REPORT

Environmental Permit Application

Open Windrow Composting Facility, Eye Landfill

Submitted to:

Biffa Waste Services Ltd
Redhill Landfill Site
Cormongers Lane
Redhill
Surrey
RH1 4ER

Submitted by:

Golder, member of WSP
Attenborough House, Browns Lane Business Park, Stanton-on-the-Wolds,
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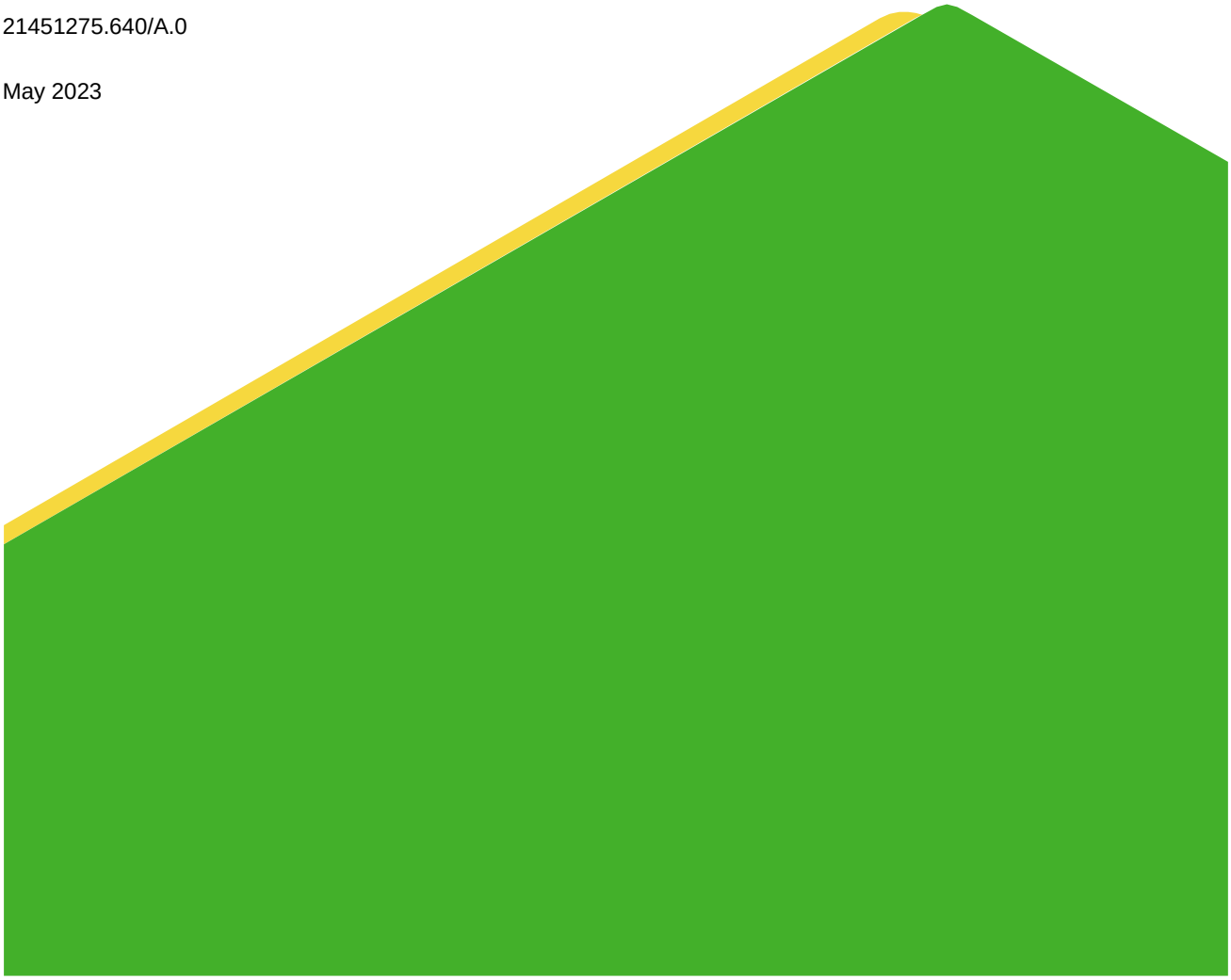
21451275.640/A.0

May 2023



Distribution List

Biffa Waste Services Ltd - 1 copy (pdf)

Environment Agency - 1 copy (pdf)

Golder, member of WSP - 1 copy (pdf)

Table of Contents

Signature Page

Golder, member of WSP

Nicola White
Project Manager

Chris McDonald
Project Director

Date: 16 May 2023

AA/NW/CM/ab

Company Registered in England No. 01383511
At WSP House, 70 Chancery Lane, London, WC2A 1AF
VAT No. 905054942

Application Forms A, B2, B3 and F1

Application for an environmental permit Part A – About you

You will need to fill in this part A if you are applying for a new permit, applying to change an existing permit or surrender your permit, or want to transfer an existing permit to yourself. Please check that this is the latest version of the form available from our website.

You can apply online for Waste standard rules environmental permits, bespoke waste permits and bespoke Medium combustion plant permits

Apply online for an environmental permit.

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.**

Note: if you believe including information on a public register would not be in the interests of national security you must enclose a letter telling us that you have told the Secretary of State. We will not include the information in the public register unless directed otherwise.

It will take less than one hour to fill in this part of the application form.

Where you see the term 'document reference' on the form, give the document references and send the documents with the application form when you've completed it.

Contents

1 About you

Are you applying as an individual, an organisation of individuals (for example, a partnership), a company (this includes Limited Liability Partnerships) or a public body?

An individual	☐ Now go to section 2 and if you are applying for a new permit or transferring a permit for an installation or waste activity please also fill in Appendix 1
An organisation of individuals (for example, a partnership)	☐ Now go to section 3 and if you are applying for a new permit or transferring a permit for an installation or waste activity please also fill in Appendix 1
A public body	☐ Now go to section 4
A registered company or other corporate body	☑ Now go to section 5 and if you are applying for a new permit or transferring a permit for an installation or waste activity please also fill in Appendix 1

2 Applications from an individual

2a Please give us the following details

Name

Title (Mr, Mrs, Miss and so on) _____

First name _____

Last name _____

Now go to section 6

3 Applications from an organisation of individuals or charity

3a Type of organisation

For example, a charity, a partnership, a group of individuals or a club

3b Details of the organisation or charity

If you are an organisation of individuals, please give the details of the main representative below. If relevant, provide details of other members (please include their title Mr, Mrs and so on) on a separate sheet and tell us the document reference you have given this sheet

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Now go to question 3c or section 6

3c Details of charity

Full name of charity

This should be the full name of the legal entity not any trading name.

3d Company registration number

If you are registered with Companies House please tell us your registration number

3e Charity Commission number

If you are registered with the Charity Commission please tell us your registration number

Now go to section 6

4 Applications from public bodies

4a Type of public body

For example, NHS trust, local authority, English county council

4b Name of the public body

4c Please give us the following details of the executive

An officer of the public body authorised to sign on your behalf

Name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Position

Now go to section 6

5 Applications from companies or corporate bodies

5a Name of the company

Biffa Waste Services Ltd

5b Company registration number

00946107

Date of registration (DD/MM/YYYY)

16/01/1969

If you are applying as a corporate organisation that is not a limited company, please provide evidence of your status and tell us below the reference you have given the document containing this evidence.

Document reference

5 Applications from companies or corporate bodies, continued

5c Please give details of the directors

If relevant, provide details of other directors and company secretary, if there is one, on a separate sheet and tell us the reference you have given this sheet.

Document reference: see Supporting Statement 21451275.641

Details of company secretary (if relevant) and director/s

Title (Mr, Mrs, Miss and so on):

First name:

Last name:

Title (Mr, Mrs, Miss and so on):

First name:

Last name:

Now go to section 6

6 Your address

6a Your main (registered office) address

For companies this is the address on record at Companies House.

Contact name

Title (Mr, Mrs, Miss and so on): Mr

First name: Neil

Last name: Sumner

Address: Biffa Waste Services Ltd
Coronation Road
Cressex
High Wycombe, Buckinghamshire

Postcode: HP12 3TZ

Contact numbers, including the area code

Phone:

Fax:

Mobile: 07703 395704

Email: neil.sumner@biffa.co.uk

For an organisation of individuals every partner needs to give us their details, including their title Mr, Mrs and so on. So, if necessary, continue on a separate sheet and tell us below the reference you have given the sheet.

Document reference:

6b Main UK business address (if different from above)

Contact name

Title (Mr, Mrs, Miss and so on):

First name:

Last name:

Address:

Postcode:

6 Your address, continued

Contact numbers, including the area code

Phone

Fax

Mobile

Email

Now go to section 7

7 Contact details

7a Who can we contact about your application?

It will help us if there is someone we can contact if we have any questions about your application. The person you name should have the authority to act on your behalf.

Please add a second contact on a separate sheet if this person is not always available.

Document reference of this separate sheet

This can be someone acting as a consultant or an 'agent' for you.

Contact name

Title (Mr, Mrs, Miss and so on) Mr

First name Neil

Last name Sumner

Address Biffa Waste Services Ltd
Redhill Landfill Site
Cormongers Lane
Redhill, Surrey

Postcode RH1 4ER

Contact numbers, including the area code

Phone

Fax

Mobile 07703 395704

Email neil.sumner@biffa.co.uk

7b Who can we contact about your operation (if different from question 7a)?

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Address

Postcode

Contact numbers, including the area code

Phone

Fax

Mobile

Email

7 Contact details, continued

7c Who can we contact about your billing or invoice?

Note: Please provide the name and address that all invoices should be sent to for your subsistence fees.

As in question 7a ☐

As in question 7b ☐

Please give details below if different from question 7a or 7b.

Contact name

Title (Mr, Mrs, Miss and so on)

First name

Last name

Address

Postcode

Contact numbers, including the area code

Phone

Fax

Mobile

Email biffa.invoices@biffa.co.uk

8 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. 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.

9 Where to send your application

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

For water discharges by email to PSC-WaterQuality@environment-agency.gov.uk

For waste and installations by email to PSC@environment-agency.gov.uk

For flood risk activity permits send 1 copy only to enquiries@environment-agency.gov.uk or to the local Environment Agency office for where the work is proposed to be carried out.

Or

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

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 ☐

Crystal Mark 19101
Clarity approved by Plain English Campaign

For Environment Agency use only

Date received (DD/MM/YYYY)

Our reference number

Payment received?

No ☐

Yes ☐ Amount received

£

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

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

Are you applying as an individual, an organisation of individuals (for example, a partnership) or a company (this includes Limited Liability Partnerships)?

An individual	☐ Now go to 2
An organisation of individuals (for example, a partnership)	☐ Now go to 3
A registered company or other corporate body	☑ Now go to 4

2 Applications from an individual

Please give us the following details

Name

Date of birth (DD/MM/YY)

3 Applications from an organisation of individuals or charity

Details of the organisation or charity

If you are an organisation of individuals, please give the date of birth details of the main representative below. If relevant, provide details of other members on a separate sheet and tell us the document reference you have given this sheet.

Name

Date of birth (DD/MM/YY)

Document reference

4 Applications from companies or corporate bodies

Name of the company

Please give the date of birth details for all directors and company secretary if there is one. If relevant, provide those details of other directors on a separate sheet and tell us the document reference you have given this sheet.

Details of company secretary (if relevant) and director/s

Name: see Supporting Statement 21451275.641

Date of birth (DD/MM/YY)

Name

Date of birth (DD/MM/YY)

Name

Date of birth (DD/MM/YY)

Document reference: see Supporting Statement 21451275.641

Application for an environmental permit
Part B2 – General – new bespoke permit

Environment Agency

Fill in this part of the form together with parts A and F1 if you are applying for a new bespoke permit. You also need to fill in part B3, B4, B5, B6, or B7 (this depends on what activities you are applying for).

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

You can apply online for: waste operations; medium combustion plant; and specified generator bespoke environmental permits at **https://apply-for-environmental-permit.service.gov.uk/start/start-or-open-saved**

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

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

Contents

1 About the permit

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

see Supporting Statement 21451275.641

1 About the permit, continued

1b Is the permit for a site or for mobile plant?

☐ Mobile plant Now go to **question 1c**

☑ Site Now go to **section 2**

Note: The term 'mobile plant' does not include mobile sheep dipping units.

Mobile plant only

1c Have we told you during pre-application discussions that we believe that a mobile permit is suitable for your activity?

☐ No

☐ Yes

1d Have there been any changes to your proposal since this discussion?

☐ No Now go to **section 3**

☐ Yes You should send us a description of the activity you want to carry out, highlighting the changes you have made since our pre-application discussions

Document reference

Now go to **section 3**

2 About the site (excludes mobile plant)

2a What is the site name, address, postcode and national grid reference?

Site name

Eye Landfill OWC Facility

Address

Eye Landfill, Eyebury Road, Eye, Peterborough, Cambridgeshire

Postcode

PE6 7TH

National grid reference for the site (for example, ST 12345 67890)

TF 23296 01443

2 About the site (excludes mobile plant), continued

2b What type of regulated facility are you applying for?

Note: if you are applying for more than one regulated facility then go to 2c.

- ☐ Installation
- ☐ Waste operation
- ☐ Mining waste operation

Water discharge activity

- ☐ Groundwater activity (point source)
- ☐ Groundwater activity (discharge onto land)

What is the national grid reference for the regulated facility (if only one)?
(See the guidance notes on part B2.)

- ☐ As in 2a above
- ☐ Different from that in 2a Please fill in the national grid reference below

National grid reference for the regulated facility

Now go to **question 2d**

2c If you are applying for more than one regulated facility on your site, what are their types and their grid references?

See the guidance notes on part B2.

Regulated facility 1

National grid reference

What is the regulated facility type?

- ☐ Installation
- ☐ Waste operation
- ☐ Mining waste operation
- ☐ Water discharge activity
- ☐ Groundwater activity (point source)
- ☐ Groundwater activity (discharge onto land)

2 About the site (excludes mobile plant), continued

Regulated facility 2

National grid reference

What is the regulated facility type?

- ☐ Installation
- ☐ Waste operation
- ☐ Mining waste operation
- ☐ Water discharge activity
- ☐ Groundwater activity (point source)
- ☐ Groundwater activity (discharge onto land)

Use several copies of this page or separate sheets if you have a long list of regulated facilities. Send them to us with your application form. Tell us below the reference you have given these extra sheets.

Document reference

Now go to **question 2d**

2d Low impact installations (installations only)

Are any of the regulated facilities low impact installations?

- ✔ No
- ☐ Yes If yes, tell us how you meet the conditions for a low impact installation (see the guidance notes on part B2 – 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

2e Treating batteries

Are you planning to treat batteries? (See the guidance notes on part B2.)

- ✔ No
- ☐ Yes Tell us how you will do this, send us a copy of your explanation and tell us below the reference you have given this explanation

Document reference for the explanation

2 About the site (excludes mobile plant), continued

2f Ship recycling

Is your activity covered by the Ship Recycling Regulations 2015? (See the guidance notes on part B2.)

✔ 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

2g Multi-operator installation

If the site is a multi-operator site (that is there is more than one operator of the installation) then fill in the table below the application reference for each of the other permits.

Table 1 – Other permit application references

3 Your ability as an operator

If you are only applying for a standalone water discharge or for a groundwater activity, you only have to fill in **question 3d**.

3a Relevant offences

Applies to all except standalone surface water discharges and groundwater discharges (see the guidance notes on part B2).

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

3 Your ability as an operator, continued

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/YYYY)

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.

see Supporting Statement 21451275.641

Now go to **question 3b**

Please also complete the details in **Appendix 2**.

3b Technical ability

Relevant waste operations only (see the guidance notes on part B2).

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

Please select one of the following:

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

or

☐ We will have a certified Competence Management System within 12 months and have enclosed evidence of the contract with an accredited certification body

3 Your ability as an operator, continued

CIWM/WAMITAB scheme

Your answers below must relate to the person(s) providing technically competent management when the permitted activities start.

Please select **one** of the following:

- I have enclosed a copy of:

  ✔ the relevant qualification certificate/s

  or

  ☐ evidence of deemed competence

  or

  ☐ 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 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

- ☐ The technically competent manager will complete their qualification within four weeks of starting the permitted activities and I have enclosed evidence of their registration with WAMITAB or their EPOC booking as appropriate

- **For medium- and high-risk tier activities other than landfill**

  The technically competent manager will complete the qualification within 12 months and I have enclosed evidence of their registration with WAMITAB and, where relevant, EPOC booking.

  ☐ I understand they must complete either four specified units of the relevant qualification or an EPOC within four weeks of the permitted activities commencing

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)

see Supporting Statement 21451275.641

First name

Last name

Phone

Mobile

Email

3 Your ability as an operator, continued

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

Document reference

see Supporting Statement 21451275.641

Now go to **question 3c**

Please also complete the details in **Appendix 2**.

3c Finances

Installations, waste operations and mining waste operations only.

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 (or they) (or any relevant person) 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

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 (all)

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.

For waste and installation permits only: your management system must also explain your resilience to climate change.

You can find guidance on management systems on our website at **https://www.gov.uk/guidance/develop-a-management-system-environmental-permits**

✔ **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)

☐ Green dragon

☐ Own management system

☐ EMAS Global

☐ Other

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

Document reference/s

see Supporting Statement 21451275.641

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

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

But not any mobile plant

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 B2.)

Document reference/s of the plans

see Supporting Statement 21451275.641

5 Supporting information, continued

5b Provide the relevant sections of a site condition/baseline report if this applies

See the guidance notes on part B2 for what needs to be marked on the plan.

Document reference of the report

see Supporting Statement 21451275.641

✔ If you are applying for an installation, tick the box to confirm that you have sent in a baseline report

5c Provide a non-technical summary of your application

See the guidance notes on part B2.

