

Document reference for the facility recycling plan

2e2 Is this a renewal of an existing authorisation covered by the Ship Recycling Regulations 2015?

No ☒

Yes ☐ Tell us the expiry date of your existing authorisation

(DD/MM/YYYY)

2 About your proposed changes, continued

Table 1 – Changes to existing activities

Fill in Table 1 with details of all the proposed changes to current activities. In the final column of the table, give us the document reference for the proposed changes and send them to us with your filled in application form.

Name	Installation schedule 1 references	Description of the installation activity	Description of waste operation	Description of the mining waste operations	Description of water discharge activity	Description of groundwater activity	Proposed changes document reference
i.e. name of installation, waste operation, mining waste operation, water discharge activity or groundwater activity							
Example – effluent unique name					Example – treated sewage effluent		
If you do not have enough room, go to the line below or send a separate document and give us the document reference here							
Flusco Landfill	Landfill		Variation to increase				Application Report V3
			annual waste input				
			limits and add waste				
			codes for non-haz				
			waste disposal and				
			waste for restoration				

2 About your proposed changes, continued

2f Low impact installations (installations only)

2f1 Will any changes mean that any of the regulated facilities will become low impact installations?

No ☒ Now go to section 3

Yes ☐ If yes, tell us how you meet the conditions for a low impact installation (see the guidance notes on part C2 – Appendix 1)

Document reference

Tick the box to confirm you have filled in the low impact installation checklist in appendix 1 for each regulated facility

☐

3 Your ability as an operator

If you are applying to add waste installations or waste operations to a permit that has not previously had them, you need to fill in all of section 3.

If you are applying to consolidate (combine) two or more permits or have an updated permit you must fill in question 3d.

This section does not apply for applications to surrender a permit.

3a Relevant offences

Installations and waste operations only (see the guidance notes on part C2).

3a1 Have you, or any other relevant person, been convicted of any relevant offence?

No ☒ Now go to question 3b

Yes ☐ Please give details below

Name of the relevant person

Title (Mr, Mrs, Miss and so on)

First name

Last name

Position held at the time of the offence

Name of the court where the case was dealt with

Date of the conviction (DD/MM/YY)

Offence and penalty set

Date any appeal against the conviction will be heard (DD/MM/YYYY)

If necessary, use a separate sheet to give us details of other relevant offences and tell us below the reference number you have given the extra sheet.

Document reference

Now go to question 3b

Please also complete the details in Appendix 2.

3b Technical ability

Specified waste management activities and waste operations only (see the guidance notes on part C1).

Please indicate which of the two schemes you are using to demonstrate you are technically competent to operate your facility and the evidence you have enclosed to demonstrate this.

ESA/EU skills

I have enclosed a copy of the current Competence Management System certificate

☐

CIWM/WAMITAB scheme

Please select **one** of the following:

• I have enclosed a copy of:

– the relevant qualification certificate/s

☒

or

– evidence of deemed competence

☐

or

3 Your ability as an operator, continued

- Environment Agency assessment ☐
- or
- evidence of nominated manager status under the transitional provisions for previously exempt activities ☐

and, if deemed competent or Agency-assessed, or if there is evidence of a nominated manager, or if the original qualification is over two years old:

I have enclosed a copy of the relevant current continuing competence certificate/s ☒

For each technically competent manager please give the following information. If necessary, use a separate sheet to give us these details and tell us below the document reference you have given the extra sheet.

Title (Mr, Mrs, Miss and so on) 

First name

Last name

Phone

Mobile

Email

Please provide the environmental permit number/s and site address for **all** other waste activities that the proposed technically competent manager provides technical competence for, including permits held by other operators. Continue on a separate sheet as required.

Permit number	Site address	Postcode
BM60261B	Hespin Wood Landfill, Todhills, Carlisle, Cumbria	CA6 4BJ

Document reference

Now go to question 3c

Please also complete the details in Appendix 2.

3c Finances

Installations, waste operations and mining waste operations only (see the guidance notes on part C2).

Please note that if you knowingly or carelessly make a statement that is false or misleading to help you get an environmental permit (for yourself or anyone else), you may be committing an offence under the Environmental Permitting (England and Wales) Regulations 2016.

Do you or any relevant person or a company in which you were a relevant person have current or past bankruptcy or insolvency proceedings against you?

No ☒

Yes ☐ Please give details below, including the required set-up costs (including infrastructure), maintenance and clean up costs for the proposed facility against which a credit check may be assessed

We may want to contact a credit reference agency for a report about your business's finances.

3 Your ability as an operator, continued

Landfill, Category A mining waste facilities and mining waste facilities for hazardous waste only

How do you plan to make financial provision (to operate a landfill or a mining waste facility you need to show us that you are financially capable of meeting the obligations of closure and aftercare)?

Renewable bonds ☐

Cash deposits with the Environment Agency ☐

Other – provide comprehensive details ☒

Document reference Application Report V3

Provide a cost profile and expenditure plan of your estimated costs throughout the aftercare period of your site.

Document plan reference

Now go to question 3d

3d Management systems

You must have an effective, written management system in place that identifies and reduces the risk of pollution. You may show this by using a certified scheme or your own system.

Your permit requires you (as the operator) to ensure that you manage and operate your activities in accordance with a written management system.

You need to be able to explain what happens at each site and which parts of the overall management system apply. For example, at some sites you may need to show you are carrying out additional measures to prevent pollution because they are nearer to sensitive locations than others.

You can find guidance on management systems on our website at www.gov.uk/government/organisations/environment-agency.

Tick this box to confirm that you have read the guidance and that your management system will meet our requirements ☐

What management system will you provide for your regulated facility?

ISO 14001 ☐

BS 8555 (Phases 1–5) ☐

Acorn ☐

Green dragon ☐

Own management system ☒

Please make sure you send us a summary of your management system with your application.

Document reference/s Application Report V3

4 Consultation

Fill in 4a to 4c for installations and waste operations and 4d for installations only.

Could the waste operation or installation involve releasing any substance into any of the following?

4a A sewer managed by a sewerage undertaker?

No ☒

Yes ☐ Please name the sewerage undertaker

4b A harbour managed by a harbour authority?

No ☒

Yes ☐ Please name the harbour authority

4c Directly into relevant territorial waters or coastal waters within the sea fisheries district of a local fisheries committee?

No ☒

Yes ☐ Please name the fisheries committee

4 Consultation, continued

4d Is the installation on a site for which:

4d1 a nuclear site licence is needed under section 1 of the Nuclear Installations Act 1965?

No ☒

Yes ☐

4d2 a policy document for preventing major accidents is needed under regulation 5 of the Control of Major Accident Hazards Regulations 2015, or a safety report is needed under regulation 7 of those Regulations?

No ☒

Yes ☐

5 Supporting information

5a Provide a plan or plans for the site

See the guidance notes on part C2 for what needs to be marked on the plan.

Clearly mark the site boundary or discharge point, or both. Also include site drainage plans, site layout plans, and plant design drawings/process flow diagrams (as required). (See the guidance notes on part C2.)

Document reference/s of the plans

n/a - site unchanged

5b Do any of the variations you plan to make need extra land to be included in the permit?

No ☒

Yes ☐ Please provide a site report for the extra land

Document report reference/s

5c Provide a non-technical summary of your application

Document reference of the summary

Application Report V3

5d Risk of fire from sites storing combustible waste

Are you applying for an activity that includes the storage of combustible wastes?

(This applies to all activities excluding standalone water and groundwater discharges.)

No ☒ Go to question 5f

Yes ☐ Go to question 5e

5e Will your variation increase the risk of a fire occurring or increase the environmental risk if a fire occurs?

See the guidance notes on part C2.

No ☐

Yes ☐ Provide a fire prevention plan. You need to highlight any changes you have made since your pre-application discussions

Document reference of the plan

5f Adding an installation

If you are applying to add an installation, tick the box to confirm that you have sent in a baseline report and provide a reference

☐

Document reference of the report

6 Environmental risk assessment

If you need one, see the guidance notes on part C2.

Provide an assessment of any additional risks the proposed changes or additions to your regulated facilities poses to the environment as part of your application to vary this permit. The risk assessment must follow the methodology set out in 'Risk assessments for your environmental permit' at <https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit> or an equivalent method.

Document reference for the assessment

Application Report V3

7 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

Email: enquiries@environment-agency.gov.uk

Website: www.gov.uk/government/organisations/environment-agency

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve it.

Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.

Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form?

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please

☐

No thank you

☐

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No ☐

Yes ☐

Amount received

£ _____

Plain English Campaign's Crystal Mark does not apply to appendix 1.**Appendix 1 – Low impact installation checklist**

Installation reference				
Condition	Response			Do you meet this?
A – Management techniques	Provide references to show how your application meets A			Yes ☐
	References			No ☐
B – Aqueous waste	Effluent created		m ³ /day	Yes ☐ No ☐
C – Abatement systems	Provide references to show how your application meets C			Yes ☐
	References			No ☐
D – Groundwater	Do you plan to release any hazardous substances or non-hazardous pollutants into the ground?		Yes ☐ No ☐	Yes ☐ No ☐
E – Producing waste	Hazardous waste		Tonnes per year	Yes ☐
	Non-hazardous waste		Tonnes per year	No ☐
F – Using energy	Peak energy consumption		MW	Yes ☐ No ☐
G – Preventing accidents	Do you have appropriate measures to prevent spills and major releases of liquids? (See 'How to comply'.)		Yes ☐ No ☐	Yes ☐ No ☐
	Provide references to show how your application meets G			
	References			
H – Noise	Provide references to show how your application meets H			Yes ☐
	References			No ☐
I – Emissions of polluting substances	Provide references to show how your application meets I			Yes ☐
	References			No ☐
J – Odours	Provide references to show how your application meets J			Yes ☐
	References			No ☐
K – History of keeping to the regulations	Say here whether you have been involved in any enforcement action as described in Compliance History Appendix 1 explanatory notes		Yes ☐ No ☐	

Appendix 2 – Date of birth information for Relevant offences and/or Technical ability questions only

Date of birth information in this appendix will not be put onto our Public Register

Have you filled in the Relevant Offences question?

Yes ☒

No ☐

Have you filled in the Technical ability question?

Yes ☒

No ☐

2 Relevant Offences - date of birth information

Please give us the following details

Name

Date of birth (DD/MM/YY)

3 Technical ability - date of birth information

Name

Date of birth (DD/MM/YY)



Application form

Part C4

Application for an environmental permit

Part C4 – Varying a bespoke waste operation permit



Fill in this part of the form, together with parts A, C2 and F1, if you are applying to vary (change) the conditions or any other part of the permit. Please check that this is the latest version of the form available from our website.

You only need to give us details in this application for the parts of the permit that will be affected (for example, if you are adding a new facility or making changes to existing ones).

You do not need to resend any information from your original permit application if it is not affected by your proposed changes.

Please read through this form and the guidance notes that came with it.

The form can be:

- 1) saved onto a computer and then filled in. Please note that the form follows a logic that means questions will open or stay closed depending on a previous answer. So you may not be able to enter text in some boxes.
- 2) printed off and filled in by hand. Please write clearly in the answer spaces.

It will take less than three hours to fill in this part of the application form.

Contents

- 1 What waste operations are you applying to vary?
 - 2 Point source emissions to air, water and land
 - 3 Operating techniques
 - 4 Monitoring
 - 5 How to contact us
- Appendix 1 – Specific questions for the recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes
- Appendix 2 – Specific questions for inert waste landfill and deposit for recovery operations

1 What waste operations are you applying to vary?

Fill in Table 1a with details of what you are applying to vary.

Fill in a separate table for each waste operation you are applying to vary. Use a separate sheet if you have a long list and send it to us with your application form. Tell us below the reference you have given this document.

Document reference

Application Report V2

Types of waste accepted

For each line in Table 1a, fill in a separate document to list those wastes you will accept on the site for that operation, giving the List of Wastes catalogue code (search for 'Technical guidance on how to assess and classify waste' at www.gov.uk/government/organisations/environment-agency). If you need to exclude waste from your activity or facility by restricting the description, quantity, physical nature, hazardous properties, composition or characteristic of the waste, include these in the document. Send it to us with your application form.

1 What waste operations are you applying to vary?, continued**Table 1a – Waste operations which do not form part of an installation**

Name of the waste operation	Description of the waste operation	Annex I (D codes) and Annex II (R codes) and descriptions	Hazardous waste treatment capacity (if this applies) (See note 1)	Non-hazardous waste treatment capacity (if this applies) (See note 1)
Add extra rows if you need them. If you do not have enough room, go to the line below or send a separate document and give us the document reference here	Use the description from the guidance. Include any extra detail that you think would help to accurately describe what you want to do			
Flusco Landfill	landfill for non-hazardous waste with a separate cell for stable non-reactive hazardous waste, asbestos or gypsum;	D5 - Specially engineered landfill R5 - the recycling or reclamation of inorganic material		
	including assessment of odour management plan.	R10 - Land treatment resulting in benefit to agriculture or ecology		
For all waste operations	Total storage capacity (see note 2)			
	New total if varying to increase			
	Annual throughput (tonnes each year)			
	New total if varying to increase			920,000.00

1 What waste operations are you applying to vary?, continued**Notes**

1 By 'capacity', we mean:

- the total landfill capacity (cubic metres) for landfills
- the total treatment capacity (tonnes each day) for waste treatment
- the total storage capacity (tonnes) for waste-storage operations

2 By 'total storage capacity', we mean the maximum amount of waste in tonnes you store on the site at any one time.

Please provide the document reference. You can use Table 1b as a template.

If you want to accept any waste with a code ending in 99, you must provide more information and a full description of the waste in the document, (for example, detailing the source, nature and composition of the waste). Where you only want to receive specific wastes within a waste code you can provide further details of the waste you want to receive. Where a waste is dual coded you should use both codes for the waste.

Document reference

Application Report V2

Table 1b – Template example – types of waste accepted and restrictions

Waste code	Description of the waste
Example	Example
02 01 08*	Agrochemical waste containing hazardous substances
18 01 03*	Infectious clinical waste, not contaminated with chemicals or medicines – human healthcare (may contain sharps) for alternative treatment
17 05 03*/17 06 05*	Non-hazardous soil from construction or demolition contaminated with fragments of asbestos cement sheet

1c Deposit for recovery purposes (see the guidance notes on part C4)

Are you applying for a waste recovery activity involving the permanent deposit on waste on land for construction or land reclamation (including landfill restoration)?

No ☒ Go to section 2

Yes ☐

Are you applying for an inert landfill permit that includes a restoration activity using waste?

No ☐ Go to section 2

Yes ☐ Please send us a copy of your restoration plan in accordance with our guidance at <https://www.gov.uk/guidance/landfill-operators-environmental-permits/restore-your-landfill-site>

Have we advised you during pre-application discussions that we believe the activity is waste recovery?

No ☐ Go to section 2

Yes ☐

Have there been any changes to your proposal since the discussions?

No ☐

Yes ☐

Please send us a copy of your waste recovery plan that complies with our guidance at <https://www.gov.uk/guidance/waste-recovery-plans-and-permits>. You need to highlight any changes you have made since your pre-application discussions. Also give us the reference number of the document with your justification.

Please note that there is an additional charge for the assessment of a waste recovery plan that must be submitted as part of this application. For the charge see <https://www.gov.uk/topic/environmental-management/environmental-permits>.

Document reference

2 Point source emissions to air, water and land

Fill in Table 2 below with details of the point source emissions that result from the operating techniques at each of your waste operations.

Fill in one table for each waste facility.

Table 2 – Emissions

Name of the waste operation	n/a			
Point source emissions to air				
Emission point reference and location	Source	Parameter	Quantity	Unit
Point source emissions to water (other than sewers)				
Emission point reference and location	Source	Parameter	Quantity	Unit
Point source emissions to sewers, effluent treatment plants or other transfers off site				
Emission point reference and location	Source	Parameter	Quantity	Unit
Point source emissions to land				
Emission point reference and location	Source	Parameter	Quantity	Unit

Supporting information

3 Operating techniques

3a Technical standards

Fill in Table 3a for each waste operation you refer to in Table 1a above and list the ‘appropriate measures’ you are planning to use. If you are using the standards set out in the relevant technical guidance(s) (TGN) there is no need to justify using them within your documents in Table 3a.

You must justify your decisions in a separate document if:

- there is no technical standard
- the technical guidance provides a choice of standards, or
- you plan to use another standard

This justification could include a reference to the Environmental Risk Assessment provided in part C2 of the application form.

Table 3a should summarise:

- the operations undertaken
- the measures you will use to control the emissions from your process, as identified in your risk assessment or the relevant technical guidance
- how you will meet other standards set out in the relevant technical guidance

Table 3a – Technical standards

Fill in a separate table for each waste operation.

Waste operation		
Description of the waste operation Add extra rows if you need them	Appropriate measure (TGN reference)	Document reference (if appropriate)
Landfill for non-hazardous waste with a	Non-hazardous and inert waste: appropriate	https://www.gov.uk/guidance/non-hazardous-waste
separate cell for stable non-hazardous waste,	measures for permitted facilities	
asbestos or gypsum		
	Control and monitor emissions for your	https://www.gov.uk/guidance/control-and-monitor-emissions
	environmental permit	

In all cases, describe the type of facility or operation you are applying for and provide site infrastructure plans, location plans and process flow diagrams or block diagrams to help describe the operations and processes undertaken. Give the document references you use for each plan, diagram and description.

Document reference

3b General requirements

Fill in a separate table for each waste operation.

Table 3b – General requirements

Name of the waste operation	
If the technical guidance or your risk assessment shows that emissions of substances not controlled by emission limits are an important issue, send us your plan for managing them	Document reference or references n/a
If the technical guidance or your risk assessment shows that odours are an important issue, send us your odour management plan. If your activity type is listed in the guidance document ‘Control and monitor emissions for your environmental permit’ as needing an odour management plan, or your risk assessment shows that odours are an important issue, you need to send us your odour management plan.	Document reference or references Application Report V2, Appendix 2 Odour Management Plan
If the technical guidance or your risk assessment shows that noise or vibration are important issues, send us your noise or vibration management plan (or both)	Document reference or references n/a

3 Operating techniques, continued

We may need to ask for management plans or risk assessments in other circumstances based on our regulatory experience. If you are unsure as to whether you need to submit a management plan with your application, please discuss this with the Environment Agency prior to submission.

Search for 'Risk assessment for your environmental permit' at www.gov.uk/government/organisations/environment-agency.

3c Information for specific sectors

For some of the sectors, we need more information to be able to set appropriate conditions in the permit. This is as well as the information you may provide in sections 5, 6 and 7. For those activities listed in Table 3c, you must answer the questions in the related document.

Table 3c – Questions for specific sectors

Sector	Appendix
Recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes	See the questions in appendix 1
Inert landfill and deposit of waste on land for construction, land reclamation, restoration or improvement	See the questions in appendix 2

General information

4 Monitoring

4a Describe the measures you use for monitoring emissions by referring to each emission point in Table 2 above

You should also describe any environmental monitoring. Tell us:

- how often you use these measures
- the methods you use
- the procedures you follow to assess the measures

Document reference

n/a

4b Point source emissions to air only

Provide an assessment of the sampling locations used to measure point source emissions to air. The assessment must use M1 (search for 'M1 sampling requirements for stack emission monitoring' at www.gov.uk/government/organisations/environment-agency).

Document reference of the assessment

n/a

5 How to contact us

If you need help filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422 549 (Monday to Friday, 8am to 6pm)

Email: enquiries@environment-agency.gov.uk

Website: www.gov.uk/government/organisations/environment-agency

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve it.

Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.

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We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form?

We will use your feedback to improve our forms and guidance notes, and to tell the Government how regulations could be made simpler.

Would you like a reply to your feedback?

Yes please

☐

No thank you

☐

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No ☐

Yes ☐

Amount received

£

Plain English Campaign's Crystal Mark does not apply to appendices 1 to 2.

Appendix 1 – Specific questions for the recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes

1 Please provide an accurate and reliable characterisation of your compost like outputs (CLO). This should be based on sampling and analysis of the CLO produced by the treatment (MBT) process over a 12-month period and in accordance with section 2 of TGN 6.15

Document reference

2 Please provide an agricultural benefit assessment for the use of your CLO. This should be based on section 2 of TGN 6.15 and should be signed and dated by an appropriate technical expert

Document reference

3 Please provide a site-specific risk assessment of risks to soil and food chain receptors. This should be based on Schedule 2 of TGN 6.15 and include a map with a green outline showing the boundary of the area being treated and include:

- locations where the waste will be stored and spread
- any spring, well or borehole used to supply water for domestic or food production purposes that is within 250 metres of the area being treated
- any spring, well or borehole not being used for domestic or food production purposes that is within 50 metres of the area being treated
- any European designated sites (candidate or Special Area of Conservation, proposed or Special Protections Area in England and Wales or Ramsar Site) or Sites of Special Scientific Interest (SSSI) which are within 500 metres of the place where waste is to be stored or spread
- the location of public rights of way
- any Groundwater Source Protection Zones
- surface watercourses
- any buildings or houses within 250 metres of the area being treated
- land drains within the boundary

Document reference

4 Are the technical standards and measures fully in line with those set out in section 3 of TGN 6.15?

No ☐ Provide justification for departure from TGN 6.15 and a copy of the proposed technical standards, measures or procedures

Document reference

Yes ☐

Appendix 2 – Specific questions for inert waste landfill and deposit for recovery operations

1 Please provide your Environmental Setting and Site Design (ESSD) report

Document reference

Note: You should use the Environment Agency template to help you develop an environmental setting and site design (ESSD) report.