Document reference of the summary

see Supporting Statement 21451275.641

5d 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

☐ Yes Provide a fire prevention plan (see the guidance notes on part B2). You need to highlight any changes you have made since your pre-application discussions.

Document reference of the plan

6 Environmental risk assessment

Provide an assessment of the risks each of your proposed regulated facilities poses to the environment. 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 assessments

see Supporting Statement 21451275.641

7 How to contact us

If you have difficulty using 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.

7 How to contact us, continued

Feedback

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

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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

See the guidance notes on part B2.

Installation reference			
Condition	**Response**		**Do you meet this?**
A – Management techniques	Provide references to show how your application meets A References		☐ Yes ☐ No
B – Aqueous waste	Effluent created m³/day		☐ Yes ☐ No
C – Abatement systems	Provide references to show how your application meets C References		☐ Yes ☐ 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 Non-hazardous waste Tonnes per year		☐ Yes ☐ 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? ☐ Yes ☐ No Provide references to show how your application meets G References		☐ Yes ☐ No
H – Noise	Provide references to show how your application meets H References		☐ Yes ☐ No
I – Emissions of polluting substances	Provide references to show how your application meets I References		☐ Yes ☐ No
J – Odours	Provide references to show how your application meets J References		☐ Yes ☐ No
K – History of keeping to the regulations	Say here whether you have been involved in any enforcement action (as described in 'Appendix 1 – Compliance history' section of part B2 guidance 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

Relevant Offences – date of birth information

Please give us the following details

Name

see Supporting Statement 21451275.641

Date of birth (DD/MM/YYYY)

Technical ability – date of birth information

Name

see Supporting Statement 21451275.641

Date of birth (DD/MM/YYYY)

Application for an environmental permit
Part B3 – New bespoke installation permit

If you are applying for a new bespoke permit for an installation, fill in this part of the form, together with parts A, B2 and F1.

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 go with it.

If you are applying for a permit for an intensive farm do not use this form, but complete application form part B3.5 instead.

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 activities are you applying for?

Fill in Table 1a below with details of all the activities listed in schedule 1 or other references (see note 1) of the Environmental Permitting Regulations (EPR) and all directly associated activities (DAAs) (in separate rows), that you propose to carry out at the installation.

Fill in a separate table for each installation you are applying for. 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 the document.

Document reference: see Supporting Statement 21451275.641

1 What activities are you applying for?, continued

Table 1a – Types of activities

Schedule 1 listed activities						
Installation name	Schedule 1 or other references (See note 1)	Description of the activity (See note 2)	Activity capacity (See note 3)	Annex I (D codes) and Annex II (R codes) and descriptions	Hazardous waste treatment capacity (if this applies) (See note 3)	Non-hazardous waste treatment capacity (if this applies) (See note 3)
If there are not enough rows, send a separate document and give the document reference number here	Put your main activity first			For installations that take waste only	For installations that take waste only	For installations that take waste only

Directly associated activities (See note 4) Also note: if the DAA is a Medium Combustion Plant or Specified Generator (MCP/SG) please also fill in part B2.5, (see https://www.gov.uk/government/publications/application-for-an-environmental-permit-part-b25-new-bespoke-medium-combustion-plant-and-specified-generator-permit)		
Name of DAA If there are not enough rows, send a separate document and give the document reference number here	Description of the DAA (please identify the schedule 1 activity it serves)	
For installations that take waste (See note 5 below)	Total storage capacity	
	Annual throughput (tonnes each year)	

1 What activities are you applying for?, continued

Notes

1. Quote the section number, part A1 or A2 or B, then paragraph and sub-paragraph number as shown in EPR part 2 of schedule 1, schedule 13 and 14 for Local Authority regulated activities, or schedule 25/25B for Medium Combustion Plant or Specified Generators.
2. Use the description from the relevant schedule of the regulations. Include any extra detail that you think would help to accurately describe what you want to do.
3. By 'capacity', we mean:

- the total incineration capacity (tonnes every hour) for waste incinerators
- the total landfill capacity (cubic metres) for landfills
- the total capacity (cubic metres) for the recovery of hazardous waste on land
- the total treatment capacity (tonnes each day) for waste treatment operations
- the total storage capacity (tonnes) for waste storage operations
- the processing and production capacity for manufacturing operations, or
- the thermal input capacity for combustion activities

Fill each listed activity as a separate line and give an accurate description of any other activities associated with your schedule 1 activities. You cannot have Directly Associated Activities (DAAs) as part of a mobile plant application. If the DAA is a Medium Combustion Plant or Specified Generator (MCP/SG) please fill in the table in appendix 1 question 13.

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

Types of waste accepted

For those installations that take waste, for each line in Table 1a (including DAAs), fill in a separate document to list those wastes you will accept on to the site for that activity. Give the List of Wastes catalogue code and description (see https://www.gov.uk/government/publications/waste-classification-technical-guidance).

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.

Please provide the reference for each document.

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 of this extra information: see Supporting Statement 21451275.641

1 What activities are you applying for?, continued

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 Recovery of hazardous waste on land

Are you applying for a waste recovery activity involving the permanent deposit of inorganic hazardous waste on land for construction or land reclamation?

No ☑ Now go to question 2

Yes ☐

Have you written a waste recovery plan (WRP) that shows that you will use waste to perform the same function as non waste materials you would have used?

No You must write a WRP to support your application.

Yes

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

No

Yes

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

No

Yes

Please send us a copy of your current waste recovery plan that complies with our guidance at https://www.gov.uk/government/publications/deposit-for-recovery-operators-environmental-permits/waste-recovery-plans-and-deposit-for-recovery-permits. You need to highlight any changes you may have made since your pre-application discussions.

Document reference

Please note that there is an additional charge for the assessment or re assessment of a waste recovery plan that must be submitted as part of this application. For the charge see https://www.gov.uk/government/publications/environmental-permitting-charges-guidance/environmental-permitting-charges-guidance

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 installations.

Fill in one table for each installation, continuing on a separate sheet if necessary.

Table 2 – Emissions (releases)

Installation name	see Supporting Statement 21451275.641			
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

You will also need to complete application form part B6 if your installation includes a point source emission(s) to:

- water
- groundwater or
- sewer

Supporting information

3 Operating techniques

3a Technical standards

Fill in Table 3a for each activity at the installation you refer to in Table 1a above and list the 'Best Available Techniques' you are planning to use. If you use the standards set out in the relevant BAT conclusion(s), BAT reference document(s) (BREF) and/or technical guidance(s) (TGN) there is no need to justify using them within your documents in Table 3a.

For Part A(2) activities refer to https://www.gov.uk/government/collections/integrated-pollution-prevention-and-control-sector-guidance-notes and for Part B and Schedule 14 activities see https://www.gov.uk/government/collections/local-air-pollution-prevention-and-control-lappc-process-guidance-notes

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 B2 (General bespoke permit) of the application form.

For each of the activities listed in Table 1a, the documents in 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 BAT conclusions, BREF or technical guidance
- how you will meet other standards set out in the relevant BAT conclusions document, BREF or technical guidance

Table 3 – Technical standards

Fill in a separate table for each activity at the installation.

Installation name		
Description of the schedule 1 activity or directly associated activity	Best available technique (BATC, BREF or TGN reference) (see footnote below)	Document reference (if appropriate)

* Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control)

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: see Supporting Statement 21451275.641

3b General requirements

Fill in a separate Table 4 for each installation.

Table 4 – General requirements

Name of the installation	Open Windrow Composting Facility
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 Supporting Statement 21451275.641
Where the technical guidance or your risk assessment shows that odours are an important issue, send us your odour management plan	Document reference or references Supporting Statement 21451275.641
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 Supporting Statement 21451275.641

For guidance on risk assessments for your environmental permit see https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit

3c Types and amounts of raw materials

Fill in Table 5 for all schedule 1 activities. Fill in a separate table for each installation.

Table 5 – Types and amounts of raw materials

Name of the installation				
Capacity (See note 1 below)				
Schedule 1 activity	Description of raw material and composition	Maximum amount (tonnes) (See note 2 below)	Annual throughput (tonnes each year)	Description of the use of the raw material including any main hazards (include safety data sheets)

Notes

1 By 'capacity', we mean the total storage capacity (tonnes) or total treatment capacity (tonnes each day).

2 By 'maximum amount', we mean the maximum amount of raw materials on the site at any one time.

Use a separate sheet if you have a long list of raw materials, and send it to us with your application form. Please also provide the reference of this extra sheet.

Document reference

3d 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 below, you must answer the questions in the related document.

Table 6 – Questions for specific sectors

Sector	Appendix
Combustion	See the questions in appendix 1
Chemicals	See the questions in appendix 2
Incinerating waste	See the questions in appendix 3
Landfill and recovery of hazardous waste on land	See the questions in appendix 4

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: see Supporting Statement 21451275.641

4b Point source emissions to air only

4b1 Has the sampling location been designed to meet BS EN 15259 clause 6.2 and 6.3?

No ☐
Yes ☐

4b2 Are the sample ports large enough for monitoring equipment and positioned in accordance with section 6 and appendix A of BS EN 15259?

No ☐
Yes ☐

4b3 Is access adjacent to the ports large enough to provide sufficient working area, support and clearance for a sample team to work safely with their equipment throughout the duration of the test?

No ☐
Yes ☐

4b4 Are the sample location(s) at least 5 HD from the stack exit

No ☐
Yes ☐

4b5 Are the sample location(s) at least 2 HD upstream from any bend or obstruction?

No ☐
Yes ☐

4b6 Are the sample location(s) at least 5 HD downstream from any bend or obstruction?

No ☐
Yes ☐

4b7 Does the sample plane have a constant cross sectional area?

No ☐
Yes ☐

4b8 If horizontal, is the duct square or rectangular (unless it is less than or equal to 0.35 m in diameter)

No ☐
Yes ☐

4b9 If you have answered 'No' to any of the questions 4b1 to 4b8 above, provide an assessment to how the standards in BS EN 15259 will be met.

Document reference of the assessment

5 Environmental impact assessment

5a Have your proposals been the subject of an environmental impact assessment under Council Directive 85/337/EEC of 27 June 1985 [Environmental Impact Assessment] (EIA)?

No ☑ Now go to question 6

Yes ☐ Please provide a copy of the environmental statement and, if the procedure has been completed:

- a copy of the planning permission
- the committee report and decision on the EIA

Document reference of the copy

6 Resource efficiency and climate change

If the site is a landfill or a recovery of hazardous waste on land activity, you only need to fill in this section if the application includes gas engines.

6a Describe the basic measures for improving how energy efficient your activities are

Document reference of the description: not applicable

6b Provide a breakdown of any changes to the energy your activities use up and create

Document reference of the description: not applicable

6c Have you entered into, or will you enter into, a climate change levy agreement?

No ☐ Describe the specific measures you use for improving your energy efficiency

Document reference of the description

Yes ☐ Please give the date you entered (or the date you expect to enter) into the agreement (DD/MM/YYYY)

Please also provide documents that prove you are taking part in the agreement.

Document reference of the proof: not applicable

6d Explain and justify the raw and other materials, other substances and water that you will use

Document reference of the justification: not applicable

6e Describe how you avoid producing waste in line with Council Directive 2008/98/EC on waste

If you produce waste, describe how you recover it. If it is technically and financially impossible to recover the waste, describe how you dispose of it while avoiding or reducing any effect it has on the environment.

Document reference of the description: not applicable

7 Installations that include a combustion plant (excluding waste incinerators)

7a List all your combustion plant at the site and provide thermal input and operating hours for each

Document reference not applicable

7b Do any of your combustion plants have a net rated thermal input of 1 or more MW and is not an excluded MCP?

No ☐ Go to 7c

Yes ☐ Please fill in the table in appendix 1 question 13

7c Is the aggregated net thermal input of your combustion plant more than 20 MW?

No ☐

Yes ☐ Please go to appendix 1 question 11

8 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: https://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 ☐

Crystal Mark 19107
Clarity approved by Plain English Campaign

For Environment Agency use only

Date received (DD/MM/YYYY)

Payment received?

No ☐

Yes ☐ Amount received

Our reference number

£

Plain English Campaign's Crystal Mark does not apply to appendices 1 to 4.

Appendix 1 – Specific questions for the combustion sector

1 Identify the type of fuel burned in your combustion units (including when your units are started up, shut down and run as normal). If your units are dual fuelled (that is, use two types of fuel), list both the fuels you use

Fill in a separate table for each installation.

Installation reference			
Type of fuel	When run as normal	When started up	When shut down
Coal	☐	☐	☐
Gas oil	☐	☐	☐
Heavy fuel oil	☐	☐	☐
Natural gas	☐	☐	☐
WID waste	☐	☐	☐
Biomass (see notes 1 and 2 below)	☐	☐	☐
Biomass (see notes 1 and 2 below)	☐	☐	☐
Biomass (see notes 1 and 2 below)	☐	☐	☐
Biomass (see notes 1 and 2 below)	☐	☐	☐
Biomass (see notes 1 and 2 below)	☐	☐	☐
Landfill gas	☐	☐	☐
Other	☐	☐	☐

Notes

1. Not covered by Industrial Emissions Directive 2010/75/EU.
2. 'Biomass' is referred to The Renewables Obligation Order 2002 (https://www.legislation.gov.uk/uksi/2002/914/contents/made)

Give extra information if it helps to explain the fuel you use.

Document reference

Appendix 1 – Specific questions for the combustion sector, continued

2 Give the composition range of any fuels you are currently allowed to burn in your combustion plant

Fill in a separate table for each installation, continuing on a separate sheet if necessary

Fuel use and analysis					
Installation reference					
Parameter	Unit	Fuel 1	Fuel 2	Fuel 3	Fuel 4
Maximum percentage of gross thermal input	%				
Moisture	%				
Ash	% wt/wt dry				
Sulphur	% wt/wt dry				
Chlorine	% wt/wt dry				
Arsenic	% wt/wt dry				
Cadmium	% wt/wt dry				
Carbon	% wt/wt dry				
Chromium	% wt/wt dry				
Copper	% wt/wt dry				
Hydrogen	% wt/wt dry				
Lead	% wt/wt dry				
Mercury	% wt/wt dry				
Nickel	% wt/wt dry				
Nitrogen	% wt/wt dry				
Oxygen	% wt/wt dry				
Vanadium	mg/kg dry				
Zinc	mg/kg dry				
Net calorific value	MJ/kg				

Appendix 1 – Specific questions for the combustion sector, continued

3 If NOx factors are necessary for reporting purposes (that is, if you do not need to monitor emissions), please provide the factors associated with burning the relevant fuels

Fill in a separate table for each installation.

Installation reference	
Fuel	NOx factor (kgt^{-1})
Fuel 1	
Fuel 2	
Fuel 3	
Fuel 4	

Note: kgt^{-1} means kilograms of nitrogen oxides released for each tonne of fuel burned.

4 Will your combustion plant be subject to Chapter III of the Industrial Emissions Directive 2010/75/EU?

No ☐ Now fill in application form part F

Yes ☐

5 What is your plant?

an existing one ☐ A plant licensed before 1 July 1987

a new one ☐ A plant licensed on or after 1 July 1987 but before 27 November 2002, or a plant for which an application was made before 27 November 2002 and which was put into operation before 27 November 2003

a new-new one ☐ A plant for which an application was made on or after 27 November 2002

6 If you run more than one type of plant or a number of the same type of plant on your installation, please list them in the table below

Fill in a separate table for each installation.

Installation reference	
Type of plant	Number within installation
Existing	
New	
New-new	
Gas turbine (group A)	
Gas turbine (group B)	

Appendix 1 – Specific questions for the combustion sector, continued

7 If you run an existing plant, have you submitted a declaration for the 'limited life derogation' set out in Article 33 of Chapter III of the Industrial Emissions Directive?

No ☐ Now go to question 9

Yes ☐

8 Have you subsequently withdrawn your declaration?

No ☐

Yes ☐

9 List the existing large combustion plants (LCPs) which have annual mass allowances under the National Emission Reduction Plan (NERP), and those with emission limit values (ELVs) under the LCPD

Installation reference	
LCPs under NERP	LCPs with ELVs

10 Do you meet the monitoring requirements of Chapter III of the Industrial Emissions Directive?

No ☐

Yes ☐ Document reference

11 Have you carried out a cost–benefit assessment (CBA) of opportunities for cogeneration (combined heat and power) or district heating under Article 14 of the Energy Efficiency Directive?

No ☐ Please provide supporting evidence of why a CBA is not required (for example, an agreement from us)

Document reference of this evidence

Yes ☐ Please submit a copy of your CBA

Document reference of the CBA

Appendix 1 – Specific questions for the combustion sector, continued

12 Does your installation need to be combined heat and power-ready (CHP-ready)?

No ☐ Please provide supporting evidence of why a CHP-ready assessment is not required (for example, an agreement from us)

Document reference of this evidence

Yes ☐ Please provide a copy of your CHP-ready assessment

Document reference of the CHP-ready assessment

13 Information to be provided by the operator to the competent authority for each Medium Combustion Plant as identified in Annex I of Medium Combustion Plant Directive (EU/2015/2193)

MCP specific identifier*	
12-digit grid reference or latitude/longitude	
Rated thermal input (MW) of the MCP	
Type of MCP (diesel engine, gas turbine, other engine or other MCP)	
Type of fuels used: gas oil (diesel), natural gas, gaseous fuels other than natural gas, landfill gas	
Date when the new MCP was first put into operation	
Sector of activity of the MCP or the facility in which it is applied (NACE code)	
Expected number of annual operating hours of the MCP and average load in use	

Where the option of exemption under Article 6(8) is used the operator (as identified on Form A) should sign a declaration here that the MCP will not be operated more than the number of hours referred to in this paragraph	

* identifier – the MCP must be traceable via a serial number or other unique identifier, name plate, manufacturer and or model

NACE code means Nomenclature of Economic Activities and is the European statistical classification of economic activities (http://www.export.gov.il/files/EEN/ListNACEcodes.pdf).