2 Please provide your Waste Acceptance Procedures (including Waste Acceptance Criteria)

Document reference

3 Have you provided a hydrogeological risk assessment (HRA) for the site?

No ☐ Please refer to the section of your ESSD that explains why this is unnecessary for your site

Yes ☐ Document reference

4 Have you completed an outline engineering plan for the site?

No ☐ Please refer to the section of your ESSD that explains why this is unnecessary for your site

Yes ☐ Document reference

5 Have you provided a stability risk assessment (SRA) for your site?

No ☐ Please refer to the section of your ESSD that explains why this is unnecessary for your site

Yes ☐ Document reference

Appendix 2 – Specific questions for inert waste landfill and deposit for recovery operations, continued

6 Have you completed a monitoring plan for the site?

No ☐ Please refer to the section of your ESSD that explains why this is unnecessary for your site

Yes ☐ Document reference

7 Have you completed a plan for closing the site and procedures for looking after the site once it has closed?

No ☐ If no for deposit for recovery activities please refer to the section of your ESSD that explains why this is unnecessary for your site

Yes ☐ For inert waste landfill you must provide a closure plan

Document reference

Spreading waste to support plant growth

8a Does the activity involve the deposit of waste to create or treat a growing medium (R10 for land treatment)?

No ☐

Yes ☐

8b If you answered 'yes' to question 8a, does the R10 activity include the spreading of waste to improve the quality of the growing medium (e.g. soil conditioner to improve existing soil profile)?

No ☐

Yes ☐ Go to question 8c

8c If you have answered 'Yes' to question 8b, have you completed a benefit statement?

No ☐ Please explain why

Document reference

Yes ☐

Note: Refer to our guidance when completing your statement (including EPR 8.01, section 6).



Application form

Part F1

Application for an environmental permit Part F1 – Charges and declarations



We recommend you use an Adobe Acrobat product to complete the form. You may not be able to complete the form using different software, such as the PDF reader built into your internet browser

Fill in this part for all applications for:

- installations (excluding new permit and variation applications for intensive farming. Use application form Part B3.5 or C3.5 instead)
- waste operations
- mining waste operations
- medium combustion plant
- specified generators
- water discharges (excluding treated domestic sewage effluent discharges of up to 15 cubic metres (15m³) a day into ground or up to 20 cubic metres (20m³) a day to surface water)
- groundwater activities (excluding small discharges of 15m³ per day or less if using Part B6.5 OR existing small discharges to Source Protection Zone1 if using Part B6.6)

Please check that this is the latest version of the form available from our website.

Please read through this form and the guidance notes that came with it.

The form can be:

- 1) saved onto a computer and then filled in.
- 2) printed off and filled in by hand. Please write clearly in the answer spaces.

We anticipate it will take less than 3 hours to fill in this form if you have all the necessary information available.

Contents

- 1 Working out charges**
- 2 Payment**
- 3 Privacy notice**
- 4 Confidentiality and national security**
- 5 Declaration**
- 6 Application checklist**
- 7 How to contact us**
- 8 Where to send your application**

1 Working out charges

You must fill out this section for all applications except for waste mobile plant and Part B surrender notifications.

You have to submit an application fee with your application. For guidance on the fee and how to pay your charges, please see our charging guidance (<https://www.gov.uk/government/publications/environmental-permitting-charges-guidance>) and the current charging scheme <https://www.gov.uk/government/publications/environmental-permits-and-abstraction-licences-tables-of-charges>. You can also contact us for pre-application advice to help work out the charges.

Please note that there is an annual subsistence charge to cover the costs we incur in the ongoing regulation of the permit.

Table 1 – Type and number of facilities being applied for

For example, if you are submitting one installation application, enter the number one into the first column.

Installation	Waste	Mining waste	Medium Combustion Plant (MCP)/ Specified Generator (SG)	Water discharge	Groundwater activity
	1				

Table 2 – General application charge (A)

Charge activity reference from the charging scheme tables	Charge activity description from the charging scheme tables	What are you applying for? For example, a new permit, minor variation, normal variation, substantial variation, surrender, low risk surrender, transfer	Amount
e.g. 1.17.3	e.g. Section 5.2 – landfill for hazardous waste	e.g. transfer application	e.g. £5,561
1.17.1	Section 5.2 - Landfill for non - hazardous waste with a separate cell for stable non - reactive hazardous waste, asbestos or gypsum; including assessment of odour management plan.	Normal Variation	£11,465
Total A			£11,465

1 Working out charges, continued

Table 3 – Additional assessment charges (B)

Part 1.19 Charges for plans and assessments			Tick appropriate
Reference	Plan or assessment	Charge	
1.19.1	Waste recovery plan or variation or revision of a waste recovery plan.	£1,231	☐
1.19.2	Habitats assessment (except where the application activity is a flood risk activity, water discharge or groundwater activity).	£779	☐
1.19.3	Fire prevention plan (except where the application activity is a farming installation).	£1,241	☒
1.19.4	Pests management plan (except where the application activity is a farming installation).	£1,241	☒
1.19.5	Emissions management plan (except where the application activity is a farming installation).	£1,241	☒
1.19.6	Odour management plan (except where the application activity is a farming installation).	£1,246	☐
1.19.7	Noise and vibration management plan (except where the application activity is a farming installation).	£1,246	☒
1.19.8	Ammonia modelling assessment	£620	☐
1.19.9	Dust and bio-aerosol management plan.	£620	☐
1.19.10	Habitats assessment for discharges to water and groundwater activities.	£2,035	☐
1.19.11	Specific Substances Assessment for a water discharge activity to surface water.	£3,774	☐
1.19.12	Specific Substances Assessment for a groundwater activity.	£1,546	☐
1.19.13	Advertising	£500	☐
Total B			£4,969

Total charges

Add the total charges from Table 1 to the total charges from Table 2 (total A plus total B)

£16,434

2 Payment

You must fill out this section for all applications except for waste mobile plant and Part B surrender notifications.

Tick below to show how you have paid.

- ☐ Cheque
- ☐ Credit or debit card
- ☒ Electronic transfer (for example, BACS)

Cheques

You should make cheques payable to 'Environment Agency' and make sure they have 'A/c Payee' written across them if it is not already printed on.

2 Payment, continued

Please write the name of your company and application reference number on the back of your cheque. We will not accept cheques with a future date on them.

Credit/debit cards

If you are paying by credit or with debit card we will call you. We can accept payments by Visa, MasterCard or Maestro card only.

☐ Call me to arrange payment by debit or credit card

Electronic transfer BACS

If you choose to pay by electronic transfer, you will need to use the following information to make your payment:

Company name	Environment Agency
Company address	SSCL (Environment Agency), PO Box 797, Newport Gwent, NP10 8FZ
Bank	RBS/NatWest
Address	London Corporate Service Centre, CPB Services, 2nd Floor, 280 Bishopsgate, London EC2M 4RB
Sort code	60-70-80
Account number	10014411
Account name	EA RECEIPTS
Payment reference number	PSCAPPXXXXYYY

You need to create your own reference number. It should begin with PSCAPPWASTE (Waste), PSCAPPINST (Installation), PSCAPPWQ (Water Quality) (to reflect the facility type) and it should include the first five letters of the company name (replacing the X's in the above reference number) and a unique numerical identifier (replacing the Y's in the above reference number). The reference number that you supply will appear on our bank statements.

You should also email your payment details and reference number to ea_fsc_ar@gov.sscl.com.

If you are making your payment from outside the United Kingdom, it must be in sterling. Our IBAN number is GB23NWBK60708010014411 and our SWIFTBIC number is NWBKGB2L.

If you do not quote your reference number, there may be a delay in processing your payment and application.

Provide a unique reference number for the application, i.e. do not only use the company name only

PSCAPPWASTEFLUSC002

State who is paying (full name and whether this is the agent/applicant/other)

Seletia (F) Limited

Fee paid

£16,434

Date payment sent (DD/MM/YYYY)

24/11/2025

3 Privacy notice

The Environment Agency runs the environmental permit application service.

See <https://www.gov.uk/guidance/environmental-permits-privacy-notice> for how we use your personal information in services to support environmental permitting.

4 Confidentiality and national security

Confidentiality

We will normally put all the information in your application on a public register of environmental information. However, we may not include certain information in the public register if this is in the interests of national security, or because the information is confidential.

You can ask for information to be made confidential by enclosing a letter with your application giving your reasons. If we agree with your request, we will tell you and not include the information in the public register. If we do not agree with your request, we will let you know how to appeal against our decision, or you can withdraw your application. You can find guidance on confidentiality in ‘Environmental permitting guidance: core guidance’, published by Defra and available at <https://www.gov.uk/government/publications/environmental-permitting-guidance-core-guidance--2>.

Only tick the box below if you wish to claim confidentiality for parts of your application

☐ Please treat the specified information in my application as confidential

National security

You can tell the Secretary of State that you believe including information on a public register would not be in the interests of national security. You must enclose a letter with your application telling us that you have told the Secretary of State and you must still include the information in your application. We will not include the information in the public register unless the Secretary of State decides that it should be included.

You can find guidance on national security in ‘Environmental permitting guidance: core guidance’, published by Defra and available at <https://www.gov.uk/government/publications/environmental-permitting-guidance-core-guidance--2>

You cannot apply for national security via this application.

Now fill in section 5

5 Declaration

If you knowingly or recklessly make a statement that is false or misleading to help you get an environmental permit (for yourself or anyone else), you may be committing an offence under the Environmental Permitting (England and Wales) Regulations 2016.

A relevant person should make the declaration (see the guidance notes on part F1). An agent acting on behalf of an applicant is NOT a relevant person.

Each individual (or individual trustee) who is applying for their name to appear on the permit must complete this declaration. You will have to print a separate copy of this page for each additional individual to complete.

If you are transferring all or part of your permit, both you and the person receiving the permit must make the declaration. You must fill in the declaration directly below; the person receiving the permit must fill in the declaration under the heading ‘For transfers only’.

5 Declaration, continued

Note: we will issue a letter to both current and new holders to confirm the transfer. If you are changing address we will need to send this letter to your new address; therefore please tell us your new address in a separate letter.

If you are unable to trace one or more of the current permit holders please see below under the transfers declaration.

I declare that the information in this application is true to the best of my knowledge and belief. I understand that this application may be refused or approval withdrawn if I give false or incomplete information.

If you deliberately make a statement that is false or misleading in order to get approval you may be prosecuted.

- ☒ Tick this box to confirm that you understand and agree with the declaration above, then fill in the details below (you do not have to provide a signature as well)
- ☐ I confirm that my standard facility will fully meet the rules that I have applied for (this only applies if the application includes standard facilities)
- ☐ Tick this box if you do not want us to use information from any ecological survey that you have supplied with your application (for further information please see the guidance notes on part F1)

Name

Title

Mr

First name

Steven

Last name

Nimmo

on behalf of (if relevant; for example, a company or organisation and so on)

Seletia (F) Limited

Position (if relevant; for example, a company or organisation and so on)

Director

Today's date (DD/MM/YYYY)

24/11/2025

For transfers only – declaration for person receiving the permit

A relevant person should make the declaration (see the guidance notes on part F1). An agent acting on behalf of an applicant is NOT a relevant person.

I declare that the information in this application to transfer an environmental permit to me is true to the best of my knowledge and belief. I understand that this application may be refused or approval withdrawn if I give false or incomplete information.

Note: If you cannot trace a person or persons holding the permit you may be able to transfer the permit without their declaration as above. Please contact us to discuss this and supply evidence in your application to confirm you are unable to trace one or all of the permit holders.

If you deliberately make a statement that is false or misleading in order to get approval you may be prosecuted.

5 Declaration, continued

- ☐ Tick this box to confirm that you understand and agree with the declaration above, then fill in the details below (you do not have to provide a signature as well)

Name

Title

First name

Last name

on behalf of (if relevant; for example, a company or organisation and so on)

Position (if relevant; for example, a company or organisation and so on)

Today's date (DD/MM/YYYY)

Now go to section 6

6 Application checklist

You must fill in this section.

If your application is not complete, we will return it to you. If you aren't sure about what you need to send, contact us before you submit your application. For further information on pre-application advice, see <https://www.gov.uk/guidance/get-advice-before-you-apply-for-an-environmental-permit>.

You must do the following:

- ☐ Complete legibly all parts of the application form that are relevant to you and your activities
- ☐ Identify relevant supporting information in the form and send it with the application
- ☐ List all the documents you are sending in the table below.
- ☐ For new permit applications or any changes to the site plan, provide a plan that meets the standards given in the guidance note on part F1
- ☐ Provide a supporting letter for any claim that information is confidential
- ☐ Get the declaration completed by a relevant person (not an agent)
- ☐ Send the correct fee

6 Application checklist, continued

Continue on an extra sheet if necessary.

[illegible]

Document reference

7 How to contact us

If you have difficulty filling in this form, please contact the person who sent it to you or contact us as shown below.

General enquiries: 03708 506 506 (Monday to Friday, 8am to 6pm)

Textphone: 03702 422549 (Monday to Friday, 8am to 6pm)

Email: [**enquiries@environment-agency.gov.uk**](mailto:enquiries@environment-agency.gov.uk)

Website: [**www.gov.uk/government/organisations/environment-agency**](http://www.gov.uk/government/organisations/environment-agency)

If you are happy with our service, please tell us. It helps us to identify good practice and encourages our staff. If you're not happy with our service, please tell us how we can improve.

Please tell us if you need information in a different language or format (for example, in large print) so we can keep in touch with you more easily.

8 Where to send your application

For how many copies to send see the guidance note on part F1.

Please send your filled in application form and supporting documents to:

For water discharges and groundwater activities by email to

[**PSC-WaterQuality@environment-agency.gov.uk**](mailto:PSC-WaterQuality@environment-agency.gov.uk)

For waste, installations, medium combustion plant and specified generators by email to

[**PSC@environment-agency.gov.uk**](mailto:PSC@environment-agency.gov.uk)

For large electronic documents (too large for email attachment) you can upload your applications to file sharing sites and send us a link to download the documents. Alternatively, you can send more than one email with documents attached.

Or by post to:

Permitting Support, NPS Sheffield
Quadrant 2
99 Parkway Avenue
Parkway Business Park
Sheffield
S9 4WF

Do you want all information to be sent to you by email?

- ☐ Please tick this box if you wish to have all communication about this application sent via email (we will use the details provided in the Part A form).

Feedback

(You don't have to answer this part of the form, but it will help us improve our forms if you do.)

We want to make our forms easy to fill in and our guidance notes easy to understand. Please use the space below to give us any comments you may have about this form or the guidance notes that came with it.

How long did it take you to fill in this form?

We will use your feedback to improve our forms and guidance notes.

Would you like a reply to your feedback?

☐ Yes please

☐ No thank you

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

☐ No

☐ Yes

Amount received (£)



Appendix 1

Market Assessment

To be provided.



Appendix 2

TCM

WAMITAB

WASTE MANAGEMENT INDUSTRY TRAINING AND ADVISORY BOARD

CERTIFICATE No: 11542

CERTIFICATE OF TECHNICAL COMPETENCE

This Certificate confirms that

George Thomas Brown

has demonstrated the standard of technical competence required for the management
of a facility of the type set out below

Facility Type:

Level 4 in Waste Management Operations -

Managing Landfill Non-Hazardous Waste (4LNH)



Authorising Signatures:

Director General

Director

[Signature]

[Signature]

Date of issue:

21 June 2010

Continuing Competence Certificate

This certificate confirms that

George Brown

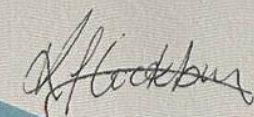
Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current for two years from 22/09/2025

LIN	Landfill - Inert Waste
LNH	Landfill - Non Hazardous Waste

Expiry Date:
22/09/2027

Verification date: 18/09/2025

Authorised:

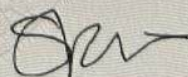


Responsible Officer

Learner ID: 143326

Certificate No.: 5289745

Date of Issue: 22/09/2025



CIWM Chief Executive Officer



The Chartered Institution
of Wastes Management





Appendix 3

Environmental Risk Assessment



Environmental Risk Assessment

Seletia (F) Limited
Flusco Landfill,
Newbiggin,
Penrith,
Cumbria,
CA11 0JB



PROVIDING SOLUTIONS, ENSURING COMPLIANCE

T 01952 879705 E info@westburyenv.co.uk

A Agriculture House, Southwater Way
Telford, Shropshire, TF3 4NR

W www.westburyenv.co.uk



Document Control Table

Project Reference	24/012p
Project Title	Permit Variation Application
Document Title	Environmental Risk Assessment V2
Document Issue Date	24 November 2025
Client	Seletia (F) Limited
Status	Issued

Change log

Version.	Changes	Produced by	Checked by	Date
1	Original Environmental Risk Assessment.	Sian Wilcox	Tracey Westbury	26 June 2025
2	Updated Client Name. Added Sections: 1, 2, 3, 4, 7, Table 2, Table 3.	Sian Wilcox	Tracey Westbury	24 November 2025



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Drawings

24/012t 001 Sensitive Receptor Plan V2



1. Introduction

- 1.1. Westbury Environmental Limited have produced this Environmental Risk Assessment (ERA) to support an Environmental Permit variation application on behalf of Seletia (F) Limited (Operator) at Flusco Landfill, Newbiggin, Penrith, Cumbria, CA11 0JB (Site).
- 1.2. For the purposes of this ERA, the Site is defined as the area and activities covered by Environmental Permit reference EPR/BM5941IH (Permit).
- 1.3. This ERA considers any potential increase in environmental risk associated with the following proposed changes:
 - Increase of the annual limit for non-hazardous waste to 500,000 tonnes per annum.
 - Increase of the annual limit for inert waste to 200,000 tonnes per annum.
 - Increase of the annual limit for waste for restoration to 200,000 tonnes per annum.
 - Addition of waste code 18 02 03 (Wastes whose collection and disposal is not subject to special requirements in order to prevent infection) to Table S2.1 Permitted waste types for disposal at a landfill for non-hazardous waste, in the Permit.
 - This waste stream will consist of animal faeces.
 - This waste will be bagged before arrival on Site.
 - This waste will be stored on Site for less than one day prior to deposit in the landfill.
 - Addition of waste code 19 05 03 (off specification compost) to Table S2.3 Permitted waste types for restoration, in the Permit.
 - This waste will be produced in accordance with the requirements of the Animal By-Products Regulations.
 - This waste will have been tested and evidenced to meet the specifications for pathogenic microorganisms.
- 1.4. This assessment has been undertaken in accordance with the requirements set out by the Environment Agency guidance document “Risk assessments for your environmental permit” (last updated 3 January 2025).

Content of the Environmental Risk Assessment

- 1.5. This report provides a detailed description of the Site and its environmental setting, identifies nearby sensitive receptors and evaluates the magnitude of risk to receptors as a result of the proposed changes.
- 1.6. The Environmental Risk Assessment is structured as follows:
 - Section 2 provides information relating to the Site setting, including the location of the Site and nearby sensitive receptors (Table 1).
 - Section 3 provides information on how environmental risk has been identified.
 - Section 4 identifies risk factors, sources of risk, mitigation measures and the impact of proposed changes (Table 2).
 - Section 5 provides a risk matrix for estimating the magnitude of environmental risk (Table 3).
 - Section 6 provides an assessment of environmental risk, risk management, and residual risk following risk mitigation measures (Table 4).
 - Section 7 provides a conclusion of the Environmental Risk Assessment and the impact of the proposed changes.



2. Site Location and Sensitive Receptors

Location

- 2.1. Flusco Landfill is located at Newbiggin, Penrith, Cumbria, CA11 0JB.
- 2.2. The land surrounding the Site is largely agricultural. The nearest residential area being Newbiggin which is located approximately 88m east from the Site boundary at its closest point.
- 2.3. The Site is not located within a Groundwater Source Protection Zone.
- 2.4. There are two water bodies located in the northern half of the Site boundary.
- 2.5. The Site is located within flood Zone 1 and therefore has a low risk of flooding.
- 2.6. The Site is located on a Secondary A bedrock aquifer. The bedrock geology is comprised of Jew Limestone Member - Limestone. The superficial geology is comprised of Till, Devensian - Diamicton.
- 2.7. The Site is partly located on a Secondary (undifferentiated) Superficial Drift Aquifer to the northeast and southeast. A majority of the Site is located on an Unproductive Superficial Drift Aquifer.
- 2.8. The Site is in flood zone 1 and therefore has a low risk of flooding.