To find out the 12-digit grid reference you can search on the UK Grid Reference Finder website at https://gridreferencefinder.com/

Appendix 2 – Specific questions for the chemical sector

1 Please provide a technical description of your activities

- The description should be enough to allow us to understand:
- the process
- the main plant and equipment used for each process
- all reactions, including significant side reactions (that is, the chemistry of the process)
- the material mass flows (including by products and side streams) and the temperatures and pressures in major vessels
- the all emission control systems (both hardware and management systems), for situations which could involve releasing a significant amount of emissions – particularly the main reactions and how they are controlled
- a comparison of the indicative BATs and benchmark emission levels standards: technical guidance notes (TGNs) (see https://www.gov.uk/government/collections/technical-guidance-for-regulated-industry-sectors-environmental-permitting); additional guidance 'The production of large volume organic chemicals' (EPR 4.01); 'Speciality organic chemicals sector' (EPR 4.02); 'Inorganic chemicals sector' (EPR 4.03); and best available techniques reference documents (BREFs) for the chemical sector

Document reference

2 If you are applying for a multi-purpose plant, do you have a multi-product protocol in place to control the changes?

No ☐

Yes ☐ Provide a copy of your protocol to accompany this application

Document reference

3 Does Chapter V of the Industrial Emissions Directive (IED) apply to your activities?

No ☐

Yes ☐ Fill in the following

3a List the activities which are controlled under the IED

Installation reference	
Activities	

3b Describe how the list of activities in question 3a above meets the requirements of the IED

Document reference

Appendix 3 – Specific questions for the waste incineration sector

If you are proposing to accept clinical waste, please complete your answer to question 3a 'Technical standards' with reference to relevant parts of our healthcare waste appropriate measures guidance (see https://www.gov.uk/guidance/healthcare-waste-appropriate-measures-for-permitted-facilities)

1a Do you run incineration plants as defined by Chapter IV of the Industrial Emissions Directive (IED)?

No ☐ You do not need to answer any other questions in this appendix

Yes ☐ IED applies

1b Are you subject to IED as

An incinerator? ☐

A co-incinerator? ☐

2 Do any of the installations contain more than one incineration line?

No ☐ Now go to question 4

Yes ☐

3 How many incineration lines are there within each installation?

Fill in a separate table for each installation.

Installation reference		
Number of incineration lines within the installation		
Reference identifiers for each line		

You must provide the information we ask for in questions 4, 5 and 6 below in separate documents. The information must at least include all the details set out in section 2 ('Key Issues') of S5.01 'Incineration of waste: additional guidance' (under the sub heading 'European legislation and your application for an EP Permit'). See https://www.gov.uk/government/collections/technical-guidance-for-regulated-industry-sectors-environmental-permitting.

You must answer questions 7 to 13 on the form below.

4 Describe how the plant is designed, equipped and will be run to make sure it meets the requirements of IED, taking into account the categories of waste which will be incinerated

Document reference

5 Describe how the heat created during the incineration and co-incineration process is recovered as far as possible (for example, through combined heat and power, creating process steam or district heating)

Document reference

Appendix 3 – Specific questions for the waste incineration sector, continued

6 Describe how you will limit the amount and harmful effects of residues and describe how they will be recycled where this is appropriate

Document reference

For each line identified in question 3, answer questions 7 to 13 below

Question 3 identifier, if necessary

7 Do you want to take advantage of the Article 45 (1)(f) allowance (see below) if the particulates, CO or TOC continuous emission monitors (CEM) fail?

No ☐

Yes ☐ This allows 'abnormal operation' of the incineration plant under certain circumstances when the CEM for releases to air have failed. Annex VI, Part 3(2) sets maximum half hourly average release levels for particulates (150 mg/m3), CO (normal ELV) and TOC (normal ELV) during abnormal operation.

Describe the other system you use to show you keep to the requirements of Article 13(4) (for example, using another CEM, providing a portable CEM to insert if the main CEM fails, and so on).

8 Do you want to replace continuous HF emission monitoring with periodic hydrogen fluoride (HF) emission monitoring by relying on continuous hydrogen chloride (HCl) monitoring as allowed by IED Annex VI, Part 6 (2.3)?

Under this you do not have to continuously monitor emissions for hydrogen fluoride if you control hydrogen chloride and keep it to a level below the HCl ELVs.

No ☐

Yes ☐ Please give your reasons for doing this

Appendix 3 – Specific questions for the waste incineration sector, continued

9 Do you want to replace continuous water vapour monitoring with pre-analysis drying of exhaust gas samples, as allowed by IED Annex VI, Part 6 (2.4)?

Under this you do not have to continuously monitor the amount of water vapour in the air released if the sampled exhaust gas is dried before the emissions are analysed.

No ☐

Yes ☐ Please give your reasons for doing this

10 Do you want to replace continuous hydrogen chloride (HCl) emission monitoring with periodic HCl emission monitoring, as allowed by IED Annex VI, Part 6 (2.5), first paragraph?

Under this you do not have to continuously monitor emissions for hydrogen chloride if you can prove that the emissions from this pollutant will never be higher than the ELVs allowed.

No ☐

Yes ☐ Please give your reasons for doing this

Appendix 3 – Specific questions for the waste incineration sector, continued

11 Do you want to replace continuous HF emission monitoring with periodic HF emission monitoring, as allowed by IED Annex VI, Part 6 (2.5), first paragraph?

Under this you do not have to continuously monitor emissions for hydrogen fluoride if you can prove that the emissions from this pollutant will never be higher than the ELVs allowed.

No ☐

Yes ☐ Please give your reasons for doing this

12 Do you want to replace continuous SO2 emission monitoring with periodic sulphur dioxide (SO2) emission monitoring, as allowed by IED Annex VI, Part 6 (2.5), first paragraph?

Under this you do not have to continuously monitor emissions for sulphur dioxide if you can prove that the emissions from this pollutant will never be higher than the ELVs allowed.

No ☐

Yes ☐ Please give your reasons for doing this

Appendix 3 – Specific questions for the waste incineration sector, continued

13 If your plant uses fluidised bed technology, do you want to apply for a derogation of the CO WID ELV to a maximum of 100 mg/m³ as an hourly average, as allowed by IED Annex VI, Part 3?

No ☐

Does not apply ☐

Yes ☐ Please give your reasons for doing this

14 Have you carried out a cost–benefit assessment (CBA) of opportunities for cogeneration (combined heat and power) or district heating under Article 14 of the Energy Efficiency Directive?

No ☐ Please provide supporting evidence of why a CBA is not required (for example, an agreement from us)

Document reference of this evidence

Yes ☐ Please submit a copy of your CBA

Document reference of the CBA

15 Does your installation need to be combined heat and power-ready (CHP-ready)?

No ☐ Please provide supporting evidence of why a CHP-ready assessment is not required (for example, an agreement from us)

Document reference of this evidence

Yes ☐ Please provide a copy of your CHP-ready assessment

Document reference of the CHP-ready assessment

Appendix 4 – Specific questions for the landfill sector and recovery of hazardous waste on land activities

1. For the landfill sector, provide your Environmental Setting and Installation Design (ESID) report and any other risk assessments to control emissions.

For recovery of hazardous waste on land activities, provide your Environmental Setting and Site Design (ESSD) report and any other risk assessments to control emissions

Document reference

2. For recovery of hazardous waste on land activities, provide your Waste Acceptance Procedures (including Waste Acceptance Criteria)

Document reference

Refer to our guidance at

https://www.gov.uk/government/publications/deposit-for-recovery-operators-environmental-permits/waste-acceptance-procedures-for-deposit-for-recovery

3. Provide your hydrogeological risk assessment (HRA) for the site

Document reference

4. Provide your outline engineering plan for the site

Document reference

5. Provide your stability risk assessment (SRA) for the site

Document reference

6. Provide your landfill gas risk assessment (LFGRA) for the site

Document reference

We have developed guidance on these assessments and their reports which can be found at
https://www.gov.uk/government/collections/environmental-permitting-landfill-sector-technical-guidance

7. For recovery of hazardous waste on land activities, 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

Document reference of this evidence

Yes ☐ Document reference

Appendix 4 – Specific questions for the landfill sector and recovery of hazardous waste on land activities, continued

8. Have you completed a proposed plan for closing the site and your procedures for looking after the site once it has closed?

No ☐ If you have answered 'no' for recovery of hazardous waste on land activities, refer to the section of your ESSD that explains why this is unnecessary for your site

Document reference of this evidence

Yes ☐ For landfill you must provide a closure and aftercare plan

Document reference

Application for an environmental permit Part F1 – Charges and declarations

Environment Agency

Fill in this part for all applications for installations, waste operations, mining waste operations, water discharges, point source groundwater discharges and groundwater discharges onto land. 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. 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

Each individual who is applying for their name to appear on the permit must complete the declaration in section 5. You will have to print a separate copy of the declaration page for each additional individual to complete.

1 Working out charges

You must fill in this section.

You have to submit an application fee with your application. You can find out the charge by searching for 'Environment Agency charging scheme and guidance: environmental permits' at www.gov.uk/government/organisations/environment-agency.

Please remember that the charges are revised on 1 April each year and that there is an annual subsistence charge to cover the costs we incur in the ongoing regulation of the permit.

Table 1 – Type of application (fill number of activity being applied for in each column)

Installation	Waste	Mining waste	Medium Combustion Plant (MCP)/Specified Generator (SG)	Water discharge/point source discharge to groundwater	Groundwater spreading onto land
S5.4 A(1) (b) (i)					

Table 2 – Charge type (A)

Charge activity reference	Charge activity description	What are you applying to do? E.g. new, minor variation, normal variation, substantial variation, surrender, low risk surrender, transfer	Amount
e.g. 1.17.3	e.g. Sect 5.2 landfill for hazardous waste	e.g. transfer	e.g. £5,561
1.16.18	Composting Facility; includes assessment of	New permit application	£ 11,465.00
	odour management plan		
Total A			£ 11,465.00

1 Working out charges (you must fill in this section), 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	£1,231	☐
1.19.2	Habitats assessment (except where the application activity is a flood risk 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 emissions risk assessment (intensive farming applications only)	£620	☐
1.19.9	Dust and bio-aerosol management plan (intensive farming applications only)	£620	☑
	Advertising	£500	☐
Total B			£ 1,399.00

Total charges

Total A plus total B £ 12,864.00

2 Payment

Tick below to show how you have paid.

Cheque ☐

Postal order ☐

Cash ☐ Tick below to confirm you are enclosing cash with the application

Credit or debit card ☐

Electronic transfer (for example, BACS) ☑

Remittance number PSCAPPBIFFA026

Date paid (DD/MM/YYYY) 17/05/2023

How to pay

Paying by cheque, postal order or cash

Cheque details

Cheque made payable to

Cheque number

Amount £

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

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

We do not recommend sending cash through the post. If you cannot avoid this, please use a recorded delivery postal service and enclose your application reference details. Please tick the box below to confirm you are enclosing cash.

I have enclosed cash with my application ☐

2 Payment, continued

Paying by credit or debit card

If you are paying by credit or debit card we can call you. We will destroy your card details once we have processed your payment. We can accept payments by Visa, MasterCard or Maestro card only.

Please call me to arrange payment by debit or debit card ☐

Paying by electronic transfer BACS reference

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	PSCAPPXXXXXYYY

You need to create your own reference number. It should begin with PSCAPP (to reflect that the application is for a permitted activity) 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.

If you are making your payment from outside the United Kingdom, it must be in sterling. Our IBAN number is GB23NWK60708010014411 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	PSCAPPBIFFA026
State who is paying (full name and whether this is the agent/ applicant/other)	Biffa Waste Services Ltd
Fee paid	£ 12,864.00
Date payment sent (DD/MM/YYYY)	17/05/2023

Now read section 3 below

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

3 Privacy notice

The Environment Agency runs the environmental permit application service.

We are the data controller for this service. A data controller determines how and why personal information is processed.

Our personal information charter explains:

- your rights
- what we do with your personal information

We're allowed to process your personal information because we have official authority as the environmental regulator. We need this information to carry out a task in the public interest that is set out in law. As the data controller, when you apply for an environmental permit, we have a legal obligation to process your personal data under the Environmental Permitting Regulations. The second lawful basis for processing your personal data is to comply with this legal obligation.

We need your personal information to process your environmental permit application. If you do not give us this information we cannot issue a permit to you. After we've issued a permit to you, we use your personal information:

- to check that you're complying with your permit
- during any potential enforcement action

What personal information we collect

If you're the individual applicant, director or company secretary of a company applying or a technically competent manager we need your:

- name
- date of birth

3 Privacy notice, continued

- address
- email address

If you're the agent, consultant, employee responsible for the activity or the employee responsible for billing and invoicing we need your:

- name
- address
- email address

If you're the applicant we need details of any:

- convictions
- bankruptcy

We also collect any questions or feedback you leave, including your email address if you contact us.

Your responsibility with other people's personal information

If you've included personal information about other people on your application, you must tell them. You must provide them with a copy of this privacy notice so that they know how their personal information will be used.

What we do with your personal information

We use your personal information to help us decide whether to issue you with a permit.

The information (except dates of birth) is available online on our consultation website during the consultation period. This website is available to everyone so your information may be seen outside the European Economic Area.

After consultation we put all the information (except dates of birth) you give us in your application on our public register.

If you can demonstrate that any information you send us is commercially or industrially confidential, we'll consider withholding that information from our public register.

If you think that the information you'll send us may be a threat to national security you must contact the Secretary Of State before you apply. You must still send us that information with your application. We will not include this information on our public register unless the Secretary of State decides it can be included.

See the environmental permitting guidance for guidance on national security.

We may use your email address to contact you for user research to improve our service. You don't have to take part in the research.

Where your personal information is processed and stored

We store and process your personal information on servers in the UK. We will not host your personal information outside the European Economic Area.

We do not use your personal information to make an automated decision or for automated profiling.

How long we keep your personal information

We keep your personal information while your permit is in use and for 7 years after you surrender your permit. If the permit is for a landfill site, we keep the data for 10 years after surrender.

Removing personal information from the public register

We will remove your personal information from the public register if:

- you withdraw your application
- we refuse your application and the time limit for appealing the decision has expired or an appeal is dismissed
- the information is no longer relevant for public participation purposes under the Environmental Permitting Regulations

Contact

Our Data Protection Team gives independent advice. They monitor how the Environment Agency uses your personal information.

If you have questions or concerns about how we process personal information, or to make a complaint or request relating to data protection, please contact:

Address: Data Protection Team
Environment Agency
Horizon House
Deanery Road
Bristol
BS1 5AH

3 Privacy notice, continued

Email: dataprotection@environment-agency.gov.uk

You can also make a complaint to the Information Commissioner's Office (ICO).

The ICO is the supervisory authority for data protection legislation. The ICO website has a full list of your rights under data protection legislation.

Now read section 4 below

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 via our website at www.gov.uk/government/organisations/environment-agency.

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

Please treat the 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 via our website at www.gov.uk/government/organisations/environment-agency.

You cannot apply for national security via this application.

Now fill in section 5

5 Declaration

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.

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'.

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.

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 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) ☑

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) ☐

5 Declaration, continued

Name

Title (Mr, Mrs, Miss and so on)	Mr
First name	Neil
Last name	Sumner
on behalf of (if relevant; for example, a company or organisation and so on)	Biffa Waste Services Ltd
Position (if relevant; for example, in a company or organisation and so on)	Environmental Regulation Manager
Today's date (DD/MM/YYYY)	17/05/2023

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.

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 (Mr, Mrs, Miss and so on)	
First name	
Last name	
on behalf of (if relevant; for example, a company or organisation and so on)	
Position (if relevant; for example, in 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, speak to us before you submit your application.

You must do the following:

Complete legibly all parts of this 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. If necessary, continue on a separate sheet. This separate sheet also needs to have a reference number and you should include it in the table below	☑
For new permits 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

Question reference	Document title	Document reference
	See Supporting Statement	21451275.641

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 422549 (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, or you would like us to review a decision we have made, please let us know. More information on how to do this is available at: https://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.

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 to:

For water discharges by email to PSC-WaterQuality@environment-agency.gov.uk

For waste and installations by email to PSC@environment-agency.gov.uk

Or

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 part A) ☑

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

£

To:

Environment Agency
Permitting Support Centre
Quadrant Building 2
99 Parkway Avenue
Parkway Business Park
Sheffield
S9 4WF

Northern Ireland Environment Agency
Klondyke Building
Cromac Avenue
Gasworks Business Park
Lower Ormeau Road
Belfast
BT7 2JA

Scottish Environment Protection Agency
Erskine Court
Castle Business Park
Stirling
FK9 4TR

Natural Resources Wales
Ty Cambria
29 Newport Road
Cardiff
CF24 0TP

Other Environmental Regulators (including local authorities)

4th May 2023

Dear Sirs

Authorised Persons

Our previous correspondence to the Environment Agency, dated 25th August 2011 in which we confirmed details of authorised signatories in addition to the statutory Directors for applications submitted in accordance with the Environmental Permitting Regulations 2007 refers.

We also updated this and wrote to you on 18th October 2013 to confirm that these arrangements should apply to all applications for environmental permits, wastes management licences, consents and similar authorisations throughout the United Kingdom. Whereas this letter has been updated on a number of occasions since, we now update further following changes in statutory Directors and also changes to the Companies to which this should apply.