Receptors

- 2.9. Sensitive receptors near the Site are identified on the Drawing No. 24/012t 001 Sensitive Receptor Plan V2.
- 2.10. Table 1 shows the approximate distance and orientation (from the Site boundary to the boundary of the nearest receptor) of nearby sensitive receptors.

Table 1: Sensitive Receptors

Receptor	Type of receptor	Bearing from Site	Approx. distance from Site boundary to receptor boundary (m)
Newbiggin	Residential	East	88
Ullswater Heights Holiday Park	Leisure	North	160
North Lakes Business Park	Commercial/Industrial	West	235
A66	Road	South	415
Fluscopike Farms	Agricultural	East	450
Tymparon Hall B&B	Leisure	Northeast	465
Flusco Lodges	Leisure	West	475
Stonefold Country Park Lodges	Leisure	Southeast	825



3. Identification Environmental Risk

- 3.1. The Environmental Risk Factors identified in this assessment are:
- Dust
 - Noise
 - Odour
 - Landfill Gas
 - Leachate
 - Mud (on local roads)
 - Litter
- 3.2. Whether the proposed changes present any new risk factors has been considered. No new risk factors have been identified as a result of the proposed changes.
- 3.3. Table 2 presents the sources of environmental risk for each factor listed above.
- 3.4. Whether the proposed changes introduce any new sources of risk has been considered. No new sources of risk have been identified as a result of the proposed changes.
- 3.5. It has been identified that the magnitude of risk by each source may be impacted in some instances. The impact that the proposed changes have on each source of risk have been described in Table 2.
- 3.6. Table 2 also describes the mitigation measures currently in place on the Site. It assesses whether new mitigation measures will be required and how existing measures may be impacted by the proposed changes.
- 3.7. Current mitigation measures will continue to be implemented, with some requiring more frequent application to manage risk where an impact on risk has been identified.
- 3.8. Should an event occur on Site that prevents the Site from accepting waste deliveries, contingency measures will be implemented. Diverted vehicles may be directed to Hespin Wood Landfill, located 34.5km south of the Site, or other alternative sites.
- 3.9. The site was previously operated by Lakeland Waste Management under the local council. It is reported that the Site has previously been accepting less than 25,000 tonnes of waste per annum and was behind on works such as cell capping and installation of gas infrastructure.
- 3.10. The operator is committed to bring the Site up to date on all infrastructure requirements. The rate at which these will need to be completed may mean that there is a significant increase in vehicle movement and works associated with catching up with the infrastructure requirements.
- 3.11. This has been considered when assessing the impact of the changes on risk factors and mitigation measures.



4. Risk Factors and Mitigation Measures

Table 2: Impact on Emission Sources and Mitigation Measures

Risk Factor	Current Sources of Risk	Impact of proposed changes on Sources of Risk	Current Mitigation Measures	Impact of proposed changes on Mitigation Measures
Dust	HGV Movements Handling and movement of waste Deposit of waste in the landfill. Waste storage (wind whipping of stockpiles) Cell capping. Installation of landfill gas infrastructure.	There will be more HGV movements on Site each day. It is considered that this will result in an increased level of dust emissions as a result of vehicle movements. Movement of waste on the Site will take place more frequently each day, with waste being moved to and from storage areas and the landfill at a higher frequency. It is considered that this will increase the level of dust emissions from waste being handled. Waste will be deposited in the landfill at a faster rate. The tipping of waste loads can generate dust emissions. Dust emissions may increase as waste is tipped more frequently. It is not considered that the proposed changes will have a significant impact on waste storage. More waste will be delivered to Site daily however waste will be deposited in the landfill at a faster rate. It is not anticipated that there will be a significant impact to stockpile size or storage times as a result of the changes. There is work required to bring cell capping and installation of landfill gas infrastructure up to date. The proposed changes are not considered to impact the overall infrastructure requirements. The increase to annual inputs will mean that the infrastructure requirements may be completed at a faster rate. There will be more vehicle movements on Site at any one time because of this. The proposed addition of waste codes is not considered to have a significant impact on the risk of dust emissions. The addition of waste codes to the list of permitted waste types does not impact current sources of risk, such as	Dampening of stockpiles in dry warm weather to minimise dust generation. Dampening of internal road surfaces in dry, warm weather to minimise dust generated by vehicle movements. Temporary Cell Cover at the end of each day to prevent wind whipping of waste outside of operational hours. 5mph Speed Limit to minimise dust generated by vehicle movements. Minimising drop heights to minimise dust generated by the handling of waste. Minimising double handling of waste to minimise dust generated by the handling of waste. Sheeting of vehicles to minimise dust escaping from waste during transport.	Due to the increased frequency of waste being delivered to Site and deposited in the landfill, stockpiles of waste may require more frequent dampening during warm, dry weather. This is due to the fact that waste will be removed from stockpiles and deposited in the landfill at a faster rate. Newly delivered waste that has not been dampened will be added to the stockpiles at a faster rate. The dampening of road surfaces is carried out in periods of warm, dry weather. This mitigation measure is implemented based on weather conditions and the observation of dust being generated. Implementation of this mitigation measure not dependant on the volume of traffic on Site. It is considered that there will be no significant impact to the implementation of the temporary cell cover at the end of each day. The temporary cell cover is put in place at the end of each operational day. Implementation of this mitigation measure is not dependant on the volume of waste deposited in the landfill each day. Mitigations measures such as the Site speed limit, minimising drop heights, minimising double handling and the sheeting of vehicles are constantly enforced on Site. Implementation of these mitigation measures is not dependant on the number of vehicles on Site or the volume of waste being handled each day. The proposed additional waste codes are not considered to be dusty. As such, no additional dust mitigation measures will required to manage any dust emissions from these wastes.



		vehicle movements and waste handling. The proposed waste codes are not considered to be dusty so do not present an additional source of dust.		
Noise	HGV Movements Handling and movement of waste Deposit of waste in the landfill. Cell capping. Installation of landfill gas infrastructure.	There will be more HGV movements on Site each day. It is considered that this may result in an increased level of noise emissions as a result of vehicle movements. Movement of waste on the Site will take place more frequently each day, with waste being moved to and from storage areas and the landfill at a higher rate. It is considered that this may increase the level of noise generated by the handling of waste. Waste will be deposited in the landfill at a faster rate. The tipping of waste loads can generate noise. Noise emissions may increase as waste is tipped more frequently. There is work required to bring cell capping and installation of landfill gas infrastructure up to date. The proposed changes are not considered to impact the overall infrastructure requirements. The increase to annual inputs will mean that the infrastructure requirements may be completed at a faster rate. There will be more vehicle movements, and plant completing works associated with this infrastructure, on Site at any one time because of this. The proposed addition of waste codes is not considered to have a significant impact on the risk of noise emissions. The addition of waste codes to the list of permitted waste types does not impact current sources of risk, such as vehicle movements and waste handling.	5mph speed limit to minimise noise generated by vehicle movements. No idling policy / no revving of engines to minimise noise generated by vehicles. Switching off plant when not in use to minimise noise generated by idle plant. Vehicle/equipment maintenance to minimise noise associated with mechanical faults. Minimising double handling of waste to reduce the number of vehicle movements. Minimising drop heights to minimise the noise generated by the handling of waste. Maintenance of internal surface (free from potholes and ruts) to prevent the generation of noise as a result of vehicles driving on an uneven surface. Only completing waste activities during operational hours to avoid noise being a nuisance during non-working hours. Fans for landfill gas extraction fitted with attenuators to minimise noise associated with landfill gas infrastructure.	An increase in the frequency of vehicle movements may mean that vehicles and equipment require more frequent maintenance as a result of them being used more. More vehicle movements may mean that the internal road surfaces will degrade faster. More frequent maintenance may be required on internal surfaces to ensure that they are free from pot holes and ruts. Mitigation measures such as the Site speed limit, minimising drop heights, minimising double handling, no idling policy, and only completing waste activities during operational hours are constantly enforced on Site. Implementation of these mitigation measures is not dependant on the volume of waste being handled each day. Landfill gas extraction equipment is fitted with noise attenuators as part of the landfill gas infrastructure. The implementation of this mitigation measure is not dependant on the volume of waste being handled each day. The proposed additional waste codes are not considered to present any additional sources of noise. As such, no additional noise mitigation measures are required.
Odour	Reception, handling, storage and deposit of biodegradable wastes	More waste will be accepted per day and the total volume of waste will be deposited over a shorter period of time. As a result of this, more biodegradable wastes may be present on site at any one time, therefore increasing the risk of odour emissions.	Olfactory monitoring to detect putrescible odours. Odorous waste loads are deposited as soon as practically possible to	Olfactory monitoring may need to be carried out more frequently as a result of there potentially being more odorous waste present at Site at any one time. The measure of always depositing odorous wastes as soon as practically possible is applied to all odorous



		The proposed addition of waste codes is not considered to have a significant impact on the risk of odour emissions. The waste codes proposed are not considered to be more odorous than waste types that are currently accepted under the Environmental Permit. As an example, the proposed addition of waste code 18 02 03 for animal faeces would not be considered to be a greater source of odour than other odorous waste codes such as 02 01 06 (animal faeces, urine and manure) that are currently accepted under the environmental permit.	minimise the storage times of odorous wastes. Temporary cell cover at the end of each day to minimise the risk of odour emissions escaping from the landfill cell.	waste regardless of the volume of waste. This mitigation measure will therefore not be impacted by the change. It is considered that there will be no significant impact to the implementation of the temporary cell cover at the end of each day. The temporary cell cover is put in place at the end of each operational day. Implementation of this mitigation measure is not determined by the volume of odorous waste deposited in the landfill each day. The proposed additional waste codes are not considered to be more odorous than other waste types that are currently accepted under the Environmental Permit. As such, there are no additional mitigation measures required to manage any odour emissions from these wastes. A self-imposed sulphur content limit of 10,000mg per kg will be implemented for incoming waste loads.
Landfill Gas	Decomposition of organic waste	The increased rate of waste deposition may result in a higher volume of biodegradable waste being landfilled over shorter timeframes. This could lead to a more rapid onset of gas generation in newly filled cells, although the overall gas production profile is expected to remain consistent with existing operations.	Flaring of landfill gas extracted from completed landfill cells.	Additional gas extraction infrastructure may be installed in newly filled cells at an earlier stage to manage accelerated gas generation.
Leachate	Rainfall percolating through deposited waste. Flooding of the site. Decomposition of organic waste. Compromised cell liner allowing groundwater infiltration.	It is considered that there will be no significant impact to the sources of leachate as a result of the proposed changes. Cell liners are constructed in line with CQA's dependant on waste type and not the rate in which waste is deposited. Cells being completed quicker will likely reduce the amount of time that cell liners are exposed to the elements meaning that they could be less likely to become compromised while the cell is being filled. Cells being filled and capped quicker will likely reduce the time that waste is exposed to rain water. It is therefore considered that the proposed changes may reduce the quantity of leachate produced as a result of rain water percolating through the waste.	Temporary cell cover to shield waste from rainwater. A flood management plan to manage the potential escape of leachate as a result of a flood. Approved CQA's for cell liners. This ensures that cell liners are appropriately constructed based on waste type and are unlikely to become compromised. Leachate Treatment Facility to treat and discharge leachate from completed landfill cells.	It is considered that there will be no significant impact to the implementation of the temporary cell cover at the end of each day. The temporary cell cover is put in place at the end of each operational day. Implementation of this mitigation measure is not determined by the volume of odorous waste deposited in the landfill each day. CQA's for cell liners are always a requirement before works begin to fill a cell and this is not determined by the rate in which waste is deposited in the landfill. The leachate treatment facility has the capacity to treat leachate from both landfill and leachate imported from offsite. If the leachate treatment facility nears capacity treating leachate from the landfill, the operator will temporarily cease acceptance of leachate imported for treatment from off-site.



Mud on Roads	HGV Movements	There will be more HGV movements on Site each day. An increase in Site traffic is considered likely to increase the risk of mud being tracked on to local roads.	Wheel wash to remove mud from vehicle wheels before they exit the Site. Road Sweeper to clear mud tracked on to local roads.	The wheel wash may need to be used more frequently due to the higher number of vehicles entering and exiting Site. The road sweeper may need to be deployed more frequently to clear local roads of any mud that has been tracked from Site on vehicle wheels.
Litter	Waste deliveries Waste storage (wind whipping of stockpiles) Waste handling Deposit of waste in the landfill	There will be more waste deliveries per day. This is considered likely to result in a higher risk of litter escaping from waste loads as they are delivered to the Site. There is not considered to be a significant impact on the amount of litter windblown from storage areas. This is due to the fact that waste will be deposited at a faster rate. As such, the size of the stockpiles is not expected to be significantly impacted. Waste will be handled more frequently each day due to the accelerated pace of landfilling activities. This increased frequency in waste handling may result in a higher likelihood of litter escaping from waste loads. Waste will be deposited into the landfill at an accelerated rate. This may result in a higher likelihood of litter from the waste within landfill cells. The proposed additional waste codes are not considered to be more likely to contain litter than other wastes current accepted under the environmental permit.	Sheeting of vehicles Litter picking. Temporary cell cover	Vehicles delivering waste loads are required to be sheeted to minimise the potential for litter to escape during transit. This implementation of this measure is not determined by the number of waste deliveries each day. Litter picking is completed daily. Due to the increased risk of litter on the Site, litter picking may need to take place multiple times a day. The frequency will be determined by the amount of litter observed on Site and weather conditions (e.g., windy weather). It is considered that there will be no significant impact to the implementation of the temporary cell cover at the end of each day. This action is not determined by the volume of waste deposited each day. Litter fencing will be installed along the eastern boundary of the Site. This will act as an additional barrier between the Site operations and the nearby M6 motorway. It is considered that additional litter fencing will effectively manage any increase in litter on the Site, preventing it reaching the M6. The proposed additional waste codes are not considered to be more likely to contain litter than other wastes current accepted under the environmental permit. As such, no additional litter mitigation measures are required to manage any litter present in these wastes.



5. Environmental Risk Matrix

Risk Estimation

- 5.1. Table 3 below shows the matrix for estimating the magnitude of risk of a potential hazard from considering both the probability and consequence of a hazard occurring. The magnitude of risk determines what level of management is required to reduce the environmental impact and the probability of the risk occurring.

Table 3: Estimating the Magnitude of Risk

	Magnitude of Risk	Consequence			
		High	Medium	Low	Negligible
Probability	High	Very high	High	Medium/Low	Very low
	Medium	High	Medium	Low	Very low
	Low	High/Medium	Medium/Low	Low	Very low
	Negligible	High/Medium/Low	Medium/Low	Low	Negligible

- 5.2. Although Table 3 is a gross simplification that cannot represent the true complexity of risk assessment, it has been used as a guide in preparing this risk assessment report.
- 5.3. A risk assessment of the potential hazards associated with the proposed changes to the operation's that may cause harm to the environment has been completed using the method shown in Table 3, see Table 4 Environmental Risk Assessment.

Key Considerations

- 5.4. The following aspects have been considered when completing this Environmental Risk Assessment:

Data and Information

- Receptor
- Source / Hazard
- Harm
- Pathway

Judgement

- Probability of Exposure
- Consequences
- Magnitude of Risk

Action

- Justification for Magnitude
- Risk Management
- Residual Risk



6. Environmental Risk Assessment

Table 4: Environmental Risk Assessment

Data and Information				Judgement				Action (By Permitting)	
Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
Local human population – Residential dwellings located within the vicinity of the Site. Nearest residential dwelling; Newbiggin 88m East of the Site.	Releases of dusts and micro-organisms (bioaerosols)	Harm to human health - respiratory irritation and illness	Air transport then inhalation	Medium	Medium	Medium	Permitted waste types may comprise of dusts, powders, or loose fibres. Site activities that have the potential to generate dust include the tipping of waste into stockpiles, stored waste in the open being whipped by wind, deposit of waste in the landfill, and vehicle/plant movement. Movement of waste has the potential to emit dust. There is potential for increased dust generation from permitted activities during prolonged dry periods. It is considered that due to the	Strict waste acceptance procedures will be in place to ensure that only permitted waste types are accepted on Site. Water will be used to dampen the surface of pro to minimise dust emissions from the movement of the waste, and for dampening down stockpiles of waste to reduce the risk of wind whipping. The same dust management techniques are proposed. However, these are likely to be used more of the time as a result of the increase in tonnage being accepted per annum. Activities, causing dust emissions, will	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
							size of the dust particles, the majority of dust is likely to be deposited within 250m of the source. It is considered that the increase in waste tonnage limits may lead to a rise in dust emissions due to a higher number of vehicle movements on the site and an increased rate of waste deposition in the landfill. The predominant wind is from the west/southwest. The proposed addition of waste codes is not considered to have a significant impact on the risk of dust emissions. The addition of waste codes to the list of permitted waste types does not impact current sources of risk,	be temporarily ceased in accordance with the Risk Matrix included in the Dust Management Plan. Areas of the landfill will be covered at the end of the day to reduce the risk of wind whipping of waste. The proposed additional waste codes are not considered to pose a significant risk of dusty. As such, no additional dust mitigation measures will be required to manage any dust emissions from these wastes	