Biffa Waste Services Limited
Registered office: Coronation Road, Cressex,
High Wycombe, Buckinghamshire HP12 3TZ
Registered in England & Wales
Company No: 00946107 VAT No: 537 9116 27

This authorisation (letter of authority) should therefore be extended to include all new applications as well as applications for variations, transfers, and surrenders/revocations, under the following or successive legislation and regulations:

Environmental Permitting (England and Wales) Regulations 2016
Environmental Protection Act 1990
Pollution Prevention & Control (Scotland) Regulations 2012 (as amended)
Water (Controlled Activities) (Scotland) Regulations 2011
Waste and Contaminated Land (Northern Ireland) Order 1997
Pollution Prevention & Control (Northern Ireland) Regulations 2003
Water (Northern Ireland) Order 1999
Water Resources Act 1991 (as amended by the Water Act 2003)
Environment Act 1995
The Water Resources (Abstraction and Impounding) Regulation 2006
The Water Resources (Transitional Provisions) Regulations 2017
Scrap Metal Dealers Act 2013

Accordingly, this is to confirm that, in addition to the statutory Directors of the companies that are listed in Appendix A (together "the Companies") to this letter the following personnel are also authorised persons to sign applications on behalf of the Companies.

Graham Peacock
Neil Sumner
Fraser James
Lana McArdell
Ben King
Elsa McConnell
Mark Dorn
Dianne Dodsworth

Please retain a copy of this correspondence on record for reference during any duly making checks that may be undertaken.

Yours faithfully
for and on behalf of the Companies

……
Michael Topham
Director of each of the Companies

Biffa Waste Services Limited
Registered office: Coronation Road, Cressex,
High Wycombe, Buckinghamshire HP12 3TZ
Registered in England & Wales
Company No: 00946107 VAT No: 537 9116 27

Appendix A
The Companies

Biffa Waste Services Limited
Biffa West Sussex Limited
UK Waste Management Limited
Biffa Leicester Limited
Island Waste Services Limited
Biffa GS Environmental Limited
Biffa GS (M&B) Limited
Biffa Municipal Limited
Biffa Waste Management Limited
Biffa Environmental Municipal Services Limited
Amber Engineering Limited
Specialist Waste Recycling Limited
New Star Environmental Limited
Syracuse Waste Limited
Biffa (Corby) Limited
Forge Recycling (UK) Limited
Total Recycling Services Limited

Biffa Waste Services Limited
Registered office: Coronation Road, Cressex,
High Wycombe, Buckinghamshire HP12 3TZ
Registered in England & Wales
Company No: 00946107 VAT No: 537 9116 27

Supporting Statement (.641)

REPORT

Biffa Waste Services Ltd

Eye Landfill, Open Windrow Composting Facility

Environmental Permit Application - Supporting Statement

Submitted to:

Biffa Waste Services Ltd
Coronation Road
Cressex
High Wycombe
HP12 3TZ

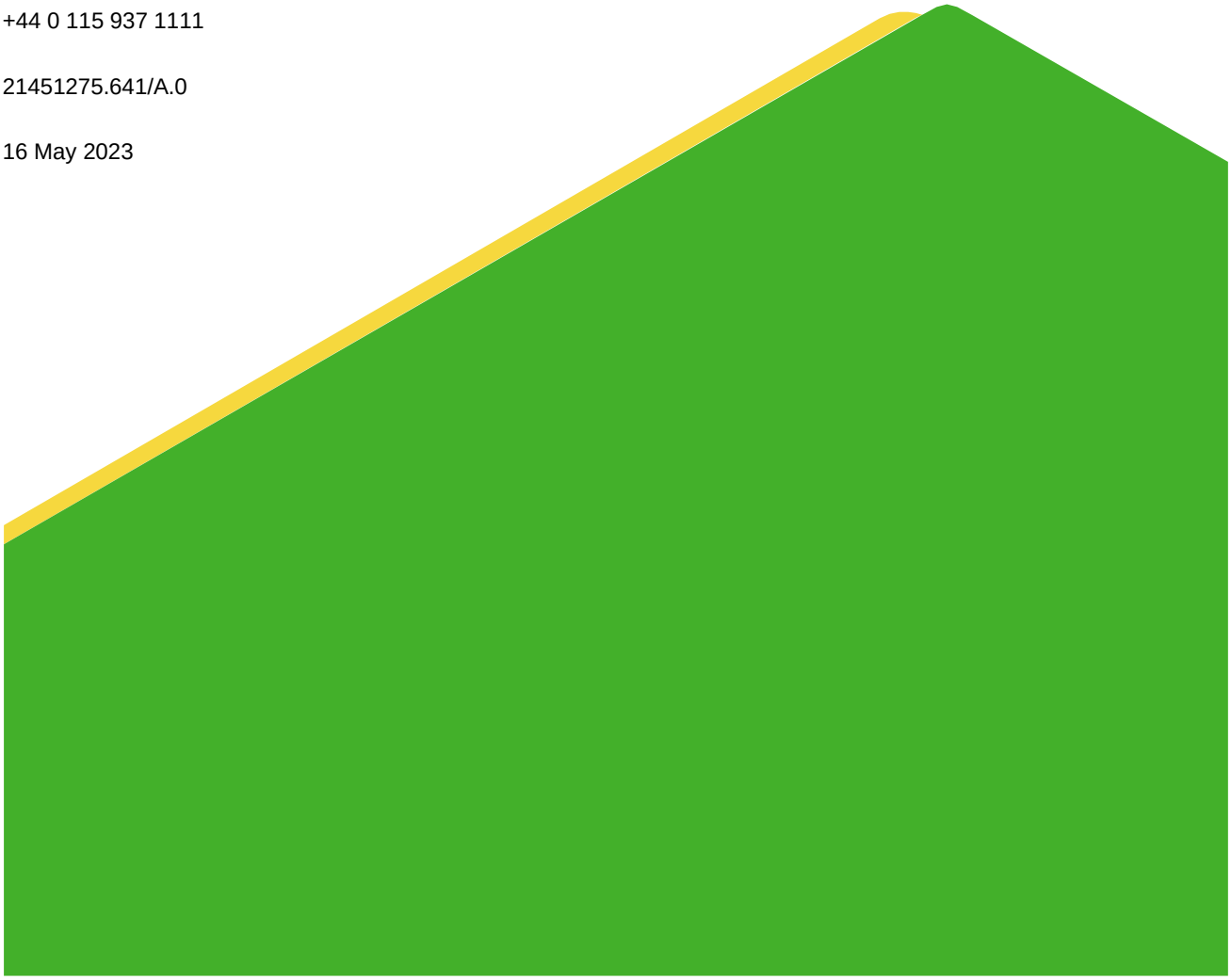
Submitted by:

Golder, member of WSP
Attenborough House, Browns Lane Business Park, Stanton-on-the-Wolds,
Nottingham, NG12 5BL, UK

+44 0 115 937 1111

21451275.641/A.0

16 May 2023



Distribution List

Biffa Waste Services Ltd - 1 copy (PDF)

Environment Agency - 1 copy (PDF)

Golder, member of WSP UK Ltd - 1 copy (PDF)

Table of Contents

TABLES

FIGURES

1.0 INTRODUCTION

1.1 Objective

Golder, a member of WSP UK Ltd (Golder) has been requested by Biffa Waste Services Ltd (Biffa) to prepare an Environmental Permit (EP) application for the development and operation of a green waste Open Windrow Composting (OWC) Facility (the 'Facility') at Eye Landfill, Eyebury Road, Eye, Peterborough, Cambridgeshire, PD6 7TH (the 'Site').

A planning application for the Facility was submitted to Peterborough City Council (PCC) in December 2021 for the Facility (Golder Associates (UK) Ltd, 2021) and is awaiting its decision.

This Supporting Statement includes the information required in the Environmental Permit application forms, together with the associated site information and assessments required to support the Environmental Permit application.

1.2 Background to this Application

In April 2021, Biffa prepared a pre-application scoping document for the proposed Facility (Biffa, 2021) which presented details of the Site location, planning and permitting history, the proposed development, and the potential permit application scenarios. The document was sent to the Environment Agency (EA) to seek formal pre-application advice in relation to the permit application for the Facility.

The EA subsequently provided a pre-application Nature and Heritage Conservation Screening Report (EPR/AP3094ES/V002, dated 27 April 2021) that identified the following:

- Protected habitats – Fens (<50 m), Natural England (**Figure 1**); and
- Protected species – Water Vole (<250 m), Local Records Centre (LRC) (**Figure 2**).

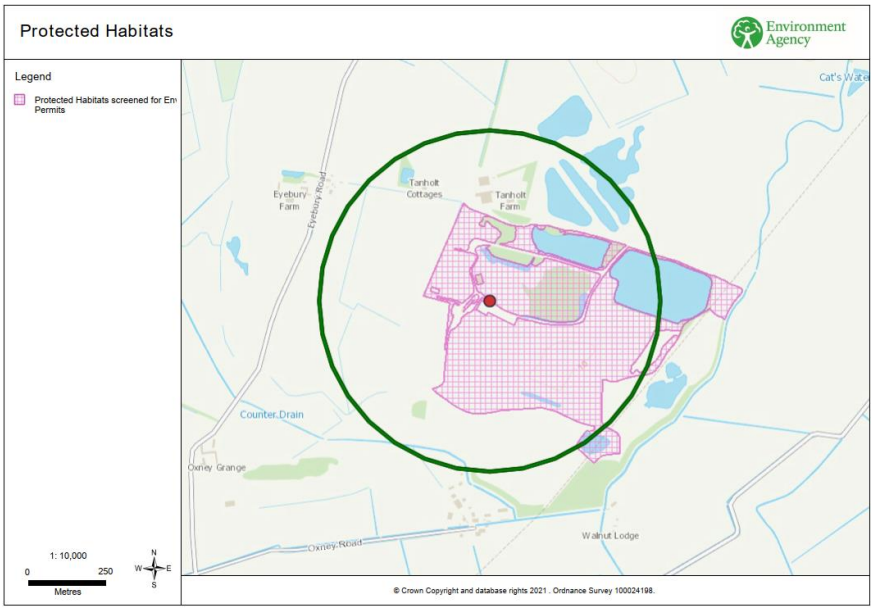


Figure 1: EA Nature and Heritage Screening Report - Protected Habitats

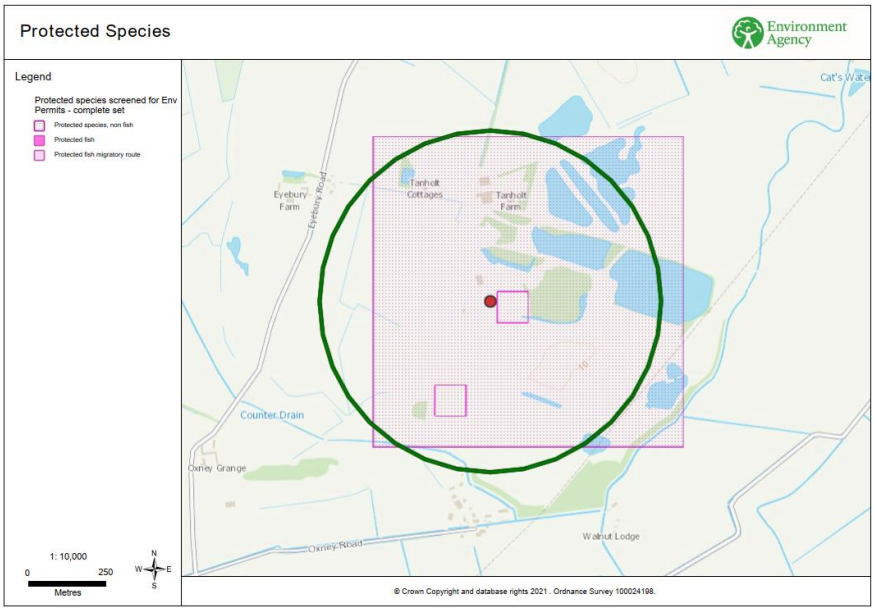


Figure 2: EA Nature and Heritage Screening Report - Protected Species

Biffa advised the EA that the site specific environmental setting did not match the findings of the Nature and Heritage Screening Report and much of the area identified for protected species and habitats were actually operational areas of the site as illustrated in **Figure 3**, **Figure 4** and **Figure 5**.

Figure 3: Typical Site Characteristics (Recycling Area and Shed)

Figure 4: Typical Site Characteristics (Area 1, East of Site Reception)

Figure 5: Southern Extension Area (Operational)

The EA indicated that (according to its Screening Report) the Facility did *not* meet the criteria for a Standard Rules Permit, although accepted that it could on the basis of site-specific review and ecological survey.

On this basis, the Facility was designed to ensure it was in line with the criteria for Standard Rules, and surveys carried out surveys and information about the ecological sensitivities in the area provided, to describe the environmental site setting. An Application for a Standard Rules Permit SR2021 No1: *composting in open systems – installations* was submitted to the EA on 8 March 2022 (Golder, 2022).

Historically, Eye Landfill has been progressively developed as a quarry for the extraction of sand and gravel with restoration by landfill since the 1960s. Today, Eye Landfill covers an area of approximately 130 hectares with four phases of landfill, gas compound, leachate storage lagoons, miscanthus beds, and recycling shed together with a Wildlife Corridor and Clear Water Lagoon (lake) established and maintained by Biffa to mitigate ecological impacts and enhance biodiversity. Biffa is responsible for development of many of the ecological features at the Site and retains responsibility for ecological management in accordance with various planning permissions.

In particular, Planning Permission Ref. 94/00004/MMFUL, dated 7 July 1999, was granted permission to Butterley Aggregates Ltd for landfill development in the Southern Extension in accordance with a phased development scheme. In 2007, Biffa completed a Ecological Appraisal towards discharging pre-commencement conditions of the planning permission for landfilling operations at the Southern Extension Area.

Planning permission (Reference 94/00004/MMFUL) was granted on 7 July 1999 by PCC. The Permission had a number of conditions, including the following:

- Condition 3. *Prior to the commencement of the development hereby permitted an ecological survey to identify the presence of protected species under the Wildlife and Countryside Act 1981 shall be undertaken. If protected species are found a mitigation strategy shall be submitted prior to the commencement of the development, for the written approval of the Local Planning Authority for consultation with English Nature. The development shall subsequently be implemented in accordance with the approved details*; and

a) Condition 30. *Prior to the commencement of the development hereby permitted, a detailed scheme showing how the nature conservation value of the lake and former silt lagoons immediately north of the application site will be enhanced shall be submitted to and approved in writing by the Local Planning Authority. Such a scheme shall include the provision of shallow areas within the lake, landscaping and the establishment of a reed bed on the former silt lagoons. The scheme shall also provide for the management of these areas for a minimum period of 5 years from completion of any land forming works, this shall include provision for the replacement of seeding or planting which is removed, dies or becomes diseased, with planting of similar size and species during the next planting season. The development shall subsequently be implemented in accordance with the approved details*.

Ecological assessments and proposals to mitigate and compensate for ecological impacts and to manage ecological areas were submitted to PCC under Conditions 3 and 30 in the following reports and letters (not reproduced here):

- Southern Extension and Lakes, Preliminary Ecological Assessment (Golder, 2007)[1]
- Eye Landfill, Southern Extension and Lakes, Ecological Appraisal Report (Golder, 2007)[2]
- Eye Landfill Southern Extension Area: Mitigation Scheme (Golder, 2007)[3]
- Eye Landfill Southern Extension, Method Statement for Mitigation and Compensation: Water Voles, Bats, Birds, Reptiles and Invertebrate Communities (Golder, 2008)[4]; and

[1] Golder Associates (UK) Ltd, *Southern Extension and Lakes, Preliminary Ecological Assessment,* 07514290053.501, Version B.0, March 2007;

[2] Golder Associates (UK) Ltd, *Eye Landfill, Southern Extension and Lakes, Ecological Appraisal Report*, 07514290053.502, Version A.0, August 2007;

[3] Letter from Golder Associates (UK) Ltd, *Eye Landfill Southern Extension Area: Mitigation Scheme,* 07514290224.501, dated 29 August 2007;

[4] Golder Associates (UK) Ltd, *Eye Landfill Southern Extension, Method Statement for Mitigation and Compensation: Water Voles, Bats, Birds, Reptiles and Invertebrate Communities*, 07514290224.508, Version A.0, dated May 2008;

- Eye Landfill, Southern Extension Ecological Management Plan for Wildlife Corridor and Lakes Area, (Golder, 2008)[5].

The works documented in the above reports resulted in a comprehensive mitigation and management scheme that included creation and management of the Wildlife Corridor, the translocation of Great Crested Newt (GCN) from the Southern Extension Area to the Wildlife Corridor and enhancement and management of the Lakes Area.

A number of targeted surveys have been undertaken to inform the ecological appraisal of the Southern Extension Area. In particular this included a population assessment for great crested newt (GCN) *Triturus cristatus* that was conducted between April – June 2007 (i.e. the appropriate survey season). Three waterbodies in the Southern Extension Area were subsequently identified with GCN present, including one waterbody where breeding was confirmed. The engineering and development works permitted by the planning permission were concluded to impact all the waterbodies and the surrounding terrestrial habitat utilised by GCN.

In order to proceed with the landfill development proposals, three areas were designated:

- First Development Area - Area 1, Area 2 (Cells 1, 2, 3, 4, 5) and Area 3 (north of the Southern Screening Bund);
- Second Development Area - Area 2 (Cells 6, 7, 8); and
- Wildlife Corridor.

In order to compensate for the habitat lost to the development of the landfill, the Wildlife Corridor was constructed to act as the final receptor site for GCN permanently displaced by the development. Prior to undertaking vegetation clearance and landfill construction in the First Development Area (2008), terrestrially occurring GCN were relocated to the Second Development Area. Once the Wildlife Corridor was constructed and associated habitats were confirmed to be suitably established the GCNs were subsequently translocated from the Second Development Area into the Wildlife Corridor (2015), which is the permanent receptor site. The works were carried out with appropriate European Protected Species derogation licences and other controls to the satisfaction of Natural England.