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
							such as vehicle movements and waste handling. The proposed waste codes are not considered to pose a significant risk of dust do not present an additional source of dust.		
		Nuisance - dust on cars, clothing etc.	Air transport then deposition	Medium	Low	Low	As above.	As above.	Low
Nearby habitats	Litter	Nuisance, loss of amenity and harm to human health	Air transport then deposition	Low	Medium	Medium/Low	Permitted waste types have a potential to produce litter. As above.	Any litter found will be collected and disposed of regularly to keep the Site tidy. Strict waste acceptance criteria are applied within the Environmental Management System (EMS) to ensure that only permitted waste types are accepted on Site. The same litter management techniques are proposed. However, these are likely to be used more of the time as	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
								a result of the increase in tonnage being accepted per annum.	
Local human population – Residential dwellings located within the vicinity of the Site. Nearest residential dwelling; Newbiggin 88m East of the Site. Nearest roads: Way to Ullswater is immediately North; Newbiggin Road is 233m East; and A66 is 445m South of the Site.	Waste, litter and mud on local roads.	Nuisance, loss of amenity, road traffic incidents, potential for resuspension of dust.	Vehicles entering and leaving the site.	Medium	Medium	Medium	Local residents are often sensitive to waste, litter, mud on roads. Permitted waste types have a potential to produce litter. It is considered that there is potential for mud to be tracked on to nearby roads. It is considered that there is a risk of litter reaching nearby by way of the wind whipping of waste. It is considered that the increase in waste tonnage limits may lead to a rise in the risk of mud and litter reaching local roads due to a higher number of vehicle movements on	There will be wheel cleaning facilities to wash mud off vehicles exiting the Site. The Site Inspection Checklist within EMS ensures regular inspection of local roads to prevent mud and debris build-up. Any litter found will be collected and disposed of regularly to prevent litter reaching local roads. The same mud and debris management techniques are proposed. However, these are likely to be used more of the time as a result of the increase in tonnage being accepted per annum.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
							the Site and an increased rate of waste being delivered.		
Local human population – Residential dwellings located within the vicinity of the Site. Nearest residential dwelling; Newbiggin 88m E from the Site.	Odour	Nuisance, loss of amenity	Air transport then inhalation	Medium	Medium	Medium	Local residents are often sensitive to odour. Permitted waste types have a potential to give rise to odour. The nearest residential receptors are located within the predominant wind direction. The proposed addition of waste codes is not considered to have a significant impact on the risk of odour emissions. The waste codes proposed are not considered to be more odorous	Strict waste acceptance procedures will be in place to ensure that only permitted waste types are accepted on Site. Incoming waste loads are unloaded and deposited in the landfill promptly to minimise potential odour emissions from the handling of waste. Vehicles carrying potentially malodorous waste will be enclosed or sheeted. Areas of the landfill will be covered at the end of the day to reduce the risk of odour emissions.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
							than waste types that are currently accepted under the Environmental Permit. As an example, the proposed addition of waste code 18 02 03 for animal faeces would not be considered to be a greater source of odour than other odorous waste codes such as 02 01 06 (animal faeces, urine and manure) that are currently accepted under the environmental permit.	The same odour management techniques are proposed. However, these are likely to be used more of the time as a result of the increase in tonnage being accepted per annum. The proposed addition of waste codes is not considered to have a significant impact on the risk of odour emissions. The waste codes proposed are not considered to be more odorous than waste types that are currently accepted under the Environmental Permit.	
	Noise and vibration	Nuisance, loss of amenity, loss of sleep	Noise through the air and vibration through the ground	Medium	Medium	Medium	Local residents are often sensitive to noise and vibration. Activities at site such as vehicle movements and deposit of waste in the landfill are a	All plant and equipment will be maintained in accordance with the manufacturers' recommendations to minimise noise generation.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
							potential source of noise. The nearest residential receptors are located within the predominant wind direction.	Noise control measures are carried out in line with the Noise Control procedure outlined in the EMS. All staff are required to report any unusual or abnormal noise to the Site Manager. The same noise management techniques are proposed. However, these are likely to be used more of the time as a result of an increase in HGV movements resulting from the increase in tonnage being accepted per annum.	
Local human population – Residential dwellings located within the vicinity of the Site. Nearest residential	Scavenging animals and scavenging birds	Harm to human health - from waste carried off site and faeces. Nuisance and loss of amenity	Air transport and over land	Medium	Medium	Medium	Permitted waste types are likely to attract scavenging animals and birds but may become breeding / nesting sites.	Strict waste acceptance procedures will be in place to ensure that only permitted waste types are accepted on Site. Contravening wastes will be removed from Site	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
dwelling; Newbiggin 130m E from the Site.								as soon as practicable to minimise the risk of stored contravening wastes attracting pests and scavenging animals. Regular housekeeping will minimise the risk from scavenging animals. The same waste storage and handling management techniques are proposed. However, these are likely to be used more of the time as a result of the increase in tonnage being accepted per annum. Areas of the landfill will be covered at the end of the day to reduce the risk of animals nesting in the landfill.	
	Pests (e.g. flies)	Harm to human health, nuisance, loss of amenity	Air transport and over land	Medium	Medium	Medium	Permitted waste types likely to attract pests.	As above.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
Nearest residential dwelling; Newbiggin 88m E from the Site.	Flooding of site	Harm to human health, nuisance, loss of amenity. Nuisance and harm to the health of local wildlife. Road closures and road traffic incidents.	Flood waters containing waste, contaminated run off from waste or leachate from the Site.	Low	Medium	Medium/Low	The Site is located within Flood Zone 1. The site is very low risk of flooding from surface water, rivers, and the sea. Waste types are inert and non-hazardous, so harm is likely to be temporary and reversible.	A Flood Management Plan is in place on Site. This plan outlines actions that should be taken in the event of a flood, such as moving plant to higher ground where possible, and containing free materials that could enter flood waters. Only inert and non-hazardous waste types are accepted on Site. Any waste types delivered to Site that are not listed in the environmental permit are rejected. Any contravening waste discovered is stored in a secure container and promptly removed from Site.	Low
Local human population and / or livestock after gaining unauthorised	All on-site hazards: wastes, machinery, and vehicles	Bodily injury	Direct physical contact	Low	Medium	Medium/Low	The structures, equipment and machinery located on the Site are secured outside of	The Site will be constantly manned during operational hours.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
access to the Site							operation / manned hours.	The same maintenance procedures are proposed. However, these are likely to be used more of the time as a result of the increase in tonnage being accepted per annum.	
Local human population – Residential dwellings located within the vicinity of the Site. Nearest residential dwelling; Newbiggin 88m E from the Site Local Roads	Major disruptive incidents – unforeseen events or emergencies that have the potential to temporarily suspend operations at the Site. These include but are not limited to; Flooding, Fire, Seismic Activity, Severe Road Accident, Pandemic and Industrial Action.	Temporary closure of the Site resulting in; Road closures and road traffic incidents. Harm to human health, nuisance, loss of amenity. Nuisance and harm to the health of local wildlife. Loss of containment of the waste, gas, and/or leachate. Loss of stability.	Pathways include, but are not limited to; Direct physical contact / inhalation of smoke Contaminated Flood Waters Air transport and over land	Low	High	Medium	The presence of combustible waste on site means that, in the event of a major disruptive incident (such as fire, flood, or severe accident), there is a risk of temporary loss of containment, environmental pollution, and harm to human health or local wildlife. While the probability of such incidents is low due to robust site management and security, the consequences could be significant,	In the event of a major disruptive incident, site operations will be suspended immediately to prevent further risk. The site's Environmental Management System (EMS) includes contingency and emergency response procedures for fire, flooding, and other emergencies. These include: • Immediate closure of the site to all incoming waste and vehicles. • Notification of relevant	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
							justifying a medium magnitude of risk. The site's proximity to sensitive receptors (residential dwellings, local roads, and surface waters) increases the potential impact of such events.	authorities (Environment Agency, emergency services). • Deployment of fire suppression and containment measures. • Implementation of the Flood Management Plan and containment of any potentially polluting materials. • Communication with alternative waste facilities (e.g., Hespian Wood Landfill) for diversion of waste vehicles if required. • Post-incident review and update of procedures as necessary.	



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
Local human population – Residential dwellings located within the vicinity of the Site. Nearest residential dwelling; Newbiggin 130m E from the Site.	Arson and / or vandalism causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness, and nuisance to the local population. Injury to staff, firefighters, or arsonists / vandals. Pollution of water or land.	Air transport of smoke. Spillages and contaminated firewater by direct run-off from site and via surface water drains and ditches	Medium	Medium	Medium	Permitted waste types include flammable materials, so a medium magnitude of risk is estimated. The Site is manned during operational hours and secured during operational hours to minimise the risk of arson/vandalism.	Procedures contained within the Environmental Management System (EMS) identify and minimise the risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances (including fire and spillages). The EMS contains procedures with regard to the risks from arson / vandalism i.e. site security measures.	Low
	Accidental fire causing the release of polluting materials to air (smoke or fumes), water or land.	Respiratory irritation, illness, and nuisance to the local population. Injury to staff or firefighters. Pollution of water or land.	As above.	Medium	Medium	Medium	Permitted waste types include flammable materials, so a medium magnitude of risk is estimated. Contravening waste has the potential to be flammable.	The EMS contains procedures and forms relating to accidents and incidents on the Site and what actions to take should one occur. Contravening waste will be stored separately and removed from site at the earliest opportunity.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
								In the event of a fire, fire suppression equipment is available on-Site including fire extinguishers and water bowsers. The increase to the annual tonnage limit will not increase the amount of waste stored at any one time. Therefore, there will be no increase in risk of fires on site.	
All surface waters close to and downstream of Site. Nearest surface water features: There are two ponds located in the northern part of the permit boundary. There are a number of ponds located between 165m-450m north of the Site at Ullswater	Spillage of liquids, leachate from waste, contaminated run-off from waste e.g. containing suspended solids	Acute effects: oxygen depletion, fish kill and algal blooms. Chronic effects: deterioration of water quality	Direct run-off from site across ground surface, via surface water drains, ditches etc. Indirect run-off via the soil layer.	Low	Medium	Medium/Low	Surface water from the northern part of the Site drains to the two ponds in the northern part of the Site. Water is abstracted from these ponds for operational purposes, or percolates naturally through to the underlying bedrock. Surface water in the southern part of the Site flows through a series of settling lagoons	Strict waste acceptance procedures will ensure that only permitted waste types will enter the Site. The same waste acceptance procedures are proposed. However, these are likely to be used more of the time as a result of the increase in tonnage being accepted per annum.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
Heights holiday park.							and weirs that allow sediment to settle before water drains through a ditch, where it percolates through limestone fissures along the eastern boundary. Rainfall on operational areas and completed cells is managed separately via a leachate drainage system, which ensures that water that has been in contact with waste does not drain to the ponds or surface water. Waste types are largely inert and non-hazardous, so harm is likely to be temporary and reversible. The Site is permitted to accept stable non-reactive hazardous waste and gypsum	The leachate management infrastructure is subject to regular checks and maintenance to ensure that surface water that has been in contact with waste does not escape to the ponds or other surface waters.	



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
							waste. The annual input limit for these waste types is not being increased. As such, it is considered that there will be no additional risk of contamination from these waste types as a result of the increase to annual waste input limits.		
Groundwater – The Site is not located in a Groundwater Source Protection Zone.	As above.	Chronic effects: contamination of groundwater, requiring treatment of water.	Infiltration through the ground then transport through soil / groundwater then extraction.	Low	Medium	Medium/Low	The Site is not located in a Groundwater Source Protection Zone and is reported to be in an area of low risk of flooding. Waste types are largely inert and non-hazardous, so harm is likely to be temporary and reversible. The Site is permitted to accept stable non-reactive hazardous waste. The annual input	Waste acceptance procedures implemented on the Site will ensure that only permitted waste types are accepted onto the site. The same waste acceptance procedures are proposed. However, these are likely to be used more of the time as a result of the increase in tonnage being accepted per annum.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
							limit for these waste types is not being increased. As such, it is considered that there will be no additional risk of contamination from these waste types as a result of the increase to annual waste input limits.	Implementation of the EMS ensures that no substances contaminate the groundwater at the Site.	
Protected sites – Protected Habitats, European sites and SSSIs. No European sites or SSSIs located within 1km.	Contaminated surface run-off.	Toxic contamination of surrounding surface water or ground water	Surface water drainage	Low	Low	Low	Waste types are largely inert and non-hazardous, so harm is likely to be temporary and reversible. The Site is permitted to accept stable non-reactive hazardous waste and gypsum waste. The annual input limit for these waste types is not being increased. As such, it is considered that there will be no additional risk of contamination from these waste	Waste accepted to the Site will be controlled by strict waste acceptance procedures. The same waste acceptance procedures are proposed. However, these are likely to be used more of the time as a result of the increase in tonnage being accepted per annum.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
							types as a result of the increase to annual waste input limits. There are no European sites or SSSI's within 1km of the Site.		
	Release of dust from Site	Smothering of plants and vegetation, reduced plant life	Atmospheric dispersion	Low	Medium	Medium/Low	Permitted waste types may comprise of dusts, powders, or loose fibres. Site activities that have the potential to generate dust include the tipping of waste into stockpiles, stored waste in the open being whipped by wind, deposit of waste in the landfill, and vehicle/plant movement. Movement of waste has the potential to emit dust. There is potential for increased dust	Strict waste acceptance procedures will be in place to ensure that only permitted waste types are accepted on Site. The same dust management techniques are proposed. However, these are likely to be used more of the time as a result of the increase in tonnage being accepted per annum. Areas of the landfill will be covered at the end of the day to reduce the risk of wind whipping of waste.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
							generation from permitted activities during prolonged dry periods. It is considered that the increase in waste tonnage limits may lead to a rise in dust emissions due to a higher number of vehicle movements on the site and an increased rate of waste deposition in the landfill. There are no European sites or SSSI's within 1km of the Site.		
	Noise and vibration	Disturbance of wildlife resulting in a reduction of biodiversity	Noise through the air and vibration through the ground	Low	Medium	Medium/Low	As above There are no European sites or SSSI's within 1km of the Site.	Equipment will be maintained in accordance with the manufacturers' recommendations to minimise noise generation. The same noise management techniques are proposed. However, these are likely to be used more of the time as	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
								a result of the increase in tonnage being accepted per annum. All staff are required to report any unusual or abnormal noise to the Site Manager.	
	Vermin and pests	The attraction of pests can lead to predation on local wildlife and increased litter.	Air transport and over land	Low	Low	Low	Permitted waste types are likely to attract pests. There are no European sites or SSSI's within 1km of the Site.	Strict waste acceptance procedures will be in place to ensure that only permitted waste types are accepted on Site. The increase in annual tonnage of waste to be accepted will not increase risk of vermin and pests due to the fact that the amount of waste stored at any one time will not change. Regular housekeeping will minimise the risk from scavenging animals.	Very Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
								The same housekeeping techniques are proposed. However, these are likely to be used more of the time as a result of the increase in tonnage being accepted per annum. Areas of the landfill will be covered at the end of the day to reduce the risk of animals nesting in the landfill.	
The landfill itself (containment, stability, and engineered design).	Landfilled waste	Loss of containment of the waste, gas, and/or leachate. Loss of stability.	Landfilled waste	Low	Medium	Medium/Low	The landfill engineering / design / containment infrastructure will not change as a result of the increased rate of input of waste. Landfill is designed to be filled with waste, the risks from this are considered / managed by the conditions within the permit. It is not considered that the risks are depended on the	Compliance with the requirement of the Environmental Permit. Environmental Monitoring of the Site is undertaken. The same site management techniques are proposed. The increase in annual tonnage of waste entering the Site will not change this.	Low



Receptor	Source	Harm	Pathway	Probability of Exposure	Consequence	Magnitude of Risk	Justification for Magnitude	Risk Management	Residual Risk
							time taken to fill the landfill.		



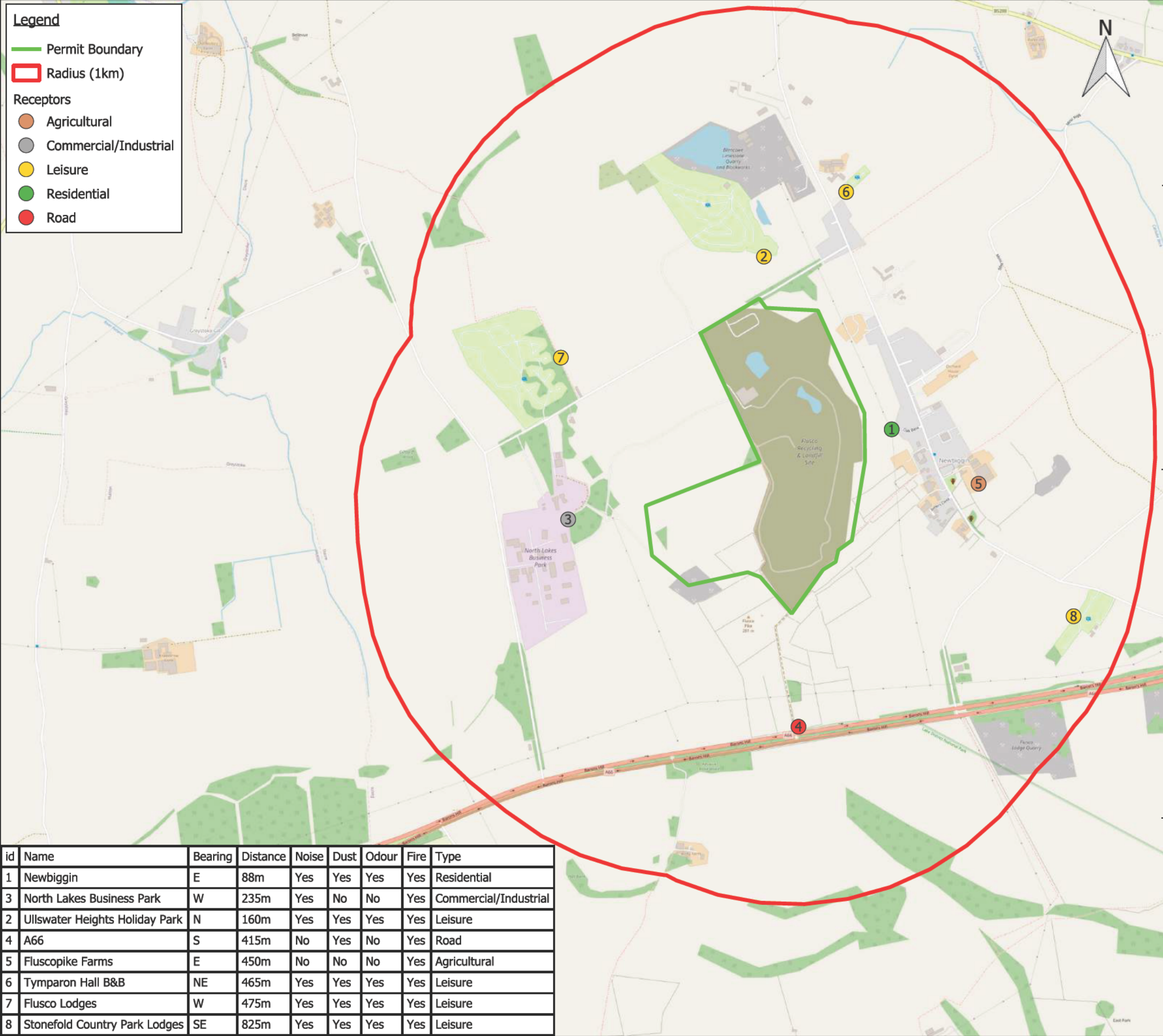
7. Conclusion

- 7.1. The following conclusions have been considered as a result of this Environmental Risk Assessment:
- No additional risks have been identified as a result of the proposed changes to the Environmental Permit.
 - It is considered that existing risks from landfill activities will be impacted by the proposed changes to the Environmental Permit.
 - Risks can be adequately managed by existing mitigation measures.
 - Where it is considered that there is a greater risk as a result of the proposed changes, adjustments to the mitigation measures (e.g., rate of deployment) have been proposed.
- 7.2. Based on this Environmental Risk Assessment, it is concluded that the proposed changes do not present a significant increase in risk to environmental pollution or human health.



Drawings

24/012t 001 Sensitive Receptor Plan V2



Legend

- Permit Boundary
- Radius (1km)
- Receptors
 - Agricultural
 - Commercial/Industrial
 - Leisure
 - Residential
 - Road



Seletia (F) Limited

Flusco Landfill

Newbiggin,
Penrith,
Cumbria, CA11 0JB

Drawing Ref: 24/012t 001 Sensitive Receptor Plan

Version Number: 2

26th September 2025

Created By: SW
Checked By: TW

Scale:
Map: 1:22,000



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id	Name	Bearing	Distance	Noise	Dust	Odour	Fire	Type
1	Newbiggin	E	88m	Yes	Yes	Yes	Yes	Residential
3	North Lakes Business Park	W	235m	Yes	No	No	Yes	Commercial/Industrial
2	Ullswater Heights Holiday Park	N	160m	Yes	Yes	Yes	Yes	Leisure
4	A66	S	415m	No	Yes	No	Yes	Road
5	Fluscopike Farms	E	450m	No	No	No	Yes	Agricultural
6	Tymparon Hall B&B	NE	465m	Yes	Yes	Yes	Yes	Leisure
7	Flusco Lodges	W	475m	Yes	Yes	Yes	Yes	Leisure
8	Stonefold Country Park Lodges	SE	825m	Yes	Yes	Yes	Yes	Leisure



Appendix 4

Odour Management Plan



Odour Management Plan

Seletia (F) Limited
Flusco Landfill,
Newbiggin,
Penrith,
Cumbria,
CA11 0JB



PROVIDING SOLUTIONS, ENSURING COMPLIANCE

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Document Control Table

Project Reference	24/012q
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Status	Issued

Change log

Version	Changes	Produced by	Checked by	Date
1	Original Odour Management Plan.	Sian Wilcox	Tracey Westbury	09 April 2025
2	Updates to 1. Introduction, 3.2, Table 3.1, 3.13, 3.14, 4.1, 4.2, 4.6-12, 6. Sources of Odour Emissions, 7. Landfill Odour Management, Table 7.1, 8. Odour Monitoring.	Sian Wilcox	Tracey Westbury	08 September 2025
3	Updates to 7.8, Table 7.1.	Sian Wilcox	Tracey Westbury	24 November 2025



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8. Odour Monitoring	16
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Drawings

Drawing No. 24/012t 001 Sensitive Receptor Plan V2

Appendices

Appendix 1	Odour Control Procedure
Appendix 2	Odour Monitoring Form
Appendix 3	Odour Complaints Form



1. Introduction

- 1.1. Westbury Environmental Limited has prepared this Odour Management Plan (OMP) on behalf of Seletia (F) Limited.
- 1.2. The Site is located at Flusco Landfill, located at Newbiggin, Penrith, Cumbria CA11 0JB (Site).
- 1.3. At the time of producing this odour management plan, cells for stable non-reactive hazardous waste and gypsum have not been constructed. The Site is therefore not currently accepting these waste types.
- 1.4. The Site is located adjacent to the residential area of Newbiggin. Land surrounding the Site is otherwise largely agricultural, with some leisure facilities (e.g., holiday lodges) and an industrial estate nearby.
- 1.5. It is considered that there is a risk of odour emissions from the landfill operations at Site due to the nature of the waste that is accepted under the Environmental Permit.
- 1.6. This OMP provides detailed information on the sources, risks and mitigation measures related to the potential for odour emissions due to landfill operations at the Site.

Using this OMP

- 1.7. A copy of this OMP must be kept in the Site office and be readily available to all members of staff.
- 1.8. This OMP forms part of the Environmental Management System (EMS) for the Site. Procedures and forms referenced within this OMP are included within the EMS. Completed forms (records) will be kept, as required by conditions included in the Permit.
- 1.9. The contents of this OMP will be implemented on the Site through procedures within the EMS. The EMS includes an Environmental Training Checklist that specifies all the required training for Site staff. This training checklist includes odour mitigation procedures. The training undertaken by each member of staff is recorded on their training record as part of the EMS.
- 1.10. Training on implementing odour mitigation procedures will be given to staff at least on an annual basis by the Site manager. New members of staff will be given training on the OMP during their induction.