Since 2012, ecological monitoring reports have been prepared by Golder and AB Ecology on an annual basis.

Some of these features are now encompassed by a County Wildlife Site (CWS) called ‘Eyebury Road Pits’ of which the Wildlife Corridor, in particular, is very well regarded by both PCC and Natural England.

As advised by the EA as a result of its Screening Report (April 2021), a Preliminary Ecological Appraisal was submitted with the Application for a Standard Rules Permit to address the ecological sensitivities as follows:

- Section 2.2.2 describes the historical development of the site and the significant ecological enhancement and management that Biffa is carrying out.
- Section 3.2 describes that the Fenland Habitat noted by the EA screening actually includes: (1) Southern Extension Landfill Cells 1 to 8; (2) Miscanthus Beds (used for Leachate treatment); (3) Area 1 (historic landfill); (4) Cemex’s former sand and gravel operations; and (5) Silt lagoons. The Fenland Habitat noted by the EA screening correctly excludes (1) Site reception, haul road and skip park; and (3) Area around a pond to the north of Recycling Shed.
- Section 3.4 provides a Protected Species Assessment.

[5] Golder Associates (UK) Ltd, *Eye Landfill, Southern Extension Ecological Management Plan for Wildlife Corridor and Lakes Area,* 07514290053.510, Version A.0, July 2008.

- Section 4.3.3 acknowledges that numerous records of water vole are presented in the desk study results, noting that many of these results were submitted by Biffa as part of the extensive monitoring and licenced translocation of water vole that has taken place at the Site as a whole:
  - The Wildlife Corridor has been used as a water vole habitat creation area to receive the water vole and viable populations of this species continue to reside in this area. The Wildlife Corridor is >450 m away to the east;
  - The Southern Extension Area is today an operational landfill, nearing completion and does not contain aquatic habitats suitable for water vole and this species is certain not to be adversely affected by the OWC Composting Facility. As such, water vole is not considered further; and
  - The Eyebury Road Pits is a County Wildlife Site (CWS) and was locally mapped in the appraisal. The OWC pad is designed and configured to be >50 m away.

The OWC pad has a footprint that includes a historic landfill (Area 1), the current haul road, and an area already used as a Recycling Facility and Waste Transfer Station (SR2008No3 and SR2008No14). An Environmental Permit was also previously held for an IVC Facility (EPR/AP3433WD) in this area which allowed for a composting facility to operate as a partial in-vessel composting facility and a partial open windrow composting facility.

Nevertheless, having initially assessed the application, the EA advised (in March 2023) that it was unable to grant a Standard Rules Permit and advised/noted the following:

- Biffa should treat it as a new bespoke permit application with permitting forms and supporting documents as required and the bespoke fee;
- More careful consideration is required for the habitat/species in relation to the composting activity ensuring detailed risk assessments and a Habitats Management Plan to assess and incorporate into the permit conditions/tables;
- To detail how operations will be carried out and how that will result in the maintenance of (and hopeful increase) of biodiversity and value retained or created;
- The EA notes that Biffa mentions ecological mitigation written into planning, if so mention this so we avoid dual regulation assessment; and
- The EA's aim to safeguard a remnant population of coded species by enhancing the condition of habitats around the operation and to compensate for any residual negative effects arising from composting activity. The EA refers to coded species in emails and requests Biffa to do the same in-case correspondence ends up on public register.

Whilst the EA databases do not allow the EA to screen successfully against the criteria for Standard Rules, Biffa considers that it has demonstrated that the screening criteria apply based on its site-specific assessment of conditions. Biffa went to significant efforts to design the OWC pad, and site-specific assessments and other details were prepared to accompany the application aiming to demonstrate this.

Following subsequent discussions and clarifications with the EA, it has been agreed that the application should be re-submitted as a Bespoke Permit Application with the existing assessments, and information set out in this introduction.

Within this re-submission of the Permit Application, the following updates have therefore been made:

- Provision of Environmental Permit forms A, C2, C3 and F1, required for a Bespoke Permit Application;
- Amendments to the Supporting Statement to provide this Introduction and inclusion of information required by the forms; and
- Payment of fee for a Bespoke Permit Application.

All other documents remain valid and are therefore unchanged, including references to the Standard Rules Criteria.

Biffa requests that the EA continue to consider whether Standard Rules Permit conditions apply on the basis of the site-specific information provided, or a bespoke permit is required.

1.3 Site Setting

The Site is located approximately 1 km southeast of the village of Eye and approximately 4 km east of Peterborough (**Drawing 611-01**). It is owned and operated by Biffa Waste Services Ltd. The total area under Biffa's control equates to approximately 82 hectares (ha) and includes four main areas, as follows:

- The Central Area (~24 ha) was filled with putrescible waste from 1982 to 2000 and has been restored;
- The Northern Extension (~7 ha) was filled with non-hazardous waste and with some asbestos between approximately 2000 and 2005 and has been restored;
- The Northeastern Extension (~11 ha) was filled with non-hazardous waste between approximately 2005 and 2011 and has been restored; and
- The Southern Extension (~15 ha) is the current operational landfill area for non-hazardous and stable non-reactive hazardous waste (i.e. asbestos waste).

The Site also has the following infrastructure and features:

- A Wildlife Corridor to the east of the Southern Extension to mitigate ecological impacts of its development. The Wildlife Corridor sits astride the path of a high voltage transmission line passing SSW to NNE;
- The Cat's Water Drain is a natural watercourse along the eastern boundary which flows southwards. It is maintained by the District Internal Drainage Board (IDB) and has been canalised adjacent to the Site;
- An 'Archaeological Exclusion Zone' between the Northern and Northeastern Extension Areas;
- 'Clear Water Lagoon' is a large lake located between the Central Area and the Southern Extension;
- The Green Wheel footpath passes west to east to along the northern edge of the Clear Water Lagoon;
- Gas Utilisation Compound and two Leachate Storage Lagoons;
- Miscanthus Beds for the treatment of leachate;
- Site Reception (including office, two weighbridges, welfare facilities and car park);
- Recycling Shed with a permit for waste transfer and materials recycling activities; and
- Silt Lagoons to the north and northeast of the Site Reception.

The Southern Extension Area covers approximately 39.5 ha and was formed by extraction of sand and gravel from 1966 with infilling and partial restoration of the void with various materials from 1978. The Southern Extension comprises three distinct areas:

- Area 1 covers approximately 5 ha and was historically filled with both inert and domestic waste, with no engineered containment, to flat lying surrounding ground levels. The Area is uncapped and is an area of rough grassland.
- Area 2 covers approximately 11 ha and was excavated for sand, gravel and the underlying clay leaving in part an open void which is partially flooded (with water levels currently controlled by pumping). It is being developed for non-hazardous waste disposal (Cells 1, 2, 3, 6, 7, 8).
- Area 3 covers approximately 23.5 ha and was variously excavated (from 1966) and then backfilled filled (from 1978). Site investigation records show that it was backfilled with primarily inert fill (with some non-hazardous waste materials) and has no engineered containment or capping. It was backfilled to surrounding ground levels and was returned to agricultural use many years ago. Part of Area 3 has subsequently been developed for non-hazardous waste disposal (Cells 4, 5) and another part of Area 3 has been used for the development of Miscanthus Beds for the treatment of landfill leachate. Other parts of Area 3 remain in agricultural use.

The Facility will be developed on Area 1 of the Southern Extension Area. The layout of the Southern Extension Area is shown on **Drawing 611-02**. Access to the Facility will be along the existing 700 m entrance road from Eyebury Road to the Site Reception.

The environmental site setting within 500 m of the Facility is shown on **Drawing 611-03**. The nearest occupied residential property (Tanholt Farm – house and outbuildings) is located approximately 250 m to the north of the Facility.

There are no designated sites within 500 m of the Facility. The closest Sites of Special Scientific Interest (SSSI) are Dogsthorpe Star Pit and Eye Gravel Pit, which are located about 2 km to the northwest and north, respectively. Dogsthorpe Star Pit is designated for its biological habitats. Eye Gravel Pit is also a Geological Conservation Review site. The SSSI is designated for its exposures of Fen Gravel (March Gravel) that contain marine and occasional non-marine shell.

Nene Washes Special Area of Conservation (SAC), Special Protection area (SPA) and Ramsar site are located approximately 3 km south and southeast of the proposed permit boundary. Nene Washes has been selected as an SAC because of the Annex II species Spined loach (*Cobitis taenia).* The SPA qualifies for designation under the EC Birds Directive for:

- Regularly supporting an internationally important wintering population of Bewick's swan (*Cygnus columbarius bewickii*);
- Supporting nationally important breeding summer populations of regularly occurring migratory species, including gadwall (*Anas strepera*), garganey (*Anas querquedula*), shoveler (*A. clypeata*), black-tailed godwits (Limosa limosa), as well as several other rare birds; and
- Supporting nationally important wintering populations of wigeon (*Anas penelope*), teal (*A. crecca*), gadwall (*Anas strepera*), Pintail (*Anas acuta*) and shoveler (*Anas clypeata*).

The nearest Local Nature Reserve (LNR) is Eye Green, which is located approximately 1.7 km to the north of the proposed Facility. The nearest Ancient or Semi-natural Woodland to the Facility is Grimeshaw Wood, which is located over 7 km west of the Facility. The nearest Scheduled Monument is located approximately 1.7 km to the northeast of the Facility.

The site is not located within a Zone 1 or Zone 2 source protection zone for public water supplies. The nearest are located beyond Peterborough to the west. An outer protection zone, at its closest, is located approximately 8.9 km to the northwest of the Site.

1.4 Background to the Facility

A summary of the proposed development is presented here. Full details of the Site history and the proposed Facility development are included in the planning application (Golder, 2021).

The Site has been an area of mineral extraction, backfilling and restoration since the 1960s. Biffa Waste Services Ltd (Biffa) commenced landfilling operations in the Central Area in 1982 and then progressed to the Northern Extension and Northeastern Extension Areas. These three areas are now restored and returned to agriculture.

Currently, Biffa undertakes various waste management operations at the Site including landfill disposal in the Southern Extension Area, generation of electricity from landfill gas, treatment of leachate by Miscanthus Beds, waste transfer and recycling. Biffa has also developed and fully manages a Wildlife Corridor beside the Cat's Water Drain (watercourse) along the eastern boundary. It also manages the Clear Water Lagoon and other water features in the centre of the Site.

Biffa has made a planning application to PCC to develop an OWC Facility at the Site to compost about 50,000 tonnes of green waste per year. The green waste will be composted under aerobic conditions.

The types of green waste to be composted will comprise biodegradable wastes from agriculture and horticulture, household collections of garden waste, plus wood, paper and cardboard, and similar wastes from commercial/ industrial processes. Wastes may include animal manures, but will not include catering waste, or wastes containing any other animal by-products.

The Facility will comprise a new, fully sealed, reinforced concrete pad (200 m x 128.5 m), oriented southwest to northeast, at or just above existing ground level, located just to the east of the Site Reception. It will have shallow gradients and kerbs to manage surface water that will drain to two new lagoons, one at the northeast end and one at the southwest end of the pad. Water will be spray-irrigated back onto the compost to keep it moist or, if it is in excess, will be removed by tanker for disposal at an appropriately authorised facility. Biffa is proposing to retain the existing Recycling Shed as part of the OWC Facility for the storage of plant and equipment.

Incoming green waste will enter the Site from the existing entrance on Eyebury Road and use the existing Site Reception. Incoming waste will be unloaded directly onto the pad, then be shredded and screened and placed into elongate piles (windrows).

The minimum composting period of each batch is five weeks. The first two weeks comprise a sanitisation phase followed by a stabilisation phase which is a minimum of three weeks. During this time, each batch will be mechanically turned down the compost pad, from windrow to windrow, in a controlled sequence that allows the material to be aerated and the final compost to end up as near to the final screening area as possible.

The green waste in the windrows will naturally decompose under aerobic conditions and reach temperatures of between 65°C to 80°C in the sanitisation phase which is sufficient to destroy weed seeds and reduce any human and animal pathogens. After the initial two-week period, temperatures will be maintained at >45°C by managing moisture levels for at least a further three weeks until the end of the stabilisation phase. The temperature and moisture content of the windrow will be monitored and recorded once a week, using a probe inserted into the windrow.

If required, the material can enter final maturation stage when the feedstock will be retained in the windrows and the temperature will further decrease. The composted material will then be screened to provide finished compost products. Most compost product will be despatched in bulk by Heavy Commercial Vehicles (HCVs). A small amount of product may be bagged suitable for small users and despatched on pallets.

1.5 Areas to be Permitted and other Permits

The Environmental Permit for the Facility will cover the green waste reception area, the screening and composting areas, the lagoons and the loading bay. The Facility Environmental Permit application boundary is shown on **Drawing 611-04**. Areas for shared use with the other landfill operations, such as the office and weighbridge, entrance road and the existing recycling shed are outside the Environmental Permit boundary for the Facility.

It should be noted that the landfill leachate storage tank that is located within the proposed Environmental Permit boundary is already present on Site and is used to store landfill leachate before tankering off Site. This tank will be removed and replaced on top of the new compost pad hardstanding. In the event that more compost liquor is generated than can be managed in the lagoons, any surplus will also go to this tank. Given the tank will mainly be used for the management of landfill leachate and will only be a back-up system for excess compost liquor management, it will be managed under the Environmental Permit for the landfill and will not be included in the operations to be managed under the Facility Environmental Permit.

Other areas of the Site that already have Environmental Permits for installation activities include:

- **Eye North Eastern and Southern Extension Landfill– EPR/BP3537PP:** This permit includes two distinct landfill areas known as the North Eastern Extension (NEE) and the Southern Extension (SE). The NEE is non-operational and has been capped and restored and will be progressing to closure and aftercare in the next 2-3 years once the landfilling operations and restoration of the SE is also completed. The SE is a non-hazardous landfill with a stable non-reactive hazardous waste (SNRHW) cell primarily for the acceptance of asbestos contaminated wastes. This permit also includes the listed activity for the biological treatment of leachate via Miscanthus Beds for the whole of the Eye waste management complex, which includes leachate arising from the adjacent permitted areas. The permitted activity for the management, treatment and utilisation of landfill gas from all permitted areas of the Eye complex are also regulated under Environmental Permit EPR/BP3537PP.
- **Eye Northern Landfill:** This site is fully restored and went into closure and aftercare on 7 November 2008 under permit variation EPR/AP3697LL. All environmental monitoring of this area is undertaken in accordance with the approved Closure Report.
- **Eye Central Landfill:** This is the oldest area of the Eye waste management complex and is regulated under Permit EPR/CP3190NG. The site was filled with non-hazardous household, commercial and industrial waste, along with stable non-reactive hazardous waste, between 1982 and 2000 when the site ceased waste acceptance with subsequent capping and restoration. The site closed under the Waste Management Licensing Regulations 1994 and the submission of a closure application was not required. Leachate from this area is currently treated by the Miscanthus Beds system and monitoring of the site is completed in accordance with Permit.
- **Eye Materials Recycling Facility/Waste Transfer Station:** The MRF/WTS activity is permitted under two sets of standard rules, these being SR2008No3 and SR2008No14 which are regulated under EPR/AP3094ES. Standard rules permit SR2008No3 allows for the operation of a Household, Commercial and Industrial WTS with treatment not exceeding 75,000 tonnes per year. Standard rules permit SR2008No14 allows for the operation of a MRF not exceeding 75,000 tonnes per year. The permitted wastes are limited to source segregated household and similar waste including some recyclable mixed municipal waste.

An In-vessel Composting (IVC) Facility at the Site was granted planning permission in July 2015 (reference 14/01307/MMFUL). An Environmental Permit was also previously held for that IVC Facility (EPR/AP3433WD). This allowed for a composting facility to operate as a partial in-vessel composting facility and a partial open windrow composting facility. This facility was never developed, and no construction works ever commenced.

2.0 PROPOSED OPERATIONS

2.1 Wastes Quantities and Types

Biffa has designed the Facility to compost about 50,000 tonnes of green waste per annum. The total quantity of waste accepted at the Site shall be less than 75,000 tonnes a year.

Waste shall only be accepted if it is of a type listed by Waste Code and Description below. The types of waste that will be accepted include green wastes and animal manures, but will not include any catering waste, or wastes containing any other animal by-products that are covered by the Animal By-Products Regulations. All waste will be accepted in accordance with the Waste Acceptance Procedure.

02 WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING

- 02 01 wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing
  - 02 01 03 plant-tissue waste
  - 02 01 06 animal faeces, urine and manure (including spoiled fully biodegradable bedding)
  - 02 01 07 wastes from forestry
  - 02 01 99 wastes not otherwise specified (spent mushroom compost from commercial mushroom growing only)
- 02 03 Wastes from fruit, vegetables, cereals, edible oils, cocoa, coffee, tea and tobacco preparation and processing; conserve production; yeast and yeast extract production, molasses preparation and fermentation
  - 02 03 04 materials unsuitable for consumption or processing
- 02 07 wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)
  - 02 07 01 Wastes from washing, cleaning and mechanical reduction of raw materials – biodegradable wastes from the processing of the raw materials used in the production of such beverages only (wastes from the production of alcoholic and non-alcoholic beverages (except coffee, tea and cocoa))
  - 02 07 02 Wastes from spirits distillation, spent grains, hops and whisky filter sheets and cloths, yeast and yeast like residues, sludge from this production process, or malt husks, malt sprouts, yeasts and yeast-like residues only
  - 02 07 04 Material unsuitable for consumption or processing – biodegradable wastes from processing raw materials used in producing alcoholic and non-alcoholic beverages (except coffee, tea and cocoa)

03 WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD

- 03 01 Wastes from wood processing and the production of panels and furniture – virgin timber only
  - 03 01 01 waste bark and cork
  - 03 01 05 sawdust, shavings, cuttings, wood and particle board other than those in 03 01 04 only
- 03 03 wastes from pulp, paper and cardboard production and processing
  - 03 03 01 waste bark and wood – virgin timber only
  - 03 03 10 fibre rejects from virgin timber only

15 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED

- 15 01 packaging (including separately collected municipal packaging waste)
  - 15 01 01 paper and cardboard packaging (excluding veneers, plastic coatings or laminates)
  - 15 01 02 plastic packaging (compostable plastics only)
  - 15 01 03 wooden packaging – virgin timber only
  - 15 01 05 composite packaging (only biodegradable organic packaging)
  - 15 01 09 textile packaging (made entirely from biodegradable fibres only)
- 15 02 Absorbents, filter materials, wiping cloths and protective clothing
  - 15 02 03 Absorbents, filter materials or cloths from the production of alcoholic and non-alcoholic beverages other than those mentioned in 15 02 02 – hops and whisky filter sheets and cloths made from compostable material only

16 WASTES NOT OTHERWISE SPECIFIED IN THE LIST

- 16 03 Off-specification batches and unused products
  - 16 03 06 Organic wastes other than those mentioned in 16 03 05 – untreated wool fleece only (excludes hides and skins)
- 16 10 Aqueous liquid waste destined for off-site treatment
  - 16 10 02 Untreated wash waters from cleaning fruit and vegetables on farm only

17 CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)

- 17 05 soils (excluding excavated soils from contaminated sites), stones and dredging spoil
  - 17 05 06 dredging spoil other than those mentioned in 17 07 05 (from inland waters only)

19 WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION/INDUSTRIAL USE

- 19 02 wastes from physic/chemical treatments of waste (including dechromatation, decyanidation, neutralisation
  - 19 02 03 premixed wastes composed only of non-hazardous wastes (waste types listed within these standard rules only)
  - 19 02 06 Sludges from physico/chemical treatment other than those mentioned on 19 02 05 (sewage sludge which has been previously pasteurised and stabilised only)
- 19 05 wastes from the aerobic treatment of solid wastes
  - 19 05 01 Non-composted fraction of municipal and similar wastes from a composting process that accepts waste types listed in these standard rules and made up of previously sanitised batches only
  - 19 05 03 off-specification compost (from a composting process that accepts waste input types listed in these standard rules only)

- 19 06 Wastes from the anaerobic treatment of waste
  - 19 06 04 Digestate from anaerobic treatment of municipal waste, separated fibre from a process that accepts waste types as listed in these standard rules or anaerobic digestion standard rules only, made up of previously pasteurised and stabilised batches only and in compliance with Animal and Plant Health Agency authorisation
  - 19 06 06 Digestate from anaerobic treatment of animal and vegetable waste, separated fibre from a process that accepts waste types as listed in these standard rules or anaerobic digestion standard rules only, made up of previously pasteurised and stabilised batches only and in compliance with Animal and Plant Health Agency authorisation
- 19 12 wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified
  - 19 12 01 paper and cardboard (excluding veneers or plastic coatings)
  - 19 12 12 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11 (and only including wastes types listed in these standard rules)

20 MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS

- 20 01 separately collected fractions (except 15 01)
  - 20 01 01 paper and cardboard (excluding veneers, plastic coatings or laminates)
  - 20 01 39 plastics (compostable plastics only)
- 20 02 garden and park wastes (including cemetery waste)
  - 20 02 01 biodegradable waste (plant matter only)
- 20 03 other municipal wastes
  - 20 03 01 Municipal household waste − separately collected garden waste only
  - 20 03 02 waste from markets (biodegradable only)

For the avoidance of doubt, wastes having any of the following characteristics shall *not* be accepted:

- Consisting solely or mainly of dusts (except sawdust), powders or loose fibres;
- Catering waste and other wastes containing animal by-products covered by the Animal ByProducts Regulations (except waste code 02 01 06 above);
- Wastes that are in a form which is liquid;
- Hazardous wastes;
- Wastes containing treated wood;
- Wastes containing wood-preserving agents or other biocides;
- Wastes containing persistent organic pollutants; and
- Wastes containing Japanese Knotweed.

2.2 Reception of Green Waste

Incoming green waste will be delivered by Heavy Commercial Vehicles (HCVs), which will use the main site entrance from Eyebury Road and take the entrance road to the Site Reception and weighbridge. Details of the waste carrier, waste type, source and quantity of green waste recorded on the Waste Transfer Note will be inspected by the weighbridge clerk.

Loads will then be deposited in the allocated area before the HCV will proceed to the wheel wash and return to the weighbridge where the vehicle will be weighed off and issued with a weighbridge ticket.

2.3 Initial Processing

After offloading, any unsuitable materials (e.g. plastic bags) or oversized materials (e.g. large diameter logs) will be removed and placed into skips for onward transportation to a suitably licensed recovery or disposal facility.

All remaining feedstock will be heaped in the reception area. Once sufficient material has been accepted and normally within 72 hours from the time of receipt, the material will be loaded into a mobile shredder (and trommel screen if used at this stage) by a 360 excavator/grab and/or front-end loading shovel. Any further unsuitable and/or oversized materials will be placed into skips for onward transportation to a suitably licensed recovery or disposal facility.

The shredded material will be formed into a windrow. A windrow will be about 7 m wide at the base and up to 3.5 m high. Once the windrow has been completed it will be given a unique batch number and will start the composting process.

Moisture checks will be carried out and adjusted by adding water or fibrous material and thereby aiding the composting process, as required. The water will be sourced from the surface water lagoons.

The Facility will operate an information management system that provides batch data records for types, quantities, sources of waste received, shredding and processing data (temperature and moisture for each batch) and final end product screening and quality characterisation.

2.4 Composting

The minimum composting period of each batch is five weeks. The first two weeks comprise the sanitisation phase followed by the stabilisation phase which is a minimum of three weeks. During this time, each batch will be mechanically turned down the pad and turned in a sequence that allows the material to be aerated and to end up as near to the final product screening area as possible.

The feedstock in the windrows will naturally decompose under aerobic conditions and reach temperatures of between 65°C to 80°C (sufficient to destroy weed seed and reduce any human and animal pathogens). After an initial two-week period, temperatures will be maintained at >45°C by turning using the front-end loading shovel and/or a 360° excavator once every two weeks and by managing moisture levels to until the end of the stabilisation phase. In the stabilisation phase, biological processes take place that together with conditions in the compost mass give rise to compost that is nominally stable. The temperature and moisture content of the windrow will be monitored and recorded once a week, using a probe inserted at least 0.5 m into the windrow.

After stabilisation, biodegradation will continue to occur, albeit at a slower rate. In the (optional) final maturation stage, the feedstock will be retained in windrows and the temperature will further decrease. The end of the maturation phase is reached when batch temperatures remain within limits for a specified minimum period. At this point each batch will be marked as complete by recording the completion date on a ‘Batch Appraisal Record Sheet’.

2.5 Screening

Once the material has satisfactorily achieved the required composting period it will be screened again through the mobile screen, typically as:

- 0 to 25 mm and/or 0 to 30 mm; and
- 0 to 10 mm dependent on demand.

Compost product not passing through the 25 mm or 30 mm screen will be mixed with incoming feedstock and re-processed. The screener may be fitted with wind sifting equipment to remove residual plastic contamination from the oversize.

Screened compost product will then be classed as finished product and stored in the product despatch area where it will await bulk collection or bagging.

The vast majority of compost product will be loaded onto HCVs and despatched in bulk. Compost product that is screened to a 0 to 10 mm grade may be taken to Recycling Shed to be bagged or blended with sands and soils to create a topsoil mix. Bags could range from 25 litre up to a one tonne builders' bag. Any small bags will be palletised and shrink wrapped and stored until despatch.

2.6 Export of Compost Product

Up to about 25,000 tonnes of compost (50% reduction) will be produced each year which will comply with PAS 100:2018. Compost will be collected on the same principle that waste is delivered. The collection vehicle will use the existing weighbridge and then be sent to the Compost Pad using a one-way system. Once the vehicle is loaded it will be directed back to the weighbridge.

3.0 ENVIRONMENTAL PERMIT APPLICATION INFORMATION

This Section presents the details required by the Permit application forms that could not be completed on the forms themselves.

3.1 Form A: About You

3.1.1 Part 5 and Appendix 1: Applications from companies or corporate bodies

Details of the company directors and secretary are presented in Table 641.1. The date of birth information for these persons (as required in Part A - Appendix 1) is also presented.

Table 641.1: Details of Company Directors and Secretary

Name	Position	Date of Birth
Michael Robert Mason Topham	CEO	[redacted]
Sarah Parsons	Company Secretary	[redacted]
Michael Charles Davis	COO	[redacted]
Maxine Eleanor Mayhew	COO	[redacted]
Biffa Corporate Services Limited	Director	N/A

3.2 Form B2: General – New Bespoke Permit

3.2.1 Part 1: About the Permit

Please refer to Section 1.2 above for a description of pre-application correspondence with the Environment Agency ahead of a Standard Rules Permit Application submission (March 2022) and prior to this subsequent application for a Bespoke Permit (2023).

3.2.2 Part 3 and Appendix 2: Your Ability as an Operator

Part 3a and Appendix 2 – Relevant Offences

A document detailing relevant offences against Biffa Waste Services Ltd is included in **Appendix A**.

3b - Technical Ability

The proposed technically competent manager for this Facility, Richard Hill, is certified through the Waste Management Industry Training and Advisory Board. His certificates are included in **Appendix B**. The environmental permit numbers and site address for all other waste activities that he provides technical competence for are also included in **Appendix B**.

3d – Management Systems (All)

Biffa operates its facilities in accordance with an Environmental Management System (EMS) (called the Integrated Management System, IMS), which is certified to ISO 14001. The IMS includes a set of procedures that covers all day-to-day operations of the Site. A summary is provided, along with a copy of the certificate, in **Appendix C**.

Details within the management system (and its appended plans and supporting documents) may change as part of planned reviews, but Biffa will maintain an EMS and IMS that provide the framework for management of the Site. All work will be carried out as per the most recent version of the EMS and IMS.

3.2.3 Part 5: Supporting Information

5a – Provide a Plan or Plans for the Site

The Facility layout is shown on **Drawing 611-04**. The wider Site layout the includes the Facility and features of the surrounding landfill is shown on **Drawing 611-03**.

5b – Provide the Relevant Sections of a Site Condition/Baseline Report

Guidance for Part B2 of the Environmental Permit application form states that a site condition report that presents baseline information about the site must be provided. The Site Condition Report (ref. 21451275.612/A.1, dated March 2022) is included in **Appendix D**.

5c – Provide a Non-Technical Summary of your Application

The key points of this application in Non-Technical Summary (NTS) are presented in Section 6.0.

3.2.4 Part 6: Environmental Risk Assessment

The following Environmental Risk Assessments are included within this application:

- Section 4: Habitats Risk Assessment;
- Section 5: Environmental Risk Assessment including consideration of Leaks and Spills, Noise, Dust, Odour, Pests and Litter;
- **Appendix E**: Water and Flood Risk Assessment; and
- **Appendix F**: Bioaerosols Risk Assessment.

3.3 Form B3: New Bespoke Installation Permit

3.3.1 Part 1: Types of Activities

The summary of all activities planned at the Facility is presented in Table **641.2.** The types and quantities of waste expected to be received at the installation are described in Section 2.1 of this Supporting Statement.

Table 641.2: Summary of Activities

Process/Activity	WFD Annex II Operations	Limitations
Main Activity		
Activity 1 - biological treatment of waste by composting. Listed in Schedule 1 of the EPR under S5.4 A(1) (b) (i) The recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes a day involving biological treatment.	R3 – recycling and reclaiming organic substances which are not used as solvents.	The activity is limited to: (a) treatment of waste by composting (b) sanitisation, stabilisation and maturation. (c) using negative aeration systems with abatement where relevant.
Directly Associated Activities		
Activity 2 – physical treatment of waste	R3 – recycling and reclaiming organic substances which are not used as solvents.	The activity is limited to: (a) physical treatment of waste restricted to storage, sorting, shredding, blending and screening. (b) managing storage of feedstock prior to windrow formation to prevent anaerobic conditions. (c) use of negative aeration is permitted where the air extracted is treated by an abatement system.
Activity 3 – storage	R13 – storage of waste pending any of the operations numbered R1 to R12. Excludes temporary storage, pending collection, on the site where it is produced.	This activity is limited to secure storage of: (a) compatible waste before composting (feedstock). (b) liquid waste consisting of dirty water or liquor (or both) in purpose-built lagoons or tanks. (c) finished compost (including finished screened material waiting for dispatch) and non-composted fraction. (d) quarantined waste in covered skips or covered piles for no longer than 5 days.
Activity 4 – storage of raw materials and waste generated on site, including: (a) chemicals (b) lubrication oil (c) antifreeze (d) diesel (e) activated carbon (f) spent air abatement filter media		

3.3.2 Part 2: Point Source Emissions

The Facility is an open composting facility, so there will be no point source emissions to air and no monitoring and assessment against emission limits to air will be required.

The Facility will operate as a closed system with respect to liquids and there will be no point source emissions ground or water. Under the emissions and monitoring section of the permit, periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil from the date of this permit issue, unless such monitoring is based on a systematic appraisal of the risk of contamination.

The Facility is located at an existing landfill Site, so there is a network of water monitoring locations (some of which surround the composting facility) that are already monitored as part of the Environmental Permits for the landfill operations. These will continue to be monitored as part of those Environmental Permits and the data collected could be used as part of any water monitoring required for the Facility. However, the historical landfilling beneath the Facility, and the historical and ongoing operational landfilling of the surrounding land, will make it difficult to distinguish whether changes in water quality over such periods are a result of emissions from the Facility.

Information regarding the baseline condition for soils and water is included in the Site Condition Report (**Appendix D**).

3.3.3 Part 3: Operating Techniques

3a, b – Technical Standards and General Requirements

The following technical guidance documents will be references while undertaking the Schedule 1 activity and Directly Associated Activities at the Site:

- "Statutory guidance SR2021 No 1: composting in open systems – installations";
- "Control and monitor emissions for your environmental permit" (.gov.uk website)"; and
- "Develop a management system: environmental permits" (.gov.uk website)".

Best available technologies (BAT) are the ways in which the Facility is designed and will be constructed and operated to minimise the risk of pollution. There are no proposed point source emissions to air or to the water environment. BAT relevant to this facility is discussed within Section 5.2 of this Supporting Statement.

Details of measures to manage the potential risks from the Facility are contained within the following Environmental Risk Assessments within this application:

- Section 4: Habitats Risk Assessment;
- Section 5: Environmental Risk Assessment including consideration of Leaks and Spills, Noise, Dust, Odour, Pests and Litter;
- **Appendix E**: Water and Flood Risk Assessment; and
- **Appendix F**: Bioaerosols Risk Assessment.

3c – Types and amounts of raw materials

Details of the proposed operations and expected types and amounts of raw materials are described in Section 2.0 of this Supporting Statement.

3.3.4 Part 4: Monitoring

Information regarding proposed Environmental Monitoring is presented in Section 5.4 of this Supporting Statement.

3.4 Form F1: Charges and Declarations

The charges for Environmental Permits are presented in The Environment Agency Table of Charges, Version 1.1 (Environment Agency, 2022). The proposed Facility falls within the following activity:

- Activity Reference 1.16.18: Composting facility, includes assessment of odour management plan - £11,465.

The following additional assessment charges apply:

- Reference 1.19.2: Habitats Assessment - £779.
- Reference 1.19.6: Odour Management Plan – included.
- Reference 1.10.9: Dust and Bio-aerosol Management Plan - £620.

The charge for a Permit Application under this activity is £12,864.

- Payment has been made directly by Biffa, by BACS, ref: PSCAPPBIFFA026 dated 17 May 2023.

4.0 HABITAT RISK ASSESSMENT

Information about the location of statutory and non-statutory sites relative to the Facility is presented in Section 1.3. It is noted in the Preliminary Ecological Appraisal that was included in the Planning Application for the Facility (included as **Appendix G** of this application) that all statutory designated sites are over ca. 1.5 km from the Facility and there are no ecological pathways between them and the Facility. It was concluded in that report that the Facility development will not damage the interests of the SSSIs, SAC, SPA and LNRs that are located within the ecological desk study area.

The Preliminary Ecological Appraisal also presents details of the non-statutory designated County Wildlife Sites (CWS) located within the ecology study area. The nearest CWS (Eyebury Road Pits) is located to the north and northeast of the application boundary and is designated for the presence of aquatic, emergent and marginal aquatic vegetation. It was concluded in the Preliminary Ecological Appraisal that there are no habitat synergies between the CWS and the footprint of the Facility. It was also noted that the land between the Facility and the CWS is dominated by operational landfill and hard bare ground.

The EA provided a pre-application Nature and Heritage Conservation Screening Report (EPR/AP3094ES/V002, dated 27 April 2021) that identified the following:

- Protected habitats – Fens (<50 m), Natural England; and
- Protected species – Water Vole (<250 m), Local Records Centre (LRC).

Following the screening process, further ecological appraisal was undertaken, and the Facility was designed so that it is outside of the screening radius for these habitats.

With respect to the Water Vole, numerous records are included in the Preliminary Ecological Appraisal. It is noted in the Preliminary Ecological Appraisal that many of these results were submitted by Golder and AB Ecology Ltd as part of the extensive monitoring and licenced translocation of water vole at the broader site. The Wildlife Corridor has been used as a water vole habitat creation area to receive the water vole and viable populations of this species continue to reside in this area. The Southern Extension Area does not contain aquatic habitats suitable for water vole and this species will not to be adversely affected by the Facility.

Ecological species of conservation concern (water vole and Great Crested Newt, GCN) have already been translocated from the landfill areas and neighbouring habitats under licence from Natural England. These areas are subject to ongoing ecological management including maintenance of the GCN fence.