Content of the Odour Management Plan

- 1.11. This Odour Management Plan is structured as follows:
 - Section 2 provides a summary of the relevant legislation and guidelines.
 - Section 3 provides information relating to the Site setting, including the location of the Site and nearby sensitive receptors.
 - Section 4 provides information on the operations carried out on the Site and the delivery of material to the Site.
 - Section 5 details the assessment process to be taken when determining if activities on Site should stop in order to prevent significant odour.
 - Section 6 describes sources of odour on the Site.
 - Section 7 provides information on the site management and the mitigation measures employed at the Site.
 - Section 8 provides information of odour monitoring carried out on the Site.
 - Section 9 provides a description of how complaints can be made and how they are addressed by the site management.



2. Relevant Legislation

Environmental Protection Act 1995

- 2.1. The Environmental Protection Act 1990, Part III, Section 79 is the primary legislation for controlling odour from industrial, trade and business premises.
- 2.2. Local Authorities must review complaints about odours from industrial, trade and business premises that could be a 'statutory nuisance' covered by the Environmental Protection Act 1990.
- 2.3. Odour may be considered a 'statutory nuisance' if one of the following applies:
 - The odour unreasonably and substantially interferes with the use or enjoyment of a home or other premises.
 - The odour injures health or is likely to injure health.
- 2.4. An 'abatement notice' will be served by the Local Authority if it is agreed that a statutory nuisance is happening, has happened or will happen in the future. An abatement notice will require whoever's responsible to stop or restrict the odour being produced.
- 2.5. If an abatement notice is not complied with then the person responsible may be prosecuted and/or fined.
- 2.6. Local Authorities can also take action to stop or restrict the nuisance by:
 - Carrying out works and making the person given the abatement notice pay for them (this can include seizure and confiscation of equipment)
 - Applying to the High Court for an injunction (if a prosecution is not adequate)

Compliance with Environmental Permit

- 2.7. The Environment Agency ensures odour from permitted waste facilities is controlled by including conditions relating to odour emissions in the Environmental Permit.
- 2.8. If the Environment Agency consider that odour emissions are at an unreasonable level, then the operator will be required to take further abatement measures to reduce odour pollution or risk having to reduce or cease operations.
- 2.9. A final determination as to whether there has been a Permit breach will involve an assessment of the level and effect of the emissions and the appropriateness of the measures being employed.



3. Site Location and Sensitive Receptors

- 3.1. Flusco Pike Landfill is located at Newbiggin, Penrith, Cumbria CA11 0JB.
- 3.2. The land surrounding the Site is largely agricultural, with the nearest residential area being Newbiggin which is located approximately 88m east from the Site boundary at its closest point.
- 3.3. The Site is not located within a Groundwater Source Protection Zone. There are two surface water features within the northern area of the Site boundary.
- 3.4. The Site is located within Flood Zone 1 and therefore has a low risk of flooding.

Sensitive Receptors

- 3.5. This OMP identifies receptors within 1km of the Site that may be sensitive to odour emissions as a result of the permit variation to remove annual waste input limits for landfill deposit.
- 3.6. Receptor sensitivity is a key factor in determining the significance of odour pollution as some receptors are more sensitive than others. Residential receptors tend to have considerably lower tolerance to odour pollution than commercial and industrial receptors.
- 3.7. Locations with a high sensitivity to odour near to the Site include the residential area of Newbiggin 130m to the east of the Site at its closest point, and Flusco Wood Lodges Holiday Park 530m northwest of the Site.
- 3.8. The distance from the Site boundary to the sensitive receptor plays an important role in the potential impact experienced from odour emissions. Odour intensity reduces significantly the further away from the source.
- 3.9. The predominant wind direction also plays an important role in the potential impacts experienced from odour emissions.
- 3.10. Wind direction data has been obtained from Penrith weather station, see Figure 3.1. Penrith weather station is the nearest weather station with Windrose statistics and is located approximately 4.5km east of the Site.
- 3.11. The predominant wind blows towards receptors to the east/north-east of the Site which includes industrial and residential areas, see Figure 3.1: Wind rose from Penrith weather station.

Figure 3.1: Wind rose from Penrith weather station



- 3.12. The direction and distances from the boundary of the Site to the boundary of sensitive receptors are provided in Table 3.1 Sensitive Receptors.

**Table 3.1 Sensitive Receptors**

Receptor	Type of receptor	Bearing from Site	Approx. distance from Site boundary to receptor boundary (m)	Odour Sensitivity (based on receptor type, bearing, distance and predominant wind direction)
Newbiggin	Residential	East	88	Very High
Ullswater Heights Holiday Park	Leisure	North	160	High
North Lakes Business Park	Commercial/Industrial	West	235	Low
Tymparon Hall B&B	Leisure	Northeast	465	Medium
Flusco Lodges	Leisure	West	475	Medium
Stonefold Country Park Lodges	Leisure	Southeast	825	Low

- 3.13. Sensitive receptors near the site are identified on Drawing No. 24/012t 001 Sensitive Receptors Plan V2.
- 3.14. The closest residential area is Newbiggin which is located 88m east of the site boundary at its closest point. This residential area is in the predominant wind direction and is therefore at higher risk of being impacted by odour emissions from landfill operations at the Site.
- 3.15. There are two holiday parks situated within 1km of the site boundary: Flusco Lodges (650 m northwest) and Ullswater Heights (330m north). These receptors are not located in the predominant wind direction.

Meteorology

- 3.16. Adverse weather conditions such as heat waves may increase the potential for odour emissions from wastes deposited on Site. Prolonged spells of high temperatures will lead to biodegradable waste degrading quicker, thereby increasing the potential for odour emissions.

Other Sources of Odour

- 3.17. It is considered that agricultural activities carried out at particular times of the year on the surrounding land, such as Fluscopike Farms located 450m east of the Site, have the potential to cause odour emissions that impact local sensitive receptors.



4. Operations at the Site

Waste Deliveries

- 4.1. Waste is delivered to the Site in Heavy Goods Vehicles (HGVs). HGVs are directed to the weighbridge before being directed to the appropriate area to tip the waste. This will either be directly in to the operation cell of the landfill, or in an appropriate waste storage area.
- 4.2. Waste acceptance procedures are applied to ensure that only suitable waste is accepted. Waste is rejected from the Site if it is not acceptable under the environmental permit.
- 4.3. All waste deliveries are accompanied by a Waste Transfer Note (WTN) which is obtained from the load driver. The WTN provides information on the driver, waste haulier name, permit number, description of waste etc. Loads not accompanied by a WTN or that do not match the description on the WTN are rejected.
- 4.4. A record is kept of all vehicles delivering waste to and from the Site, along with the type, quantity and source of waste delivered. WTN's are appropriately stored for a minimum of two years.

Waste storage and handling

- 4.5. The operations carried out at the Site include the receipt of non-hazardous and inert waste, handling and storage prior to disposal in the landfill.
- 4.6. The Site activities also include temporary storage of leachate that arises from the landfill ahead of treatment in the leachate treatment facility on Site. It is considered that the storage and treatment of leachate could have the potential to generate odour.
- 4.7. Landfill gas is collected and flared on Site for the purpose of energy recovery. It is considered that the production on landfill gas from the waste will have the potential to generate odour.
- 4.8. The storage of waste on the Site has a potential to cause odour emissions. As such, the volume of waste stored on Site at any one time is typically low, with short storage times.



5. Risk Matrix for Measures to be Taken

- 5.1. The following section details the assessment process to be taken when determining if activities on Site should stop in order to prevent significant odour.
- 5.2. Weather conditions are monitored each working day as part of the Odour Control Procedure see Appendix 1 Odour Control Procedure.

Estimating Magnitude of Risk

- 5.3. Table 5.1 provides a matrix for estimating the magnitude of risk from a potential hazard, considering both the probability and consequences of the hazard occurring.
- 5.4. The magnitude of risk determines the level of management required to reduce the probability of the hazard occurring.
- 5.5. In this management plan, the hazard is considered to be the significant emission of odour from the Site such that it could cause nuisance to local sensitive receptors. Table 5.1 describes this Risk Matrix applied to this assessment of risk.

Table 5.1 Estimating the magnitude of risk.

	Magnitude of Risk	Consequence			
		High	Medium	Low	Negligible
Probability	High	Very high	High	Medium/Low	Very low
	Medium	High	Medium	Low	Very low
	Low	High/Medium	Medium/Low	Low	Very low
	Negligible	High/Medium/Low	Medium/Low	Low	Negligible

- 5.6. An assessment of the most common weather conditions and their potential to generate significant detectable odour emissions from the activities on Site has been undertaken and is presented in Table 5.2 to Table 5.4.
- 5.7. The risk assessment is separated into two sections. In Table 5.2 the operator must record the temperature and then proceed to the corresponding table. Tables 5.3 and 5.4 contain all common weather conditions and their risk magnitude. Actions required for each risk category are detailed in Table 5.5.

Table 5.2 Temperature

Temperature	Action
Warm (Above 18°C)	Go to Table 5.3
Cool (Below 18°C)	Go to Table 5.4

Table 5.3 Risk matrix for warm weather

Conditions	Probability of odour nuisance occurring	Consequence	Risk magnitude
low wind (<3 Beaufort)	Low	Medium	Medium/Low
medium wind (>4 Beaufort)	Medium	Medium	Medium
high wind (>8 Beaufort)	Low	Medium	Medium/Low

Table 5.4 Risk matrix for cool weather

Conditions	Probability	Consequence	Risk magnitude
low wind (<3 Beaufort)	Negligible	Medium	Medium / Low



Conditions	Probability	Consequence	Risk magnitude
medium wind (>4 Beaufort)	Low	Medium	Medium / Low
high wind (>8 Beaufort)	Negligible	Medium	Medium / Low

- 5.8. The above Risk Matrix details are based on the following assumptions:
- More anaerobic degradation / odour generation will occur in warmer weather.
 - High wind speeds will cause a greater dilution of the odour from the site thereby reducing the risk of nuisance to the sensitive receptors.
- 5.9. The action and odour monitoring frequency required for each level of risk is provided in Table 5.5: Action and odour monitoring frequency required for each level of risk.

Table 5.5: Action and odour monitoring frequency required for each level of risk

Risk Magnitude	Action	Odour Monitoring Frequency
Low	Continued implementation of preventive measures.	Once per day at around midday.
Low / Medium	Continued implementation of preventative measures.	Once per day at around midday.
Medium	Continued implementation of preventative measures. Odour emissions are likely, therefore movement / deposit of waste may temporarily cease if preventative measures are not proving effective in preventing the odour emission.	Twice per day, once in the morning, once in the afternoon.
High	Continued implementation of preventative measures. Odour emissions are likely therefore movement / deposit of waste with a potential to cause odour may not be undertaken or will be temporarily ceased.	At least every 3 hours.



6. Sources of Odour

- 6.1. There are three main potential sources of odour associated with landfill operations at the Site:
 - Odorous waste.
 - Landfill gas.
 - Landfill leachate.
- 6.2. The Permit allows for the acceptance and deposit of odorous wastes from the following waste categories:
 - 02 – Wastes from Agriculture, Horticulture, Aquaculture, Forestry, Hunting and Food Preparation.
 - 20 – Municipal Wastes
- 6.3. The Permit also allows for the acceptance and deposit of biodegradable wastes with the potential to become odorous.
- 6.4. Table 6.1 provides an inventory of the potentially odorous materials that may be handled, stored and deposited on Site.
- 6.5. The Permit includes the following activities which are considered to have potential to generate odour emissions:
 - Landfill gas production, collection and treatment.
 - Temporary storage and treatment of leachate.
- 6.6. These operations require ongoing engineering works, such as the installation of gas or leachate infrastructure, which can potentially impact the odour emissions.


Table 6.1: Inventory of Odorous Materials

Waste Type	List of Waste Codes	Description	Factors that influence odour emissions	Potential for variation
Wastes from Agriculture, horticulture, aquaculture, forestry, hunting and fishing, food preparation and processing	02 01 01 – sludges from washing and cleaning 02 01 02 – animal-tissue waste 02 01 03 plant-tissue waste 02 01 06 – animal faeces urine and manure (including spoiled straw), effluent, collected separately and treated off-site 02 02 03 – materials unsuitable for consumption or processing 02 03 04 – materials unsuitable for consumption or processing 02 05 01 – materials unsuitable for consumption or processing 02 06 02 – wastes from preserving agents 02 07 01 – wastes from washing, cleaning and mechanical reduction of raw materials 02 07 02 – wastes from spirits distillation 02 07 03 – wastes from chemical treatment 02 07 04 – materials unsuitable for	Potential to be odorous as a result of decomposing organic material.	Quality of material – moisture content, organic content, age, degradation, ambient temperature). Quantity of waste on site and input of material.	Potentially less odorous in winter months due to lower ambient temperature. Potentially more nitrogenous and degraded from April to September.



	consumption or processing			
Municipal Wastes	• 20 01 08 – biodegradable kitchen and canteen waste • 20 01 25 – edible oil and fat • 20 02 01 – biodegradable waste • 20 02 03 – other non-biodegradable wastes • 20 03 01 – mixed municipal waste • 20 03 02 – waste from markets • 20 03 03 – street-cleaning residues • 20 03 04 – septic tank sludge • 20 03 06 – waste from sewage cleaning	Potential to be odorous as a result of decomposing organic material.	Quality of material – moisture content, organic content, age, degradation, ambient temperature). Quantity of waste on site and input of material.	Potentially less odorous in winter months due to lower ambient temperature. Potentially more nitrogenous and degraded from April to September.
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 05 01 – non-composted fraction of municipal and similar wastes • 19 05 02 – non-composted fraction of animal and vegetable waste • 19 05 03 – off-specification compost • 19 06 04 – digestate from anaerobic treatment of municipal waste • 19 06 06 – digestate from anaerobic treatment of animal and vegetable waste	Potential to be odorous as a result of decomposing organic material.	Quality of material – moisture content, organic content, age, degradation, ambient temperature). Quantity of waste on site and input of material.	Potentially less odorous in winter months due to lower ambient temperature. Potentially more nitrogenous and degraded from April to September.



	19 08 05 – sludges from treatment of urban waste water			
Paper and cardboard	15 01 01 – paper and cardboard packaging 20 01 01 – paper and cardboard	Potential to be odorous as a result of decomposing organic material.	Quality of material – moisture content, organic content, age, degradation, ambient temperature). Quantity of waste on site and input of material.	Potentially less odorous in winter months due to lower ambient temperature. Potentially more nitrogenous and degraded from April to September.
Wood wastes	03 01 01 – waste bark and cork 03 01 05 – sawdust, shavings, cuttings, wood, particle board and veneer 03 03 01 – waste bark and wood 15 01 03 – wooden packaging 17 02 01 – wood 19 12 07 – wood other than that mentioned in 19 1 06 20 01 38 – wood other than that mentioned in 20 01 37	Potential to be odorous as a result of decomposing organic material.	Quality of material – moisture content, organic content, age, degradation, ambient temperature). Quantity of waste on site and input of material.	Potentially less odorous in winter months due to lower ambient temperature. Potentially more nitrogenous and degraded from April to September.
Wastes from the leather, fur and textile industries	04 01 01 – fleshings and lime split wastes 04 01 02 – liming waste 04 02 10 – organic matter from natural products (for example grease, wax)	Potential to be odorous as a result of decomposing organic material.	Quality of material – moisture content, organic content, age, degradation, ambient temperature). Quantity of waste on site and input of material.	Potentially less odorous in winter months due to lower ambient temperature. Potentially more nitrogenous and degraded from April to September.
Healthcare Waste	18 02 03 wastes whose collection and disposal is subject to special requirements in order to prevent infection.	Potential to be odorous as a result of decomposing organic material.	Quality of material – moisture content, organic content, age, degradation, ambient temperature). Quantity of waste on site and input of material.	Potentially less odorous in winter months due to lower ambient temperature. Potentially more nitrogenous and degraded from April to September.



7. Odour Management

- 7.1. The Site operates in accordance with an Environmental Management System (EMS) which includes procedures and forms which outline steps to be taken to manage odour emissions that are generated as a result of Site operations.
- 7.2. Measures to manage odour from the Site are employed to minimise the potential impact of odour on nearby receptors.
- 7.3. Table 7.1 provides details on Source, Pathway and Receptor routes for odour emissions, and the measures employed to manage these.

Waste Acceptance

- 7.4. The Site is operated in accordance with a strict Waste Acceptance Procedure to ensure that only permitted waste types are accepted at the Site.
- 7.5. Information about waste being delivered to the Site is obtained by completion of a waste information form, prior to waste acceptance. A judgement is made based on the information provided to determine if the waste is acceptable for deposit/transfer on the Site.
- 7.6. Waste loads are visually inspected on arrival at the Site to ensure that the waste matches the description provided on the waste transfer note (WTN). If the waste has not been accurately described on the WTN, then it is rejected in accordance with the Waste Rejection Procedure.
- 7.7. Strongly malodorous wastes will not be accepted on to the Site and will be rejected in accordance with the EMS procedure.
- 7.8. A self-imposed sulphur content limit of 10,000mg per kg will be implemented for incoming waste loads.

Plant and Equipment

- 7.9. Sufficient plant and equipment are made available at the Site to facilitate:
 - Prompt disposal of waste in the landfill.
 - Placement of adequate temporary cell cover.
 - Sorting and separation of wastes for transfer.

Deposit of waste in the landfill

- 7.10. Incoming waste loads will be unloaded into the reception area and sent to the landfill cell as soon as practically possible to ensure that the potential for odorous emissions is minimised.
- 7.11. The size of tipping areas in operational cells are minimised where practicable to minimise the size uncovered areas that may generate odour.
- 7.12. The slope gradients in operational cells are maintained at an appropriate gradient to prevent the escape of odorous waste from the cell.
- 7.13. The Environmental Permit allows for separate cells for gypsum and stable-non reactive hazardous waste. These cells have not been constructed and so these waste types are not accepted.

Landfill Cell Capping

- 7.14. The operational area of the landfill will be covered with daily cover (typically soils or fines) by the end of each working day. The daily cover is installed to prevent odour emissions escaping the operational landfill cell outside of operational hours.
- 7.15. The daily cover is considered to be effective in reducing the exposure of the waste to the elements (e.g. rain, wind), improve the stability of the waste, minimise the risk of windblown litter, and discourage vermin.
- 7.16. Where waste will not be deposited in a cell for a longer period of time, an intermediate cover will be applied to manage potential odour emissions.



- 7.17. Completed cells will be permanently capped with an engineered cap. The permanent cap will be placed in accordance with a Construction Quality Assurance (CQA) Report which has been approved by the Environment Agency.

Landfill Gas Management

- 7.18. Gas extraction infrastructure is installed progressively across the Site as landfill cells are filled and permanently capped.
- 7.19. Landfill gas extraction systems are installed during filling and on completion of a landfill cell, to reduce the risk of uncontrolled gas emissions.
- 7.20. Installation of gas management infrastructure requires for waste to be excavated from completed cells. Olfactory monitoring is carried out where gas infrastructure works are being carried out to monitor the level of odour released from drilling down in to the completed cell.
- 7.21. Landfill gas is collected and used to produce energy. If the collected landfill gas cannot be used to produce energy, the landfill gas may be flared.
- 7.22. Landfill gas management infrastructure is regularly inspected and maintained in accordance with the maintenance procedure in the EMS.

Leachate Management

- 7.23. Leachate is temporarily stored and treated in a leachate treatment facility on the Site, before being discharged to a sewer.
- 7.24. The storage containers for leachate are sealed and are inspected and maintained in accordance with the maintenance procedures in the EMS.
- 7.25. Installation of leachate management infrastructure requires for waste to be excavated from completed cells. Olfactory monitoring is carried out where leachate infrastructure works are being carried out to monitor the level of odour released from drilling down in to the completed cell.
- 7.26. Leachate management infrastructure is regularly inspected and maintained in line with the maintenance procedure in the EMS.

Housekeeping

- 7.27. The Site is operated in accordance with a Housekeeping procedure to control litter, pests and vermin at the Site.
- 7.28. The Site is inspected regularly for litter. Any litter observed is collected as part of a daily litter picking activity.
- 7.29. Where weather conditions or site operations are observed to be producing a high level of litter, the litter picking activity will be undertaken on a more frequent basis throughout the day.
- 7.30. The Site is inspected regularly for evidence of pest and vermin infestations. If evidence of there is found, an appropriate specialist contractor will be called in to address the problem.

Employee Training

- 7.31. All Site operatives will be given the appropriate training in managing odour emissions and malodours material. Training will also be given to all personnel who are responsible for completing Odour Complaint Forms.