With respect to the ecological habitats aspects of the limitations applied to a Standard Rule Permit SR2021 No1 Installation, commentary on how the Facility location fits with those limitations is presented in **Table 641.3**.

Table 641.3: Habitats Screening Risk Criteria for Standard Rules SR2021 No1.

Habitats Risk Screening Criteria	Pass/ Fail	Commentary
Activities shall not be carried out within:		
500 m European Site or SSSI	Pass	The nearest European Sites are Nene Washes (SPA, SAC and Ramsar) nearly 3 km to the south and southeast. The nearest SSSI is Dogsthorpe Star Pit nearly 2 km to the northwest.
250 m of the presence of great crested newts, where it is linked to the breeding ponds of the newts by good habitat	Pass	GCN have been translocated from, and remain excluded from, the Southern Extension Area by GCN fencing and ongoing ecological management in accordance with planning permission. Good breeding habitat is provided in the Wildlife Corridor to southeast. There are no known GCN or good habitats to the northeast, northwest and southwest that link to breeding ponds.
50 m of a site that has species or habitats of principle importance	Pass	The Project footprint has been designed to be >50 m of all BAP habitat. There is no habitat connectivity between the Site and habitats that could support BAP species such as water vole.
50 m of a Local Nature Reserve (LNR), Local Wildlife Site (LWS), Ancient Woodland or Scheduled Monument	Pass	The nearest non-statutory site is the Eyebury Road Pits CWS. The Project has been designed to be >50 m from this feature and the intervening habitat constitutes poor terrestrial habitat (industrial/bare ground). The nearest ancient woodland is Grimeshaw Wood >5 km west.

The ecological appraisal concluded that the habitat loss is relatively small scale as the Site is dominated by bare ground and hard standing. The only mitigation required to manage the risk to ecology was the ongoing retention and monitoring of the GCN fence to maintain Site ecological sterility, and this is undertaken in accordance with planning permission.

5.0 ENVIRONMENTAL RISK ASSESSMENT

5.1 Standard Rules Permit Risk Assessment

Under the guidance for standard rule permits (EA, 2022), it is not necessary to do a separate risk assessment when applying for a permit if the location and operation of the Facility can meet all the requirements for that permit. If you are applying for a bespoke permit but most of your activities are covered by standard rules, you only need to do a risk assessment for the activities or risks that are not covered by the generic risk assessment for those standard rules.

The EA has prepared generic risk assessments for all standard rules permits that list the potential risks and how to manage them. The EA's risk parameters for the generic risk assessment for standard rules permit SR2021 No. 1 are presented in **Table 641.4**. Commentary is included in that table as to how the Facility meets or will meet those parameters, with reference to the additional site-specific risk assessments prepared to support the application. The EA risk assessment is included as **Appendix H**.

Table 641.4: Risk Assessment Parameters

Parameter	Description	Comment
Parameter 1	These permitted activities: • acceptance and storage of waste before composting (R13) • composting including screening and shredding (R3) • recycling and reclamation of organic substances which are not used as solvents (R12) – excludes temporary storage, pending collection, on the site where it is produced	No permitted activities beyond those described in the Site Condition Report (**Appendix D**) will take place.
Parameter 2	These permitted waste types: • non-hazardous biodegradable waste, including non-treated wood, vegetable matter and animal manure (excluding catering waste and other wastes covered by the Animal By-Products Regulations 2011) and • are restricted to those wastes listed in the permit	Only the permitted wastes will be accepted. These are listed in Section 2.0.
Parameter 3	Quantity of waste accepted at the facility is: • less than 75,000 tonnes each year • limited to the design capacity of the site	The Facility is intended to compost about 50,000 tonnes of green waste per year – see Section 2.0.
Parameter 4	All waste shall be stored and treated on an impermeable surface with sealed drainage system which meets a design standard.	All waste shall be stored and treated on an impermeable surface with sealed drainage system – see Section 1.4.
Parameter 5	The only point source discharges to controlled waters are clean surface water from the roofs of buildings and from areas of the facility not used for the storage or treatment of wastes. No other direct or indirect discharges are permitted.	Clean surface water from roofs, or from areas of the site that are not being used in connection with storing and treating waste, may be discharged directly to surface waters, or to groundwater. Water collected from the composting pad will be directed to lined lagoons. This water may be spray irrigated back onto the compost

Parameter	Description	Comment
		windrows to maintain moisture levels necessary for composting. Any surface water that has come into contact with the compost and cannot be managed through the lagoons will be disposed of by tanker to a suitably permitted facility.
Parameter 6	The activities shall not be carried out within 250 metres of the nearest sensitive receptor.	See Site Setting (Section 1.3).
Parameter 7	The activities shall not be carried out within 500 metres of a European site (within the meaning of Regulation 8 of the Conservation of Habitats and Species Regulations 2017) or a Site of Special Scientific Interest, including candidate or proposed sites or Maritime Conservation Zone.	See Site Setting (Section 1.3), HRA (Section 4.0) and the Preliminary Ecological Appraisal (**Appendix G**) for details regarding sensitive habitats.
Parameter 8	The activities shall not be carried out within 250 metres of the presence of great crested newts, where it is linked to the breeding ponds of the newts by good habitat.	See Site Setting (Section 1.3), HRA (Section 4.0) and the Preliminary Ecological Appraisal (**Appendix G**) for details regarding sensitive habitats.
Parameter 9	The activities shall not be carried out within 10m of a water course.	There are no watercourses within 10 m. See the Site Condition Report (**Appendix D**) and the Water and Flood Risk Assessment (**Appendix E**).
Parameter 10	The activities shall not be carried out within a groundwater source protection zone (SPZ) 1 and 2 or if a groundwater source protection zone has not been defined then within 250 metres of any well, spring or borehole used for the supply of water for human consumption (including private water supplies).	Parameter is met. See Site Setting (Section 1.3), the Site Condition Report (**Appendix D**) and the Water and Flood Risk Assessment (**Appendix E**).
Parameter 11	The activities shall not be carried out within 50 metres of a Local Nature Reserves, Local Wildlife Site, Ancient Woodland or Scheduled Monument.	See Site Setting (Section 1.3), HRA (Section 4.0) and the Preliminary Ecological Appraisal (**Appendix G**) for details.
Parameter 12	The activities shall not be carried out within 50 metres of a site that has species or of principle importance (as listed in Section 41 of the Natural Environment and Rural Communities Act 2006) that the Environment Agency considers at risk to this activity.	See HRA (Section 4.0) and the Preliminary Ecological Appraisal (**Appendix G**) for details regarding sensitive habitats.
Parameter 13	The activities shall not be carried out within an Air Quality Management Area (AQMA).	The Facility is not located in a AQMA (DEFRA, 2022).
Parameter 14	The only point source emissions into surface or groundwater are surface water from the roofs of buildings and from areas of the facility not used for the storage or treatment of wastes.	Only clean surface water from roofs, or from areas of the site that are not being used in connection with storing and treating waste, may, if required, be discharged directly to surface waters, or to groundwater by seepage through the soil via a soakaway.

Parameter	Description	Comment
Parameter 15	The only point source emission to air is from air abatement systems such as a bio filter.	No point source emissions to air proposed.
Parameter 16	Secondary containment is risk assessed and follows the recommendations of CIRIA 736 report.	This parameter will be met where applicable.

The Facility will be located and managed within the parameters of the EA's generic RA; therefore, the generic RA and its embedded management and monitoring methods will be followed. A Fire Prevention Plan is therefore not considered to be required.

No activities or risks that are not covered by the generic risk assessment have been identified.

5.2 Best Available Techniques

Best available technologies (BAT) are the ways in which the Facility is designed and will be constructed and operated to minimise the risk of pollution. There are no proposed point source emissions to air or to the water environment.

Along with the operation of the Facility (including waste acceptance and processing – see Section 2.0), the BAT relevant to the protection of water and air quality are presented within the following documents:

- **Appendix E**: Water and Flood Risk Assessment – includes the compost pad, surface water lagoon and drainage design measures proposed to mitigate the release of compost pad drainage to the wider water environment.
- **Appendix F**: Bioaerosols Risk Assessment – no risks were classified as tolerable or unacceptable, so no further BAT beyond the proposed design was required to reduce the risks. Operational management measures are, however, presented that will be used by Biffa to limit diffuse dust, odour and bioaerosols emissions.

These documents were submitted as part of the Planning Application (Golder, 2021) and are appended here for reference as **Appendix F** and **Appendix G**, respectively.

Supporting statements on what amenity management methods will also be used to limit pollution are covered in Section 5.3.

5.3 Amenity Management

This Section presents a summary of the amenity management methods that will be used to limit pollution.

5.3.1 Potentially Polluting Leaks and Spills

All vehicles and equipment used on site in connection with the OWC operations will be operated and maintained with the objective of preventing potentially polluting leaks, spillages of wastes or other potentially polluting materials. Site control measures include:

- Sealed drainage system including surface water lagoons.
- Daily site inspections to check for signs of leak or defect. Repairs will be undertaken promptly and accumulated material in the drainage system will be removed to ensure that containment capacity is not compromised.

- Plant and equipment will be maintained in line with a defined preventative maintenance schedule to ensure operational efficiency is maintained.

In the unlikely event of a pollution incident occurring on site:

- Minor spillages will be dealt with by use of appropriate absorbent materials and used absorbent will be subsequently appropriately disposed.
- In the event of a major spillage, immediate action will be taken to contain the spill. Absorbent materials will be used for spillage control and containment. Absorbents will be stored in waterproof container(s) and all operatives will be made aware of their location. Immediately following clean up and appropriate containment the Environment Agency shall be informed and a note to this effect will be made in the site diary.

5.3.2 Noise

The impact of noise can be minimised by both management measures and the choice of equipment, orientation of equipment, and working patterns. Biffa will carry out a comprehensive noise survey and assessment within four months of commencement of composting operations to demonstrate:

- The noise profile of each operational activity and the equipment used (e.g. unloading, shredding and screening).
- That it has optimised its methods of working (including the directional profile of large equipment).
- Measured noise levels at sensitive receptors including Tanholt Farm.

The survey and assessment will be submitted to the Planning Authority together with any further recommendations and mitigations measures identified as a result of the assessment.

At present, the following mitigation measures will be implemented to minimise noise impact during construction and operational phases:

Management

- The Site Manager will have responsibility for ensuring that potentially noisy activities are controlled to minimise effects on the surrounding area. Adequate staffing levels will be maintained at all times to ensure the effective operation of the facility.
- The site induction and site rules will include details of good working practices to minimise noise emissions from vehicles and plant.
- Site management meetings will be held regularly to discuss current and planned operations with respect to their potential noise effects. Identified actions arising from the meetings and responsibilities for their completion will be recorded within the meeting minutes prior to circulation to Biffa personnel.
- Biffa will work to keep nearby residents informed of any significant operations, where appropriate, including the times and duration of any abnormally noisy activity which may cause concern.
- Select all equipment for hire or purchase placing due consideration upon the noise emission levels and directional profile.
- Plant and equipment will be specified, selected, and maintained in accordance with the manufacturer's instructions to avoid unnecessary noise and vibrations.
- Vehicles, plant and equipment will be stopped when not in use.

Construction

Appropriate means will be employed to minimise noise arising from construction activities, including:

- Adherence to the hours of operation.
- Selection and use of quiet equipment.
- Ensuring that equipment is regularly maintained and fitted with effective silencers.
- Shutting down of equipment when not in use.
- Handling all materials in a manner which minimises noise.
- Switching all audible warning systems to the minimum setting required by the Risk Assessments and Methods Statements (RAMS).

Operations

The following operational measures will be implemented to limit noise emissions:

- Select all equipment for hire or purchase placing due consideration upon the noise emission levels and directional profile.
- Adherence to the hours of operation specified.
- Operate equipment in campaigns to reduce duration of noise impacts.
- Select and operate mobile equipment to reduce noise emission including tyred vehicles, avoiding banging of loading shovel, and scraping of buckets and shovels on concrete hard surfaces.
- Orienting the shredder and screen to minimise noise emissions away from sensitive receptors.
- Ensuring that equipment is regularly maintained and fitted with effective silencers (and fitted enclosures where practicable).

Traffic

The following measures will be implemented to limit noise from vehicles delivering green waste and collecting compost etc:

- Ensuring the vehicles observe a site speed limit of 10 mph; and
- Avoiding the need for vehicles to wait with engines running.

5.3.3 Dust and Particulates

A Bioaerosol Risk Assessment together with management and mitigation measures is provided in **Appendix G**. In addition, the following measures will be employed for the management of dust and particulates:

- Site operators and drivers will be fully trained and inducted.
- On-site vehicle movements will operate to specific speed limits, reducing the potential for dust to become airborne.
- Vehicles delivering waste materials or exporting compost product will be enclosed or sheeted to reduce potential for material becoming airborne.
- Existing wheel wash at the Site Reception will be used by all vehicles when required.
- The site will operate with high standards of housekeeping.

- Water suppression to minimise dust emissions in dry weather will be available even if the surface water lagoons are dry.
- Waste reception, screening, shredding, formation and the turning of windrows should be avoided during high winds or when wind direction is towards sensitive receptors.
- Regular monitoring of moisture content within all stages of the composting process shall also serve to ensure material does not dry out and become airborne.
- Site reception and pad surfacing will be subject to routine inspection and maintenance – any accumulation of materials will be removed promptly especially when they have the potential to clog drainage.
- In the event of a sustained period of dry weather, the potential for dust emissions is likely to be increased. Under these conditions dust will be suppressed and controlled by periodic sweeping and/or water dowsing on site and on the access and egress roads.

5.3.4 Odours

Many measures for the managements of dust and particulates will also effectively manage odours. The following additional measures will be employed for the management of odours:

- Staff training to include raising employee awareness with respect to normal plant operational odour levels and actions to be taken to rectify any faults.
- Rejection of any highly odorous materials at waste reception.
- Material to be stored for a maximum of nine weeks in open air windrows.

5.3.5 Pests

Pests will not be attracted and should not be present on Site as result of composting operations.

5.3.6 Litter

Contaminant materials removed from the incoming waste stream e.g. plastic bags, will be stored in covered containers prior to removal to an appropriately authorised facility.

5.4 Environmental Monitoring

Monitoring of emissions to air, water and/or land may be required. The Facility is an open composting facility, so there will be no point source emissions to air and no monitoring and assessment against emission limits to air will be required.

The Facility will operate as a close system with respect to liquids and there will be no point source emissions ground or water. Under the emissions and monitoring section of the permit, periodic monitoring shall be carried out at least once every 5 years for groundwater and 10 years for soil from the date of this permit issue, unless such monitoring is based on a systematic appraisal of the risk of contamination.

The Facility is located on an existing landfill Site, so there is a network of water monitoring locations (some of which surround the composting facility) that are already monitored as part of the Environmental Permits for the landfill operations. These will continue to be monitored as part of those Environmental Permits and the data collected could be used as part of any water monitoring required for the Facility. However, the historical landfilling beneath the Facility, and the historical and ongoing operational landfilling of the surrounding land, will make it difficult to distinguish whether changes in water quality over such periods are a result of emissions from the Facility.

Information regarding the baseline condition for soils and water is included in the Site Condition Report (**Appendix D**).

6.0 NON-TECHNICAL SUMMARY

The key points of this application in Non-Technical Summary (NTS) are presented as follows:

- Eye Landfill has been an area of mineral extraction, backfilling and restoration since the 1960s. Biffa Waste Services Ltd (Biffa) commenced landfilling operations in the Central Area in 1982 and then progressed to the Northern Extension and Northeastern Extension Areas. These three areas are now restored and returned to agriculture.
- Today, Biffa undertakes various waste management operations at the site including landfill disposal in the Southern Extension Area, generation of electricity from landfill gas, treatment of leachate by Miscanthus Beds, waste transfer and recycling. Biffa has also developed and fully manages a Wildlife Corridor beside the Cat's Water Drain (watercourse) along the eastern boundary. It also manages the Clear Water Lagoon and other water features in the centre of the Site.
- Other sand and gravel operations with associated silt lagoons and restoration activities have been undertaken by a separate company, Cemex UK Materials (Aggregates) Ltd, immediately to the west. Cemex activities have recently finished but until then, both companies use the same Site entrance from Eyebury Road.
- Biffa is making this permit application to the Environment Agency to develop an Open Windrow Composting (OWC) Facility at Eye Landfill to compost about 50,000 tonnes of green waste per annum. The green waste will be composted under aerobic conditions (in the open air) and is very much like a home-composting process on a larger controlled scale.
- The types of green waste to be composted will comprise biodegradable wastes from agriculture and horticulture, household collections of garden waste, plus wood, paper and cardboard, and similar wastes from commercial/ industrial processes. Wastes may include animal manures but will not including catering waste or wastes containing any other animal by-products.
- The OWC Facility will comprise a new, fully sealed, reinforced concrete pad (200 m x 128.5 m), oriented southwest to northeast, at or just above existing ground level, located just to the east of the Site Reception. It will have shallow gradients and kerbs to manage surface water that will drain to two new lagoons, one at the northeast end and one at the southwest end of the pad. Water will be spray-irrigated back onto the compost to keep it moist or, if it is in excess, will be removed from site. Biffa is proposing to retain the existing Recycling Shed as part of the OWC Facility for the storage of plant and equipment.
- Incoming green waste will enter the Site from the existing entrance on Eyebury Road and use the existing Site Reception. Incoming waste will be unloaded directly onto the pad, then shredded and screened and placed into elongate piles (windrows).
- The minimum composting period of each batch is five weeks. The first two weeks comprise a sanitisation phase followed by a stabilisation phase which is a minimum of three weeks. During this time, each batch will be mechanically turned down the compost pad, from windrow to windrow, in a controlled sequence that allows the material to be aerated and the final compost to end up as near to the final screening area as possible.
- The green waste in the windrows will naturally decompose under aerobic conditions and reach temperatures of between 65°C to 80°C in the sanitisation phase which is sufficient to destroy weed seeds and reduce any human and animal pathogens. After the initial two-week period, temperatures will be maintained at >45°C by managing moisture levels for at least a further three weeks until the end of the stabilisation phase. The temperature and moisture content of the windrow will be monitored and recorded once a week, using a probe inserted into the windrow.