Table 7.1: Source Pathway Receptor Routes

Source	Pathway	Receptor	Impact	Odour Management Measures
Reception, handling and storage of odorous waste.	Atmospheric dispersion causing air transport then inhalation.	Surrounding sensitive receptors. The residential area of Newbiggin (88m east). Nearby leisure facilities (Holiday parks).	Nuisance. Potential for complaints if excessive odour is detected beyond the Site boundary. Loss of amenity.	Strict Waste Acceptance and Waste Rejection procedures are adhered to. All Site operatives will be given the appropriate training in implementing the requirements of this OMP and EMS procedures relating to odour and the management of malodorous material. Training will also be given to all personnel who are responsible for completing Odour Complaint Report Forms. If odour emissions being generated are not able to be minimised by implementing odour management measures, the acceptance and deposit of odorous waste in the landfill may temporarily cease. Waste storage duration will be limited to minimise the risk of wastes stored on site becoming odorous. A self-imposed sulphur content limit of 10,000mg per kg will be implemented for incoming waste loads.
Deposit of waste in the landfill.	Atmospheric dispersion causing air transport then inhalation.	Surrounding sensitive receptors. The residential area of Newbiggin (88m east). Nearby leisure facilities (Holiday parks).	Nuisance. Potential for complaints if excessive odour is detected beyond the Site boundary. Loss of amenity.	Incoming waste loads will be deposited as soon as practically possible to ensure that the odour potential of odorous materials is reduced. Odorous wastes will be tipped in the current operational area of the landfill and will be covered at the end of each working day. The size of the tipping areas in operational cells are kept to a minimum. Operational cells are temporarily covered (typically with soils or fines) at the end of the day.



Deposit of gypsum based waste.	Atmospheric dispersion causing air transport then inhalation.	Surrounding sensitive receptors. The residential area of Newbiggin (88m east). Nearby leisure facilities (Holiday parks).	Nuisance. Potential for complaints if excessive odour is detected beyond the Site boundary. Loss of amenity.	The permit allows for a separate cell for gypsum waste. This cell has not been constructed yet, so permitted waste types for deposit in this cell are not being accepted. Should the cell for gypsum waste be constructed, measures will be taken to ensure that no biodegradable waste is deposited in this cell.
Excavation of waste and removal of cover/ temporary caps for engineering works (e.g., installation of gas wells)	Atmospheric dispersion causing air transport then inhalation.	Surrounding sensitive receptors. The residential area of Newbiggin (88m east). Nearby leisure facilities (Holiday parks).	Nuisance. Potential for complaints if excessive odour is detected beyond the Site boundary. Loss of amenity.	Olfactory monitoring will take place while installation of infrastructure such as wells or boreholes is being completed. A litter picking activity is undertaken to collect any escaped litter or waste. If odour emissions being generated are not able to be minimised by implementing odour management measures, activities may temporarily cease.



Escape of odorous wastes from operational cells.	Atmospheric dispersion causing air transport then inhalation.	Surrounding sensitive receptors. The residential area of Newbiggin (88m east). Nearby leisure facilities (Holiday parks).	Nuisance. Potential for complaints if excessive odour is detected beyond the Site boundary. Loss of amenity.	The gradient of slopes within operational cells are kept to an appropriate gradient to reduce the risk of waste escaping the cell. Landfilling may temporarily cease in periods of high wind where waste is being wind whipped. A litter picking activity is undertaken to collect any escaped litter or waste. If odour emission are detected from the operational area then further cover material may be deposited to minimise the emission.
Management of landfill gas e.g., Collecting, monitoring and flaring landfill gas.	Atmospheric dispersion causing air transport then inhalation.	Surrounding sensitive receptors. The residential area of Newbiggin (88m east). Nearby leisure facilities (Holiday parks).	Nuisance. Potential for complaints if excessive odour is detected beyond the Site boundary. Loss of amenity.	Landfill gas infrastructure is maintained in accordance with the Maintenance procedure in the EMS. Temporary gas extraction systems may be installed to collect gas prior to the completion of a cell to minimise emissions. Landfill gas extraction systems are installed as soon as practically possible after the completion of a landfill cell.



Storage and treatment of leachate.	Atmospheric dispersion causing air transport then inhalation.	Surrounding sensitive receptors. The residential area of Newbiggin (88m east). Nearby leisure facilities (Holiday parks).	Nuisance. Potential for complaints if excessive odour is detected beyond the Site boundary. Loss of amenity.	Storage containers for leachate are inspected and maintained in accordance with the maintenance procedure in the EMS.
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8. Odour Monitoring

- 8.1. Odour monitoring will be completed in accordance with the Odour Control Procedure and Odour Monitoring Form, see Appendix 1 Odour Control Procedure and Appendix 2 Odour Monitoring Form.
- 8.2. Routine odour monitoring will be undertaken at least once daily by a suitably trained member of staff.
- 8.3. Staff responsible for completing odour surveys should:
 - Not smoke or eat/drink strongly flavoured items for thirty minutes before the odour survey.
 - Not eat/drink sweet items immediately before or after the odour survey.
 - Not complete odour surveys if they have an illness which can impact the odour survey e.g., cold, sore throat.
- 8.4. Weather conditions are recorded each working day as part of the Odour Monitoring Form, Appendix 2 Odour Monitoring Form.
- 8.5. Frequency of monitoring will be determined by weather conditions.
- 8.6. When the risk magnitude is low / medium, odour monitoring will be undertaken once per day at around midday, at all monitoring locations.
- 8.7. When the risk magnitude is medium, odour monitoring will be undertaken twice per day, once in the morning and once in the afternoon, at all monitoring locations.
- 8.8. When the risk magnitude is high, odour monitoring will be undertaken at least every 3 hours, at all monitoring locations.
- 8.9. To overcome issues regarding odour adaptation, a suitably trained member of the office staff will undertake monitoring, the frequency of which will be determined by the Risk Matrix, thus could be either at the beginning of the day immediately upon arriving at the Site, or after lunch break when the staff member has been off the Site for some time. This will prevent desensitisation or 'odour fatigue'.
- 8.10. The odour monitoring will be undertaken at the monitoring locations described below:
 - Site entrance.
 - Waste transfer station area.
 - Waste storage areas.
 - Area where landfilling operations are taking place.
- 8.11. The monitoring locations are listed on the Odour Monitoring Form. At each monitoring location, the suitably trained member of staff will complete the odour assessment and fill out the table.
- 8.12. If a complaint is received directly to the Site concerning an odour emission, an odour inspection is carried out as soon as practicably possible. The Operator will attend at the location of the reported odour and complete the Odour Monitoring Form.
- 8.13. All staff responsible for checking odour will have received specific training from Site management on odour inspection.



9. Reporting and Complaints Response

- 9.1. An Odour Complaint Form will be available on Site. An Odour Complaints Report Form must be filled in and kept on file whenever an odour complaint is received in accordance with the EMS Complaints Procedure.

Engagement with the Community

- 9.2. A Site Notice Board is located at the Site entrance and includes the following information:
- The Permit holder's name.
 - The operator's name.
 - An emergency contact name and telephone number.
 - A statement that the Site is permitted by the Environment Agency
 - The Environmental Permit Ref. EPR/BM5941IH
 - The Environment Agency national numbers, 03708 506506 and 0800 807060 (incident hotline).
- 9.3. The provision of the above information ensures that members of the public can contact the Operator should they be concerned by odour or wish to make a complaint. This also applies to any events that may happen when the Site is unmanned / not operational.

Reporting of Complaints

- 9.4. Should a complaint regarding odour be received by the Site, the complaint is recorded on the Odour Complaints Report Form in the EMS and investigated in accordance with the Complaints Procedure within the EMS implemented on the Site, see Appendix 3 Odour Complaints Form. The Odour Complaints Report Form records who made the complaint, what the complaint was about and what has been done to resolve the issue and make sure this does not happen again.
- 9.5. The Site Manager must identify what caused the odour emission to be generated. This generation may have been caused by failure of odour control measures or abnormal weather conditions. If the excessive odour emission has been caused by a procedure not being carried out properly, then staff will receive repeat EMS training on the odour control procedures and site management.
- 9.6. In all cases, and where information is available, all complaints will be acknowledged and investigated, with resultant actions reported to the complainant. Any complaints received by the Environment Agency or Local Authority relating to odour emissions from the Site are dealt with on the same day.

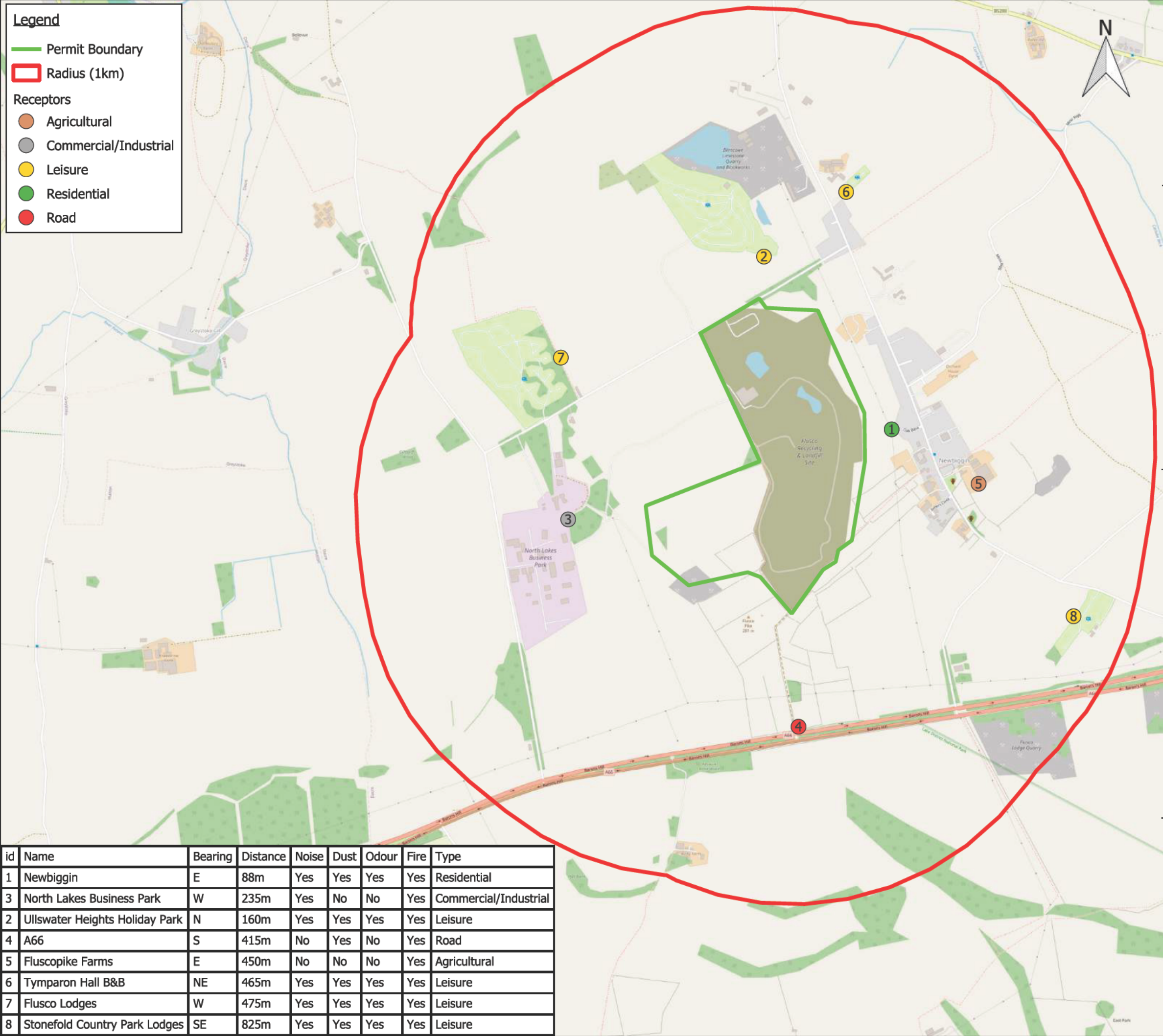
Management Responsibilities

- 9.7. Site staff are responsible for odour management issues and detecting/reporting odour emissions. All members of staff are given training on the EMS for the Site, which includes an Odour Control Procedure. All staff on the Site are trained on the Odour Control Procedure which includes details regarding mitigation measures and recording complaints.
- 9.8. On receipt of a complaint the Site Manager investigates and establishes the cause. The most effective corrective or preventative action must then be determined to prevent future emissions occurring. Where additional time is required in order to implement the appropriate corrective or preventative action the complainant will be contacted with details on the actions to be implemented and the estimated timescales for completion. The maximum response time for contacting a complainant will be two working days.
- 9.9. Should numerous complaints be received at the Site regarding the same issue, the cause of the complaint(s) will be investigated in accordance with the Accidents, Incidents & Complaints Procedure within the EMS. Operations on the Site will cease or be reduced should excessive odour emissions be identified following the implementation of other mitigation measures or when instruction from the Environment Agency to cease operations has been received.



Drawings

Drawing No. 24/012w 001 Sensitive Receptor Plan V2



Legend

- Permit Boundary
- Radius (1km)
- Receptors
 - Agricultural
 - Commercial/Industrial
 - Leisure
 - Residential
 - Road



Seletia (F) Limited

Flusco Landfill

Newbiggin,
Penrith,
Cumbria, CA11 0JB

Drawing Ref: 24/012t 001 Sensitive Receptor Plan

Version Number: 2

26th September 2025

Created By: SW
Checked By: TW

Scale:
Map: 1:22,000



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id	Name	Bearing	Distance	Noise	Dust	Odour	Fire	Type
1	Newbiggin	E	88m	Yes	Yes	Yes	Yes	Residential
3	North Lakes Business Park	W	235m	Yes	No	No	Yes	Commercial/Industrial
2	Ullswater Heights Holiday Park	N	160m	Yes	Yes	Yes	Yes	Leisure
4	A66	S	415m	No	Yes	No	Yes	Road
5	Fluscopike Farms	E	450m	No	No	No	Yes	Agricultural
6	Tymparon Hall B&B	NE	465m	Yes	Yes	Yes	Yes	Leisure
7	Flusco Lodges	W	475m	Yes	Yes	Yes	Yes	Leisure
8	Stonefold Country Park Lodges	SE	825m	Yes	Yes	Yes	Yes	Leisure



Appendix 1

Odour Control Procedure

Procedure No. 4.4 Odour Control**V.2 September 2025**

Purpose: To ensure that odours from the Site do not cause a nuisance to sensitive receptors.

	RESPONSIBLE PERSON	RECORD
1. This Procedure implements the odour control measures included within the Odour Management Plan.	<u>Site Operative</u>	Appendix A.8 Odour Management Plan
2. Strongly malodorous wastes will not be accepted on to the Site and will be rejected in accordance with the Waste Rejection Procedure.	<u>Site Operative</u>	Procedure No. 2.3 Waste Rejection
3. Any vehicles arriving at the Site that may contain potentially malodorous waste will be enclosed or sheeted.		

Landfill Operations

4. Incoming waste loads will be unloaded and deposited in the landfill promptly to minimise potential odour emissions from handling odorous waste.		
5. The size of tipping areas are kept to a minimum where practicable to minimise the size of uncovered areas that may generate odour.		
6. Waste slopes in operational cells are maintained at an appropriate gradient to prevent the escape of odorous material.		
7. Operational cells will be covered at the end of each day with temporary cover (typically soils or fines) to prevent odour emissions escaping the cell outside of operational hours.		
8. General housekeeping and regular litter picking is undertaken to remove any odorous waste that has escaped the operational landfill cell.		Procedure No 3.4 Housekeeping, Litter, Pest and Vermin Control

Waste Transfer Operations

9. Waste storage times will be limited to minimise the risk of wastes stored on Site becoming odorous.		
10. Odorous wastes are stock rotated on a first-in-first-out basis to minimise the length of time that odorous wastes are stored.		
11. General housekeeping and regular cleaning of waste storage areas and operational areas is carried out on Site to further reduce the potential for significant odour emissions.		Procedure No 3.4 Housekeeping, Litter, Pest and Vermin Control

Monitoring

12. Olfactory monitoring (sniff testing) will be undertaken on the Site in accordance with Odour Management Plan, including: • Once per day, around midday, when the risk magnitude is Low or Medium/Low. • Twice per day when the risk, once in the morning and once in the afternoon, when the risk magnitude is Medium. • At least every 3 hours when the risk magnitude is High.		Appendix A.8 Odour Management Plan
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	RESPONSIBLE PERSON	RECORD
13. Staff responsible for completing odour surveys should: • Not smoke or eat/drink strongly flavoured items for thirty minutes before the odour survey. • Not eat/drink sweet items immediately before or after the odour survey. • Not complete odour surveys if they have an illness which can impact the odour survey e.g., cold, sore throat.		
14. Once the above is completed, the Site Manager will determine the action to take using the Risk Matrix in the Odour Management Plan.	<u>Site Manager</u>	Appendix A.8 Odour Management Plan
<u>Complaints</u>		
15. In the event of a complaint of odour being received, the Accidents, Incidents and Complaints Procedure should be followed.	<u>Site Operative</u>	Procedure No 5.1 Environmental Accidents / Incidents / Complaints
16. Should a complaint regarding odour be received by the Site, the complaint will be recorded on the Odour Complaints Report Form investigated in accordance with the Complaints Procedure within the EMS implemented on the Site.	<u>Site Operative</u>	Form No 5.1d Odour Complaints Form
17. The Odour Complaints Report Form records who made the complaint, what the complaint was about and what has been done to resolve the issue and make sure this does not happen again.	<u>Site Operative</u>	
18. The Site Manager must identify what caused the odour emission to be generated. If the excessive odour emission has been caused by a procedure not being carried out properly, then staff will receive repeat EMS training on the odour control procedures and site management.	<u>Site Manager</u>	
19. In all cases, and where information is available, all complaints will be acknowledged and investigated, with resultant actions reported to the complaint. Any complaints received by the Environment Agency or Local Authority relating to odour emissions from the Site are dealt with on the same day.		



Appendix 2

Odour Monitoring Form

Form No. 4.4a Odour Monitoring Form**V.1 September 2025**

Date and time		Assessor	
Weather conditions and temperature			

Location	Time	Odour					Weather Conditions
	Start / Finish	Y/N	Intensity	Extent	Description	Source	Wind Direction and Strength
Site Entrance							
Waste Transfer Station Area							
Waste Storage Area							
Area of Active Landfilling							
Other (e.g. location closest to any complaint, if applicable)							
Action taken?							

Comments:	
Action required/ taken?	

Intensity Scale	0. No odour	1. Very faint odour	2. Faint odour	3. Distinct odour	4. Strong odour	5. Very strong odour	6. Extremely strong odour
Extent classification	I: Intermittent				P: Persistent		

Intensity of 3 or above, action must be taken to identify the cause and take preventative steps to prevent an odour emission.

Persistent intensity of 4 or above will require remedial action.

Intermittent intensity of 6 will require investigative action with potential for remedial action.



Appendix 3

Odour Complaints Form

Procedure No. 4.4 Odour Control**V.2 September 2025**

Purpose: To ensure that odours from the Site do not cause a nuisance to sensitive receptors.

	RESPONSIBLE PERSON	RECORD
1. This Procedure implements the odour control measures included within the Odour Management Plan.	<u>Site Operative</u>	Appendix A.8 Odour Management Plan
2. Strongly malodorous wastes will not be accepted on to the Site and will be rejected in accordance with the Waste Rejection Procedure.	<u>Site Operative</u>	Procedure No. 2.3 Waste Rejection
3. Any vehicles arriving at the Site that may contain potentially malodorous waste will be enclosed or sheeted.		

Landfill Operations

4. Incoming waste loads will be unloaded and deposited in the landfill promptly to minimise potential odour emissions from handling odorous waste.		
5. The size of tipping areas are kept to a minimum where practicable to minimise the size of uncovered areas that may generate odour.		
6. Waste slopes in operational cells are maintained at an appropriate gradient to prevent the escape of odorous material.		
7. Operational cells will be covered at the end of each day with temporary cover (typically soils or fines) to prevent odour emissions escaping the cell outside of operational hours.		
8. General housekeeping and regular litter picking is undertaken to remove any odorous waste that has escaped the operational landfill cell.		Procedure No 3.4 Housekeeping, Litter, Pest and Vermin Control

Waste Transfer Operations

9. Waste storage times will be limited to minimise the risk of wastes stored on Site becoming odorous.		
10. Odorous wastes are stock rotated on a first-in-first-out basis to minimise the length of time that odorous wastes are stored.		
11. General housekeeping and regular cleaning of waste storage areas and operational areas is carried out on Site to further reduce the potential for significant odour emissions.		Procedure No 3.4 Housekeeping, Litter, Pest and Vermin Control

Monitoring

12. Olfactory monitoring (sniff testing) will be undertaken on the Site in accordance with Odour Management Plan, including: • Once per day, around midday, when the risk magnitude is Low or Medium/Low. • Twice per day when the risk, once in the morning and once in the afternoon, when the risk magnitude is Medium. • At least every 3 hours when the risk magnitude is High.		Appendix A.8 Odour Management Plan
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	RESPONSIBLE PERSON	RECORD
13. Staff responsible for completing odour surveys should: • Not smoke or eat/drink strongly flavoured items for thirty minutes before the odour survey. • Not eat/drink sweet items immediately before or after the odour survey. • Not complete odour surveys if they have an illness which can impact the odour survey e.g., cold, sore throat.		
14. Once the above is completed, the Site Manager will determine the action to take using the Risk Matrix in the Odour Management Plan.	<u>Site Manager</u>	Appendix A.8 Odour Management Plan
<u>Complaints</u>		
15. In the event of a complaint of odour being received, the Accidents, Incidents and Complaints Procedure should be followed.	<u>Site Operative</u>	Procedure No 5.1 Environmental Accidents / Incidents / Complaints
16. Should a complaint regarding odour be received by the Site, the complaint will be recorded on the Odour Complaints Report Form investigated in accordance with the Complaints Procedure within the EMS implemented on the Site.	<u>Site Operative</u>	Form No 5.1d Odour Complaints Form
17. The Odour Complaints Report Form records who made the complaint, what the complaint was about and what has been done to resolve the issue and make sure this does not happen again.	<u>Site Operative</u>	
18. The Site Manager must identify what caused the odour emission to be generated. If the excessive odour emission has been caused by a procedure not being carried out properly, then staff will receive repeat EMS training on the odour control procedures and site management.	<u>Site Manager</u>	
19. In all cases, and where information is available, all complaints will be acknowledged and investigated, with resultant actions reported to the complaint. Any complaints received by the Environment Agency or Local Authority relating to odour emissions from the Site are dealt with on the same day.		

Form No. 5.1d Odour Complaints Form

V.1 September 2025

Site Manager			
Site Address	Flusco Landfill, Newbiggin, Penrith, Cumbria, CA11 0JB		
Contact No.			
Name of Complainant		Contact number of Complainant:	
Address of Complainant			
Date of complaint:		Time of complaint:	
Location of odour, if not at above address			
Weather conditions (i.e. dry, rain, fog, snow)			
Temperature (very warm, warm, mild, cold or degrees if known)			
Wind strength (none, light, steady, strong, gusting)			
Wind direction (e.g. from NE)			
Complainants' description of odour: • What does it smell like? • Intensity (see below) • Duration (time) • Constant or intermittent in this period • Does the complainant have any other comments about the odour?			
Do you accept that the odour was likely to be from the site's activities?			
What activities were being carried out on site when the odour occurred?			
Actions taken:			
Form completed by:	Date:	Signed:	



Appendix 5

Waste Acceptance Procedure

Procedure No. 2.1 Waste Acceptance**V.3, October 2025**

Purpose: To ensure that all waste imported on to the Site is acceptable under the conditions of the Environmental Permit.

	RESPONSIBLE PERSON	RECORD
<u>Environmental Permit and Waste Codes</u>		
1. The Environmental Permit contains the list of waste types that are permitted to be accepted at the Site. A table containing the codes and descriptions of waste types that are permitted on this site is included at the end of this procedure, see Tables 1-5 Permitted Waste Types: • Table 1 Permitted waste types for disposal at a landfill for non-hazardous waste. • Table 2 Permitted waste types for restoration. • Table 3 Permitted waste types for disposal in the stable non-reactive hazardous waste cell. • Table 4 Permitted waste types for disposal in the gypsum cell. • Table 5 Permitted waste types for inert waste treatment (screening). This list of waste types should be consulted if you are unsure whether a load can be accepted, alternatively the Site manager should be consulted.	All	Tables 1-5 Permitted Waste Types Appendix B.1 Environmental Permit
2. The following annual waste inputs for Landfill should not be exceeded as stated in the Environmental Permit: • 500,000 tonnes of non-hazardous waste. • 10,000 tonnes of stable non-reactive hazardous waste . • 10,000 tonnes of gypsum waste. • 200,000 tonnes of inert waste. • 200,000 tonnes of waste for restoration.		Tables 1-5 Permitted Waste Types
3. The following wastes should not be accepted for disposal in the Landfill: • Liquid waste, including waste waters but excluding sludge. • Whole used tyres (other than bicycle types and tyres with an outside diameter of more than 1400mm) • Shredded used tyres. • Chemical substances from research and development or teaching activities (e.g., Laboratory residues) which are unidentified and/or which are new and whose effects on man/or environment are unknown.		
4. Waste must not be accepted for disposal in the landfill if they have been diluted or mixed solely to meet the waste acceptance criteria.		
5. Waste shall only be accepted for disposal in the landfill if it has been treated first, unless: • It's inert waste and treatment is not technically feasible. • It's non-hazardous waste and treating it wouldn't make it safer or reduce how much there is.		
6. Waste codes starting with 17 05 or 16 03 must only be accepted for disposal in the landfill if they do not include: • Medicinal products. • Pharmaceutically active waste materials from the manufacture of medicinal products.		

	RESPONSIBLE PERSON	RECORD
7. Wastes must only be accepted for restoration if: • They are listed in Table 2 Permitted Waste Types for Restoration • They are accepted in accordance with a restoration plan approved in writing by the Environment Agency.		Table 2 Permitted Waste Types for Restoration
8. If unsure whether to accept a load onto the Site, consult Tables 1-5, and then the Site Manager if necessary.		
9. Waste loads with a sulphur content of more than 10,000mg per kg will not be accepted.		
10. Unsuitable wastes are rejected in accordance with the Waste Rejection Procedure.	Site Operative	Procedure No. 2.3 Waste Rejection
11. The Site does not typically experience seasonal variation in incoming waste material.		

Waste Pre-Acceptance

12. Following a customer enquiry, information about the waste is requested from the waste producer.	Site Manager	Form No. 2.1a Waste Information Forms
13. This information is recorded on the Waste Information Form and the information reviewed to assess if the waste is acceptable or not.		
14. Review of the information in the Waste Information Form will determine the need for sampling / testing / Hazardous Waste Assessment.	Site Manager	Procedure No. 2.2 Waste Classification Form No. 2.1a Waste Information Forms
15. A judgement should be made as to the necessity to obtain comprehensive information at this stage. If the source of the waste is not likely to be contaminated, then it may not be necessary to obtain further information or hazardous waste assessment on the waste. If the source of the waste is likely to be contaminated, then further information and/or a hazardous waste assessment should be requested.		
16. If required, a Hazardous Waste Assessment (based on WM3 Guidance) is completed in accordance with the Waste Classification Procedure.		Procedure No. 2.2 Waste Classification
17. The information requested from customers at the pre-acceptance stage is re-assessed on an annual basis to ensure it is preventing unsuitable wastes being sent to the Site.	Site Manager	
18. Pre-acceptance information requirements will be reviewed when: • There are changes in the waste. • There are changes in the process generating the waste. • Received waste does not conform to pre-acceptance information provided.		

	RESPONSIBLE PERSON	RECORD
<u>All Vehicles on Site</u>		
19. Third-party hauliers used for transporting waste must be an Upper Tier Waste Carrier registered with the Environment Agency.	Site Operative	Waste Transfer Note
20. Copies of third-party haulier registrations certifications will be retained in the Site office.	Site Operative	
21. Periodic checks should be completed on registration certificates of third-party hauliers to ensure they remain valid. If the registration has expired, a copy of the renewed registration will be obtained.	Site Operative	
<u>Acceptance of Waste onto the Site</u>		
22. All incoming vehicles will provide the accompanying Waste Transfer Note to the Site Operative unless a Season Waste Transfer Note has been provided.	Site Operative	Waste Transfer Note
23. A season waste transfer note is a document that covers transfers for up to twelve months. Season waste transfer notes may be used for wastes from a given site if it is well characterised or a regularly generated waste.		
24. The Site Operative will complete the section relating to transfer of waste and will return the waste transfer note to the driver keeping a copy of the WTN for their own records.		
25. Unless a season WTN has been provided, a Waste Transfer Note for every load is obtained from the driver and the Waste Transfer Note is checked to ensure it contains the following: • Vehicle registration and driver's name and signature. • Waste haulier name and valid waste carrier's registration number. • Name, address (of source site) and signature of the transferor. • Name, address (of destination site) and signature of the person receiving the waste (transferee). • Permit number or exemption reference of the Site Description of waste including waste type, waste source and waste containment. • Amount of waste (tonnes). • List of Waste (LoW) code. • SIC Code of the waste holder using SIC Codes (2007). • Date and time of waste transfer. • Waste Transfer Note number. • Confirmation that the Waste Hierarchy has been considered.	Site Operative	Waste Transfer Note
26. Loads will be visually checked by Site Operatives prior to offloading to ensure that an accurate written description and List of Waste code has been provided on the Waste Transfer Note.	Site Operative	Waste Transfer Note
27. After initial checks by the Site Operative, loads are then directed for tipping, inspection, and stockpiling in the offloading area.	Site Operative	

	RESPONSIBLE PERSON	RECORD
28. Each load is visually inspected during tipping by Site Operatives. Inspections are made to check the accuracy of the waste description provided on the Waste Transfer Note again and to identify any contravening waste types.	Site Operative	
29. The Site Manager shall be immediately informed if there are discrepancies with the load or its paperwork.	Site Operative	
30. If the load is not acceptable under the Environmental Permit, then, it should be rejected from site in accordance with the Waste Rejection Procedure.	Site Operative	Procedure No. 2.3 Waste Rejection
31. Waste acceptance info here form the permit TBC.		

Compliance Testing

32. Compliance testing will be carried out on waste accepted on to the Site.	Site Manager	Procedure No. 2.2 Waste Classification Procedure No. 2.2.1 Waste Sampling Pre-acceptance flow chart Waste Classification flow chart
33. The purpose of compliance testing is to ensure that the information provided during pre-acceptance was representative of the waste received and that the waste is acceptable.	Site Manager	
34. Samples taken from waste piles will be tested at a laboratory to determine the characteristics of the waste and to ensure that the waste is as described on the WTN.	Site Manager	
35. A Hazardous Waste Assessment, in accordance with WM3 Guidance, will be completed using the testing results received from the laboratory. This Hazardous Waste Assessment will classify the waste as non-hazardous or hazardous.	Site Operative	Procedure No. 2.2 Waste Classification Procedure No. 2.2.1 Waste Sampling
36. If a waste sample is found to be classified as hazardous waste, then the corresponding waste pile will be quarantined and removed from the Site in accordance with the Waste Rejection Procedure. The Hazardous Waste Classification Report will ensure that this waste is removed under the correct LoW code.	Site Operative	Pre-acceptance flow chart Waste Classification flow chart
37. Hazardous wastes will be sent to a suitably licensed facility and accompanied by a Hazardous Waste Consignment Note.	Site Operative	Procedure No. 2.2 Waste Classification Procedure No. 2.2.1 Waste Sampling

**RESPONSIBLE
PERSON****RECORD****Records**

38. Waste Transfer Notes will be stored for a minimum of two years.

Site Manager

[Procedure No.
6.1 Waste
Returns](#)

39. Information from the waste transfer notes and any consignment notes will be used to provide the necessary data to complete the waste return as required by the Environment Agency.

Consequences

40. The consequence of not following this procedure may result in unsuitable waste being accepted on to the Site. This may constitute a breach in the conditions of the Environmental Permit, in addition to causing potential contamination of the Site.



Appendix 6

Mud, Litter and Debris Procedure

Procedure No. 4.2 Mud, Litter and Debris**V.1, June 2025**

Purpose: To control mud, litter, and debris on roads within the Site and on the local highway.

	RESPONSIBLE PERSON	RECORD
1. All vehicles entering and exiting the Site shall be sheeted. This will minimise the risk of debris from the lorries falling onto public footways and roads, or onto access roads.		
2. Wheel washing facilities will be used to reduce the amount of mud transported onto public roads by vehicles leaving the site.		Procedure No. 3.5 Wheel Washing
3. The Site is inspected regularly for mud and debris, including at the boundary. The housekeeping procedure reduces the amount of debris on Site.	Site Operative	Form No. 3.3a Inspection Checklist Procedure No. 3.4 Housekeeping, Litter, Pest, and Vermin Control
4. The cleanliness of public highways in the vicinity of the Site entrance will be checked as part of the maintenance procedure.	Site Operative	Form No. 3.3a Inspection Checklist
5. A road sweeper will be hired and used to clean any mud or debris on the public highway if required.	Site Manager	
6. Any complaints of mud and debris will be handled in accordance with the Environmental Accidents / Incidents / Complaints Procedure.		Procedure No 5.1 Environmental Accidents / Incidents / Complaints



Appendix 7

Fire Prevention Plan

To be provided.



Appendix 8

Gas Management Plan



Cumbria Waste Management Ltd

LANDFILL GAS MANAGEMENT PLAN

Flusco Landfill

SUBMITTED TO GA 28/9/23
FOR APPROVAL



TYPE OF DOCUMENT (VERSION) CONFIDENTIAL

PROJECT NO. CALL-OFF CONTRACT, REF: P70105724
OUR REF. NO. TASK 05

DATE: SEPTEMBER 2023

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QUALITY CONTROL

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APPENDICES

APPENDIX A

ESID8 LANDFILL GAS MANAGEMENT

1 REPORT CONTEXT

This report has been prepared by WSP on behalf of Cumbria Waste Management Ltd (CWM) and presents an updated and consolidated Gas Management Plan (GMP) for Flusco Landfill, Newbiggin, Penrith, Cumbria, CA11 0JB (the Site). The Site currently operates under Environmental Permit (EP) EPR/BM5941IH/V006 which is regulated by the Environment Agency (EA).

The Gas Management Plan provides a framework for the management of landfill gas (LFG) based on the site characteristics and the nature and extent of the gas control system (LFTGN03). Key elements of the Gas Management Plan include the specification of control measures and definition of operational procedures, monitoring plan and action plan.

Flusco Landfill is located at National Grid Reference NY 465 293, to the north of the A66 approximately 4 km west of the town of Penrith. The Site covers an area of approximately 29 ha. Access to the Site is from a minor road to the north and the A66 (T) road to the south.

Flusco landfill is currently permitted to receive non-hazardous waste, stable non-reactive hazardous waste, gypsum waste, inert waste and waste for restoration. The Site comprises 25 cells with a total void space of approximately 3,000,000 m³. Filling began with Cell 1 in 1993 and Cell 9 is currently operational. Cells 17 to 25 constitute the planned Silverfields development.

Neither the Silverfields area nor the stable non-reactive hazardous or gypsum waste cells have been developed and are unlikely to be in the future. Previously constructed and filled cells comprise the following:

Cell 1: Filled with non-hazardous, clinical, special, and inert waste, capped;

Cell 2: Filled with non-hazardous, clinical, special, and inert waste, capped;

Cell 3: Filled with non-hazardous, clinical, special, and inert waste, capped;

Cell 4: Filled with non-hazardous, clinical, special, and inert waste, capped;

Cell 5: Filled with non-hazardous and inert waste, capped;

Cell 6: Filled with non-hazardous and inert waste, capped;

Cell 7: Filled with non-hazardous and inert waste, capped;

Cell 8: Filled with non-hazardous waste, capped; and

Cell 9: Filling with non-hazardous waste, currently operational.

In addition, Cell 16 has been filled with inert waste. Cells 10 to 15 and 17 to 25 have yet to be developed.

At Flusco, the management and monitoring of LFG is carried out by both, CWM and Infinis Energy Services Ltd (Infinis). Infinis undertakes the installation, maintenance and monitoring of the gas extraction infrastructure, as well as of the engine and flare at the Gas Utilisation Plant (GUP). Infinis also balances the gas field. CWM undertakes the installation and maintenance of the external monitoring boreholes as well as temporary and permanent capping systems. CWM also monitors the external monitoring boreholes and fulfils any reporting requirements under the Site's EP.

2 LANDFILL GAS MANAGEMENT

Landfill gas management and control is achieved at the Site by:

- **Containment** provided by low permeability liner installed across the base and perimeter slopes and low permeability capping;
- **Collection** via an active gas extraction system;
- **Treatment** within the GUP including engine utilisation and flaring; and
- **Monitoring of LFG emissions** using internal and external gas monitoring systems, surface emissions monitoring and stack emissions monitoring of engines and flare.

Drawings **ESID8 (Appendix A)** illustrate the layout of the landfill gas collection and monitoring system at the Site and is replicated in **Figure 2-1** to visualise the Site layout.

Figure 2-1 - Flusco Landfill Site Layout



3 LANDFILL GAS CONTROL MEASURES AND PROCEDURES

3.1 LFG EXTRACTION OVERVIEW

LFG control is based on an active gas extraction system incorporating a GUP. The gas collected is utilised within the GUP by a landfill gas engine. In the event of engine maintenance or shutdown, residual gas is flared.

Gas wells and extraction infrastructure are installed according to Construction Quality Assurance (CQA) principles and a CQA plan is followed for each phase of the management. The installation of in well gas wells and the documentation of the gas well installation logs are undertaken following Infinis procedures *CLM 13 Installation of In Waste Gas Wells* and *CLM 10 Gas Well Installation Log*. Gas extraction wells installed across the site consist of a combination of vertical built-up and drilled wells. All well heads are located above ground and have their own valves. Gas extraction pipework is of various sizes typically ranging from 63 mm outside diameter to 250 mm. The Site does not have a ring main.

Vertical wells are drilled into the waste and lined with flush threaded or butt-fused sections of polyethylene (PE). The vertical wells are retro drilled into the waste to no more than 80% of the depth of the waste or a minimum of three metre stand-off from the base to ensure there is no interference with the basal lining system.

Optimal well spacing are defined through site-based knowledge and in line with EA guidance (EA 2004), Landfill Gas Industry Codes of Practice (ICoP 2012) and Infinis' operational experience. Gas extraction wells are spaced with a radius of influence ensuring that the landfill gas is drawn back towards the centre of the site and to minimise the risk of oxygen being drawn into the system from outside the landfill. The gas wells will be installed progressively as phases are completed.

3.2 CONDENSATE MANAGEMENT

Condensate management within the gas system comprises of pumped and/or self-draining knock-out pots. These are MDPE vessels installed at natural or engineered low points within the gas collection pipework for the collection of condensates. Compressed air pumps are installed in each pot to allow the condensate to be pumped back into the landfill.

3.3 LFG INFRASTRUCTURE INSPECTION, MAINTENANCE AND SERVICING

Landfill gas extraction wells as well as collecting pipework and knock out pots are inspected during each monitoring round (Section 5.1). If, during any of these inspections, any remediation work is identified, action will be taken to program this as soon as is reasonably practicable. If appropriate, this work shall be carried out in accordance with CQA requirements specified within LFTGN03 (EA 2004). Commissioning data for all gas wells installed by Infinis is contained within CQA reports. Gas wells are classified as active, dormant, redundant or decommissioned following Infinis procedure *CLM 15 Gas Well classifications*. If required, decommissioning of any gas wells is undertaken following Infinis procedure *CLM12 Gas Well Decommissioning*.

Regular Surface Emission surveys are undertaken at the Site as part of the EP requirements (Section 4.3) following CWM procedure *WI015 Landfill Gas Emission Monitoring TDL-500*. Any significant emissions from discrete features including LFG and leachate infrastructure are communicated to the Compliance Manager and the Site Manager who will act in a timely manner to initiate any required remediation.

3.4 GAS FIELD BALANCING

Gas extraction from the landfill is optimised to ensure effective environmental control. Balancing of the gas extraction field is typically completed at a frequency of at least once per month by trained, experienced technicians using a portable infra-red landfill gas analyser following Infinis procedures *CLM3.1 Gas Field Monitoring and Inspection Method Statement* and *CLM 3.1 Gas Field Balancing and Inspection Method Statement*.

Trends will be reviewed monthly against the EP and agreed Gas Operating Parameters (GOPs) for the Site (Infinis procedure *CLM 01 Gas Operating Parameters*). Extraction rates will be reviewed and adjusted at a frequency of at least once per month or more frequently if required.

3.5 ENGINE AND FLARE INSPECTION, MAINTENANCE AND SERVICING

Gas plant, flare and engine unit are monitored and maintained to manufacturers specifications. All planned work within the gas compound is recorded against specific labour and machinery being maintained.

3.6 EXTERNAL MONITORING INFRASTRUCTURE INSPECTION MAINTENANCE AND SERVICING

External monitoring infrastructure will be inspected during each monitoring round (Section 4.2) following CWM procedure *WI195: Inspection, Monitoring, Reporting Borehole Defects*. Borehole condition and defects are logged in the 'BH Condition Tracking' spreadsheet. Monitoring staff will undertake any simple repairs themselves. Repair of other defects will be organised by the company engineer as soon as reasonably practicable.

Borehole depths will be measured and recorded annually. A comparison will be made between the measured depth to the depth stated on the borehole log to ensure the sample is being taken from the appropriate level and identify if the borehole is silting up or collapsing. Remediation will be undertaken in a timely manner should any issues be identified.

3.7 TEMPORARY AND PERMANENTLY CAPPING

Temporary capping is undertaken as soon as reasonably practicable. Permanent capping is undertaken as soon as reasonably practicable, after completion of filling. Permanent capping is installed according to CQA principles and a CQA plan documented within the associated CQA reports.

In line with the EP requirements (Section 4.3), surface emissions through temporary and permanently capped areas are assessed following CWM procedure *WI015: Landfill Gas Emission Monitoring TDL-500*. The findings of the emissions survey are reviewed by the Compliance Manager and any features or areas where significant emissions were found are communicated to the Site Manager who will act in a timely manner to initiate any required remediation.

4 MONITORING PLANS

The monitoring plan allows the performance of the LFG management system to be established. Monitoring data is used to verify compliance with the Gas Management Plan and EP conditions.

4.1 INTERNAL MONITORING

The network of internal gas boreholes is shown on **ESID8 (Appendix A)**. In-waste monitoring is undertaken in line with the requirements in LFTGN03, LFTGN04 and Infinis procedures *CLM 03 Gas Field Balancing and Inspection*, *CLM 3.1 Gas Field Balancing and Inspection Method Statement*, *CLM 06 Gas Field Flows*, *CLM 07 H₂S Gas Field Monitoring* and *CLM 4 Bag Sampling and CLM 4.1 Bag Sampling Method Statement*. The monitoring programme is in accordance with the EP for the Site and set out in **Table 4-1**.

Table 4-1 – Internal Monitoring Programme

Monitoring Location	Monitoring Parameter	Monitoring Frequency
In-waste gas monitoring boreholes, sealed leachate wells or sacrificial gas system for cells or phases which have no active gas extraction	Methane Carbon Dioxide Oxygen Carbon Monoxide Differential pressure Atmospheric pressure	Monthly until gas extraction commences
	Hydrogen Sulphide	Quarterly until gas extraction commences
One in waste borehole per cell and/or leachate wells for separate cells for stable non-reactive hazardous waste and gypsum on landfills for non-hazardous waste	Methane Carbon Dioxide Oxygen Carbon Monoxide Differential pressure Atmospheric pressure	Monthly
	Hydrogen Sulphide Hydrogen	Quarterly
	Trace Gases	Annually
	Methane Carbon Dioxide Oxygen Carbon Monoxide Atmospheric pressure Gas flow rate or suction % Balance Gas	Monthly or at such frequency as agreed in writing with the Environment Agency
Gas collection system at well control valve, manifolds (if applicable) and strategic points on gas system		
Gas collection system at well control valve	Hydrogen Sulphide	Six-Monthly
Output to flare or GUP	Trace Gas	Annually
Output to flare or GUP	Methane Carbon Dioxide Oxygen Gas flow rate Suction % Balance Gas	Weekly

Where the oxygen concentration exceeds 5% or the % balance gas is greater than 20% at either the output to the GUP or within the gas collection system, an assessment of air ingress into the system will be undertaken. To assist with fault-finding, monitoring will be completed at one or all of the strategic monitoring points located in key locations along the gas extraction infrastructure.

If the concentration of carbon monoxide (CO) exceeds 100 ppm at any internal gas well, further investigation shall be undertaken. While CO is usually monitored using an infra-red hand-held gas analyser with Hydrogen Sulphide (H₂S) filter, gas bag samples will be taken under these circumstances due to the potential for interference with other substances following Infinis procedure CLM 04 bag sampling.

4.2 EXTERNAL MONITORING

The network of external perimeter monitoring boreholes is shown on **ESID8 (Appendix A)**. The monitoring of external boreholes is essential to demonstrate the efficiency of gas management systems within landfill sites, and to detect any gas migrating from the site. External monitoring is undertaken in line with the requirements in LFTGN03, the LFG ICoP and *CWM Procedure SOP006 Environmental Sampling & Monitoring*. The monitoring programme is in accordance with the EP for the Site and set out in **Table 4-2** below.

Table 4-2 – External Monitoring Programme

Monitoring Location	Parameter	Action Level	Compliance Limit	Monitoring Frequency
BH1	Methane	3.2% if flow > 1l/h	3.2% if flow > 1l/h	Monthly
	Carbon Dioxide	5.4%	n/a	
BH2	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	5.0%	n/a	
BH3	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	3.2%	n/a	
BH4	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	3.1%	n/a	
BH5	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	2.8%	n/a	
BH6	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	2.5%	n/a	
BH7	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	4.0%	n/a	
BH8	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	2.9%	n/a	
BH9	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	5.3%	n/a	
BH10	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	2.5%	n/a	

Monitoring Location	Parameter	Action Level	Compliance Limit	Monitoring Frequency
BH11	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	7.5%	n/a	
BH12	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	3.9%	n/a	
BH13	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	4.2%	n/a	
BH14	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	4.5%	n/a	
BH15	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	4.0%	n/a	
BH16	Methane	0.6%	1.1%	Monthly
	Carbon Dioxide	5.1%	n/a	
BH23	Methane	0.6%	1.1%	Monthly
	Carbon Dioxide	4.3%	n/a	
BH24	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	4.1%	n/a	
BH25	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	3.5%	n/a	
BH26	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	3.3%	n/a	
BH27	Methane	1.0%	1.0%	Monthly
	Carbon Dioxide	3.5%	n/a	
BH28	Methane	1.4% if flow > 1l/h	1.4% if flow > 1l/h	Monthly
	Carbon Dioxide	9.0% ¹	n/a	
BH29	Methane	1.0% if flow > 1l/h	1.0% if flow > 1l/h	Monthly
	Carbon Dioxide	9.2%	n/a	
BH30	Methane	2.1% if flow > 1l/h	2.1% if flow > 1l/h	Monthly
	Carbon Dioxide	11.0%	n/a	
BH1 to BH16 and BH23 to BH30	Oxygen	n/a	n/a	Monthly
	Atmospheric Pressure	n/a	n/a	
	Differential Pressure	n/a	n/a	

Note: ¹The EP requires the action level for BH28 to be revised. The revision has been undertaken based on monitoring data for 2018 to 2023 (five years) including >100 data points following the Environment Agency Position Statement on Industry Code of Practice of Soil Gas (August 2011); Industry Guidance 'Perimeter soil gas emissions criteria and associated management' (January 2011, Version 1.01, the 'ICoP'); and Final R&D Technical Report P1-471 "Techniques for the Interpretation of Landfill Monitoring Data Guidance Notes" (Environment Agency 2002, the 'P1-471').

4.3 SURFACE EMISSIONS MONITORING

Monitoring of methane surface emissions can help to identify any faults in the gas management system and prioritise required remediations. The monitoring is undertaken at cells that have accepted non-hazardous biodegradable waste in line with the requirements in LFTGN07 and CWM procedure *WI015: Landfill Gas Emission Monitoring TDL-500*. The monitoring programme is in accordance with the EP for the Site and set out in **Table 4-3** below.

Table 4-3 – Surface Emissions Monitoring Programme

Monitoring Location	Monitoring Parameter	Monitoring Frequency
Permanently capped zone	Methane Concentration	Every 12 months
Temporarily capped zone	Methane Concentration	Every 12 months

4.4 EMISSIONS MONITORING FROM ENGINE AND FLARE

Stack emissions monitoring for engines and flares will be undertaken in line with the requirements in LFTGN05, LFTGN08, Environment Agency Guidance on Monitoring Stack Emissions and Infnis procedures *EC 6.1 Annual Engine and Flare Emissions Monitoring* and *EC 6.2 Quarterly Engine Emissions Monitoring*. The monitoring programme is in accordance with the EP for the Site and set out in **Table 4-4** below.

Table 4-4 – Engine and Flare Emissions Monitoring Programme

Emission Point as shown in ESID8	Monitoring Parameter	Limit	Refere nce Period	Monitoring Frequency
Engine	Oxides of Nitrogen (NO _x)	650 mg/m ³	Hourly Mean	Annually
	CO	1500 mg/m ³		
	Total VOCs	1750 mg/m ³		
	NO _x and CO	Where monitoring using hand-held equipment indicates an exceedance of the emissions standards specified above, these shall be used as action levels and the operator shall investigate the cause and take appropriate measures to reduce emissions.	n/a	Quarterly
Flare¹	NO _x	150 mg/m ³	Hourly Mean	Annually
	CO	100 mg/m ³		
	Total VOCs	10 mg/m ³		
	Temperature	n/a	n/a	

¹Note: Monitoring is unnecessary where the flare is active for less than 10% of the year.

5 MONITORING DATA MANAGEMENT AND REPORTING

Environmental monitoring data relating to internal landfill gas monitoring, engine and flare is processed by Infinis and stored at Infinis' data portal which CWM can access and download any required information and data in a timely manner.

Environmental monitoring data relating to external landfill gas monitoring and surface emissions monitoring is processed by CWM directly. Monitoring results from external landfill gas monitoring are downloaded directly from the Gas Analyser using the Gas Analyser Manager Software and filed following the CWM filing structure ready for further processing in Excel. Findings of any surface emissions monitoring are recorded in dedicated forms that are filed with the CWM Compliance Office.

Annual reporting for Flusco landfill is undertaken in accordance with the permit by CWM.

6 ACTION PLANS

Actions taken in response to abnormal changes in any monitoring data or LFG-control related emergency situations are detailed below. The overarching emergency response is set out in CWM procedure *WI024 Flusco Landfill Emergency Procedure* and environmental complaints including odour are managed in accordance with CWM procedure *CP020 Managing Environmental Complaints*.

6.1 LANDFILL GAS EMERGENCY ACTION PLAN

The gas extraction system incorporates a telemetry system with 24-hour cover provided by the Infinis Logistics Centre. Actions to prevent non-compliance in the event of various scenarios are discussed below.

Loss of Engine

The flare has sufficient capacity to combust surplus landfill gas in the event of the engine being offline. Action will be taken to ensure that the engine becomes operational as soon as practicable.

Flare Failure

In the event of the flare failing arrangements will be made for the supply of a temporary flare /flares until the permanent flare is repaired.

Gas Plant (Blower) Failure

The Site operates on a single blower. In the event of a blower failure, the affected unit would be isolated, and a replacement blower will be installed on site.

Total Site Shutdown

Attempts will be made to restart the plant as soon as reasonably practicable. An assessment of likely shutdown duration will be made. If the duration of the shutdown is liable to result in significant pollution or complaints, action will be taken to obtain alternative means of control e.g. a diesel-powered standby generator to power the site in line with procedure LC-01-028.

Fracture of the Gas Collection Main

In the event of a fracture of the gas collection main, the relevant section of pipework will be isolated. Pipework will be repaired prior to resumption of extraction.

In case of a fire being detected at the GUP, either inside the yard or within the engine compound, CWM Procedure *WI141: Landfill Gas Plant Emergency Procedure* will be followed which includes informing the Emergency Services, Infinis, and if required the EA.

6.2 HOT SPOT DETECTION & INTERVENTION

The site is routinely checked for the presence of possible hot spots (deep-seated landfill fires) through visual inspection of the site and interpretation of monitoring results. Where monitoring results suggest excessive air ingress, further investigations will be conducted to determine CO, H₂ and temperature levels at the affected wells. A hot spot may be suspected if several of the following items are observed during site inspection and monitoring:

- Substantial settlement over a short period of time;
- Smoke emanating from the gas extraction system or landfill;
- Elevated levels of CO (exceeding 100 ppm as indicated on hand-held IR instrument with the H₂S filter in place);
- Elevated levels of oxygen greatly exceeding 5%;
- Combustion residue in extraction wells or headers; and/or
- Increase in gas temperatures in the extraction system/excessive temperatures.

If it is suspected that a hot spot is present, the Infinis procedures *CLM 09 Hotspot Management*, *CLM 9.1 Monitoring of Hotspots* and *CLM 9.2 Extinguishing of Hot Spots* are applied.

6.3 LANDFILL GAS MIGRATION ACTION PLAN

6.3.1 ACTION LEVEL OR COMPLIANT LIMIT BREACH

If monitoring indicates a breach of an **Action Level** for either CO₂ or CH₄, (**Table 4-2**) then re-monitoring of the affected perimeter borehole will be undertaken within 24 hours to confirm or otherwise the breach.

Following confirmation of a breach of **Action Level** for CH₄ or CO₂, the borehole(s) in question will be subject to an extended monitoring regime comprising weekly monitoring for a period of 6 weeks. For those boreholes where the CH₄ limit has an associated flow limit (BH1, BH28, BH29 and BH30), extended monitoring comprising weekly monitoring for a period of up to 6 weeks will be undertaken in the event of an exceedance of the concentration and the flow limit where applicable.

To understand the elevated concentration, it is necessary to put the breach into context with baseline conditions and variability. As such, during the extended monitoring period, the following observations and measurements will be compiled and considered:

- Changes in atmospheric pressure over two days preceding monitoring;
- Recent weather conditions and the condition of ground surface;
- Any activities in area that may affect readings (e.g., dewatering or excavation);
- Pressure within the well;
- Flow rate from or into the well;
- Methane, carbon dioxide, oxygen, balance gas concentrations;
- Whether readings are varying and by what degree;
- Any odours from the wells;
- Groundwater levels;
- Temperature within well compared to ambient conditions; and
- The date and time.

An assessment of these parameters may indicate the cause of the exceedance.

If, within the extended monitoring period, the concentration within the affected borehole(s) falls below the **Action Level**, normal monitoring can resume, and no further action is required.

If concentrations continue to exceed the **Action Level** after the extended monitoring, or if a **Compliance Limit** is breached, then subject to confirmation of the breach an investigation will be undertaken into the possible causes of gas migration, as set out below.

Where concentrations exceed the **Compliance Limit**, a re-test will be undertaken within 24 hours to confirm or otherwise the breach. If it is not confirmed, and concentrations are found to be below the **Action Level**, normal monitoring will resume, and no further action is needed.

If concentrations are found to be below the **Compliance Limit** but above the **Action Level**, action will be taken as set out for breach of an **Action Level**. If the breach of a **Compliance Limit** is confirmed, then extended weekly monitoring will be undertaken if this has not already been undertaken for an **Action Level** breach. If levels fall below the **Action Level** in this period, normal monitoring will resume, and no further action is required. If levels do not fall below the **Action Level**, then further investigations will proceed as outlined below.

6.3.2 INVESTIGATIONS

Where persistent breaches of **Action Levels** or **Compliance Limits** indicate potential gas migration, investigation into possible causes of the gas migration will be undertaken jointly by CWM and Infinis.

6.3.2.1 Initial Assessment

The initial assessment will comprise identification of:

- Whether the gas extraction system/gas plant are operating normally;
- The integrity of the gas extraction system;
- Any recent changes to the gas extraction system/gas plant or landfill environment;
- The weather conditions at the time of monitoring, including the evaluation of atmospheric pressure, frost or freezing conditions, heavy rainfall; and
- Possible fluctuations of leachate and groundwater levels in the vicinity of the Site.

To identify the possible cause of gas migration, the following may also be necessary:

- An evaluation of the integrity of the gas extraction system, including pipe work and all associated headworks and valves, which will be visually inspected for signs of physical failure and possible vandalism;
- A check of the gas extraction system for condensate blockages and well failures; and
- An assessment of the affected area of the Site for signs of gas leakage and vegetation die-back.

Any causes of the breach of the **Action Level** or **Compliance Limit** that are identified or suspected will be rectified as soon as practically possible. Where the initial investigation does not identify any clear cause of the breach, such that action can be taken to rectify this, further investigation may be required and may comprise one or more of those identified below, whichever are appropriate for the specific circumstances at that time.

6.3.2.2 Assessment of the Gas Field Infrastructure

The on-Site gas field management will be reviewed and assessed. This may include:

- Assessing the status of all gas management wells (open, closed, percentage open);
- Confirming that the condition of all on-Site and perimeter wells is satisfactory; and
- Looking at total abstraction volumes in recent months to determine if gas losses are occurring or gas production is increasing rapidly.

If any of these assessed parameters are not satisfactory, then measures to rectify this will be considered and undertaken where possible and practical.

Any significant alterations to the gas field infrastructure other than normal operation or maintenance activities will be discussed with the EA in accordance with the requirements of the EP.

6.3.2.3 Conceptual Site Model Review

Assessment of the validity of the Conceptual Site Model (CSM) may be undertaken.

The likelihood and potential impact of gas migration depends on:

- Gas quality and volume;
- Gas permeability of the wastes;
- Site engineering (e.g. control measures such as site liners and caps);
- Proximity of buildings and services; and
- Surrounding geology.

If any of the above factors have changed since the EP was issued, then the CSM may need to be revisited and amended. Any actions resulting from this assessment will be discussed with the EA.

6.3.2.4 Extended Pathway Assessment

To identify the origin of gas found adjacent to a landfill it is important to understand the possible sources that could be generating gas other than the landfill which may be causing the concentration exceedance of an **Action Level** or **Compliance Limit**. It is therefore important to understand any changes outside the waste boundary. This may include:

- The identification of additional mine workings;
- The identification of other landfills or waste deposition;
- Whether there been any exploration for natural gas in the area;
- Whether the adjacent land been used for burying dead livestock;
- Whether there any septic tanks or any sewage pipes that might be leaking;
- Whether there is any gas mains nearby; and
- Whether there is any evidence of leachate migration.

It is often necessary to use several techniques outlined below to investigate the presence of gas outside of a landfill. Even after applying them, it may not be possible to confirm the source of the gas beyond reasonable doubt. Such techniques may include:

- Trace component testing;
- Methane to Carbon Dioxide ratios;
- Helium identification;
- Pressure gradients;
- Borehole purging/pumping;
- Carbon isotopes; and
- Tritium isotope analysis.

Such methods of analysis may be considered when CO₂ and/or CH₄ **Action Levels** or CH₄ **Compliance Limits** are persistently breached, and findings of investigations undertaken suggest another source than landfill gas from the Site. Any use of such techniques will be conducted by experienced personnel and follow methods outlined within guidance documents. All results will subsequently be made available to the EA.

6.3.2.5 Containment Performance Assessment

The investigation undertaken in accordance with the sections above may include one or more of the following:

- Confirmation of the breach;
- Assessment of the efficiency of the gas management system;
- CSM source and pathway checks; and
- The extended pathway assessment conclusions.

Following this, the performance of the containment system can be put into context.

6.3.3 NOTIFICATION REQUIREMENTS

Breaches of **Action Levels** will result in the LFG Operator and the Landfill Manager being informed within 24 hours of the breach.

The EA will not be notified unless a **Compliance Limit** is breached, or concentrations are continuously above an **Action Level** but below the **Compliance Limit** for three months continuously.

Breach of a **Compliance Limit** (and associated flow limit where applicable) will result in the EA being informed by CWM.

If the gas field management needs to be improved to address a continued breach of **Action Level** or **Compliance Limits**, then consideration will be given to doing so in conjunction with the EA. If it cannot be further improved, then additional off-site gas containment or control methods may be considered to address risks to sensitive nearby receptors.

7 REFERENCES

- CWM CP020 Managing Environmental Complaints
- CWM SOP006 Environmental Sampling & Monitoring
- CWM WI024 Flusco Landfill Emergency Procedure
- CWM WI141 Landfill Gas Plant Emergency Procedure
- CWM WI195 Inspection, Monitoring, Reporting Borehole Defects
- CWM W1015 Landfill Gas Emission Monitoring TDL-500
- Environment Agency, LFTGN 03, Guidance on the Management of Landfill Gas
- Environment Agency, LFTGN 04, Guidance for Monitoring Trace Components in Landfill Gas
- Environment Agency, LFTGN 05, Guidance for Monitoring Enclosed Landfill Gas Flares
- Environment Agency, LFTGN 07, Guidance for Monitoring Landfill Gas Surface Emissions
- Environment Agency, LFTGN 08, Guidance on Monitoring Landfill Gas Engine Emissions
- Environment Agency: Guidance on Monitoring stack emissions: measurement locations
- Environment Agency: Guidance on Monitoring stack emissions: techniques and standards for periodic monitoring
- Industry Code of Practice for the Management of Landfill Gas
- Infinis CLM 01 Gas Operating Parameters
- Infinis CLM 03 Gas Field Balancing and Inspection
- Infinis CLM 3.1 Gas Field Balancing and Inspection Method Statement
- Infinis CLM 04 Bag Sampling
- Infinis CLM 4.1 Bag Sampling Method Statement
- Infinis CLM 06 Gas Field Flows
- Infinis CLM 07 H2S Gas Field Monitoring
- Infinis CLM 08 Hydrogen Gas Field Monitoring Guidance Note
- Infinis CLM 09 Hot Spot Management
- Infinis CLM 9.1 Monitoring of Hot Spots
- Infinis CLM 9.2 Extinguishing of Hot Spots
- Infinis CLM 10 Gas Well Installation Log
- Infinis CLM 12 Gas Well Decommissioning
- Infinis CLM 13 Installation of In Waste Gas Wells
- Infinis EC 6.1 Annual Engine and Flare Emissions
- Infinis EC 6.2 Quarterly Engine Emissions Monitoring



Appendix 9

Dust Management Plan

To be provided.



Appendix 10

Noise Management Plan

To be provided.



Appendix 11

Pest Management Plan

To be provided.