- If required, the material can enter final maturation stage when the feedstock will be retained in the windrows and the temperature will further decrease. The composted material will then be screened to provide finished compost products. Most compost product will be despatched in bulk by Heavy Commercial Vehicles (HCVs). A small amount of product may be bagged suitable for small users and despatched on pallets.
- Eye Landfill is an operational industrial site and compost will not be available at the Site for sale to members of the public.
- Composts derived from source segregated biodegradable materials and wastes are used in agricultural, horticultural, land restoration, soft landscaping, sports recreation, and other markets in the UK[6]. According to their grade (in terms of particle size range) and other properties, composts are supplied for use as soil improvers and mulches, as substrates for growing media, and as a significant ingredient in manufactured topsoils and turf dressings. Awareness of suitable uses for composts, the associated benefits and compost availability has improved considerably in recent years.
- PAS 100:2018 *Specification for Composted Materials* is a Publicly Available Specification (PAS) that sets out requirements for the process of composting, the selection of input materials, the minimum quality of composted materials and the storage, labelling and traceability of compost products. It specifies requirements for a Quality Management System (QMS) for the production of composts to ensure they are consistently fit for their intended uses. Biffa will produce its compost in accordance with PAS 100:2018.
- The Supporting Statement that accompanies this Environmental Permit Application provides a description of the proposed development and environmental setting together with associated environmental risk assessments, and other information in support of a permit application to the EA.

[6] PAS100 2018

7.0 REFERENCES

1) Biffa Waste Services, 2021. Eye Green Waste Composting Facility Environmental Permit Application Pre-application Scoping Document. April 2021.

2) Department for Environment Food & Rural Affairs, 2022. UK Air Information Resource AQMA Interactive Map., https://uk-air.defra.gov.uk/aqma/maps/, accessed 19 January 2022.

3) Environment Agency, 2022. SR2021 No 1: generic risk assessment for composting in open systems – installations, https://www.gov.uk/government/publications/sr2021-no-1-composting-in-open-systems-installations/sr2021-no-1-generic-risk-assessment-for-composting-in-open-systems-installations, accessed 18 January 2022.

4) Golder Associates (UK) Ltd, 2021. Eye Landfill - Green Waste Open Windrow Composting Facility Planning Application - Supporting Statement. Ref: 21482103.601/A.0, dated 16 December 2021.

Signature Page

Golder, member of WSP

Nicola White
Project Manager

Chris McDonald
Project Director

Date: 16 May 2023

AA/NW/CM/ab

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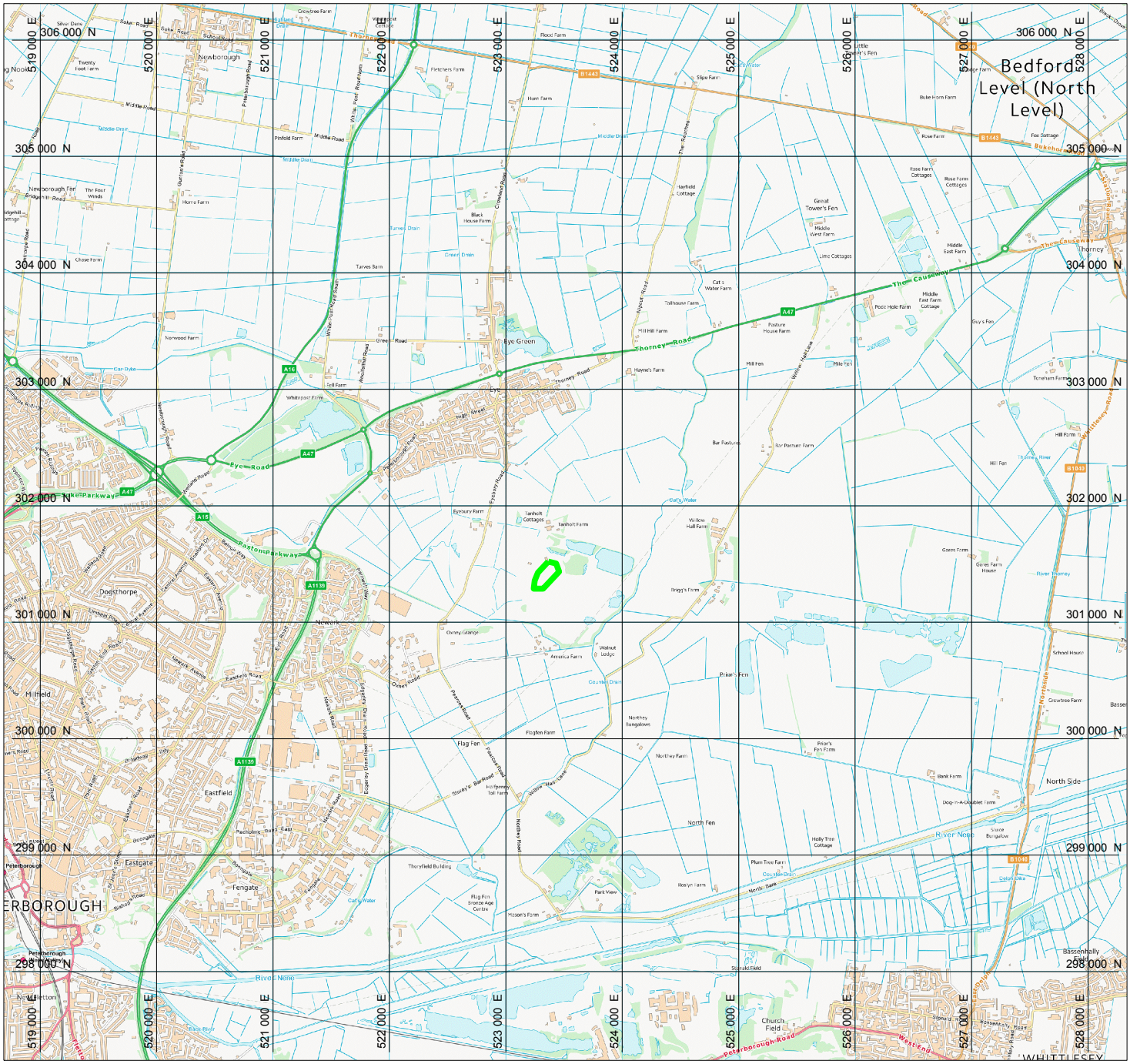
DRAWINGS

611-01 Site Location

611-02 Site Layout

611-03 Environmental Setting

611-04 Facility Layout



Key:

ENVIRONMENTAL PERMIT APPLICATION BOUNDARY

N

0 1,000 2,000

1:50,000 METRES

WSP GOLDER

GOLDER FILE REF	ENGINEER	REVIEWED BY
21451275-1002-EP-0001	A.G.	N.W.

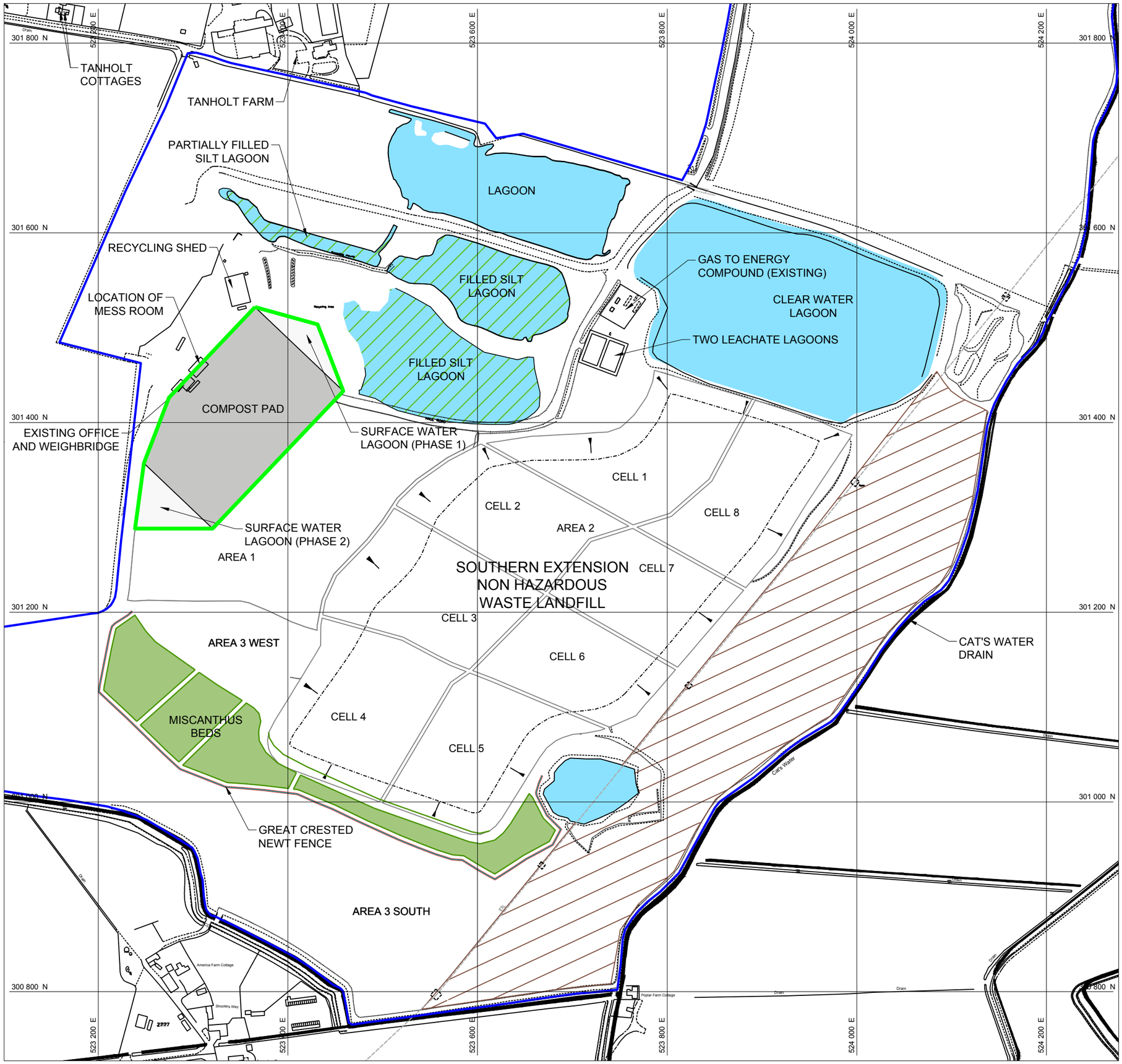
REV.	DATE	DRAWN	DESCRIPTION

Biffa

Biffa Waste Services Ltd
Redhill Landfill Site
Carmongers Lane,
Nutfield, Redhill
RH1 4ER
Tel. 01737 765042
Mob: 07921 386021

E-mail phil.mumford@biffa.co.uk

PROJECT	Open Windrow Composting Facility
LOCATION	Eye Landfill
DRAWING TITLE	Site Location Plan
DRAWING No.	611-01
COMPUTER REF.	E5237600
DRAWN	ECS
DATE	02/03/22
SCALE(S)	1:50,000



KEY

- ENVIRONMENTAL PERMIT APPLICATION BOUNDARY
- LAND UNDER APPLICANT'S CONTROL
- WILDLIFE CORRIDOR
- PYLONS AND OVERHEAD ELECTRICITY TRANSMISSION WIRES
- MISCANTHUS BEDS

N

0 100 200

1:4,000 METRES

WSP GOLDER

GOLDER FILE REF	ENGINEER	REVIEWED BY
21451275-1002-EP-0002	A.G.	N.W

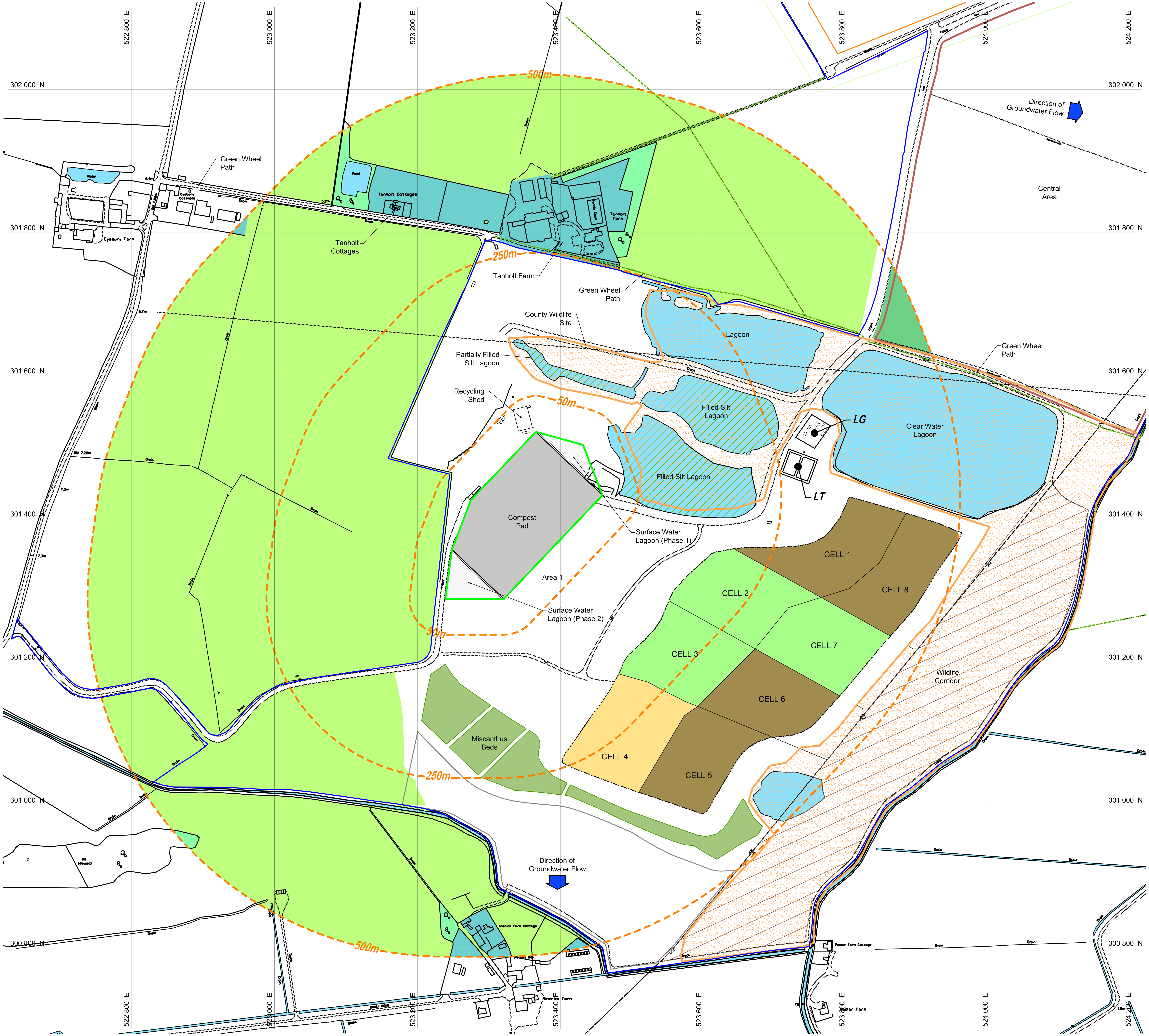
REV.	DATE	DRAWN	DESCRIPTION

Biffa

Biffa Waste Services Ltd
Redhill Landfill Site
Cormongers Lane,
Nutfield, Redhill
RH1 4ER
Tel. 01737 765042
Mob. 07921 386021

E-mail phil.mumford@biffa.co.uk

PROJECT	Open Windrow Composting Facility
LOCATION	Eye Landfill
DRAWING TITLE	Site Layout
DRAWING No.	611-02
COMPUTER REF.	E5237300
DRAWN	ECS
DATE	02/03/22
SCALE(S)	1:4,000



Key:

- EYE LANDFILL OWNERSHIP BOUINDARY
- ENVIRONMENTAL PERMIT APPLICATION BOUNDARY
- PYLONS AND OVERHEAD ELECTRICITY TRANSMISSION WIRES
- WILDLIFE CORRIDOR
- 500m OFFSET FROM COMPOST PAD AND LAGOONS
- COUNTY WILDLIFE SITE
- CLOSED AND RESTORED LANDFILL
- FILLED AND CAPPED LANDFILL
- OPERATIONAL LANDFILL
- FUTURE LANDFILL
- LG GAS UTILISATION PLANT
- LT LEACHATE STORAGE LAGOON FOR MISCANTHUS BEDS
- DOMESTIC PROPERTY
- COMMERCIAL/INDUSTRIAL PROPERTY
- FARMLAND (ARABLE OR LIVESTOCK)
- FOOTPATH, TRACK OR BRIDLEWAY
- WATERCOURSES AND DRAINS
- GROUNDWATER FLOW

Note:

1. All levels relative to Newlyn Ordnance Datum.

Reference:

1. Site survey provided by A&B Surveys, drawing ref.APA2003, dated January 2003, manually amended to east from Ordnance Survey Opendata.

N

0 100 200

1:2,500 METRES

WSP GOLDER

GOLDER FILE REF	ENGINEER	REVIEWED BY
21451275-1002-EP-0003	C.McD.	N.W.

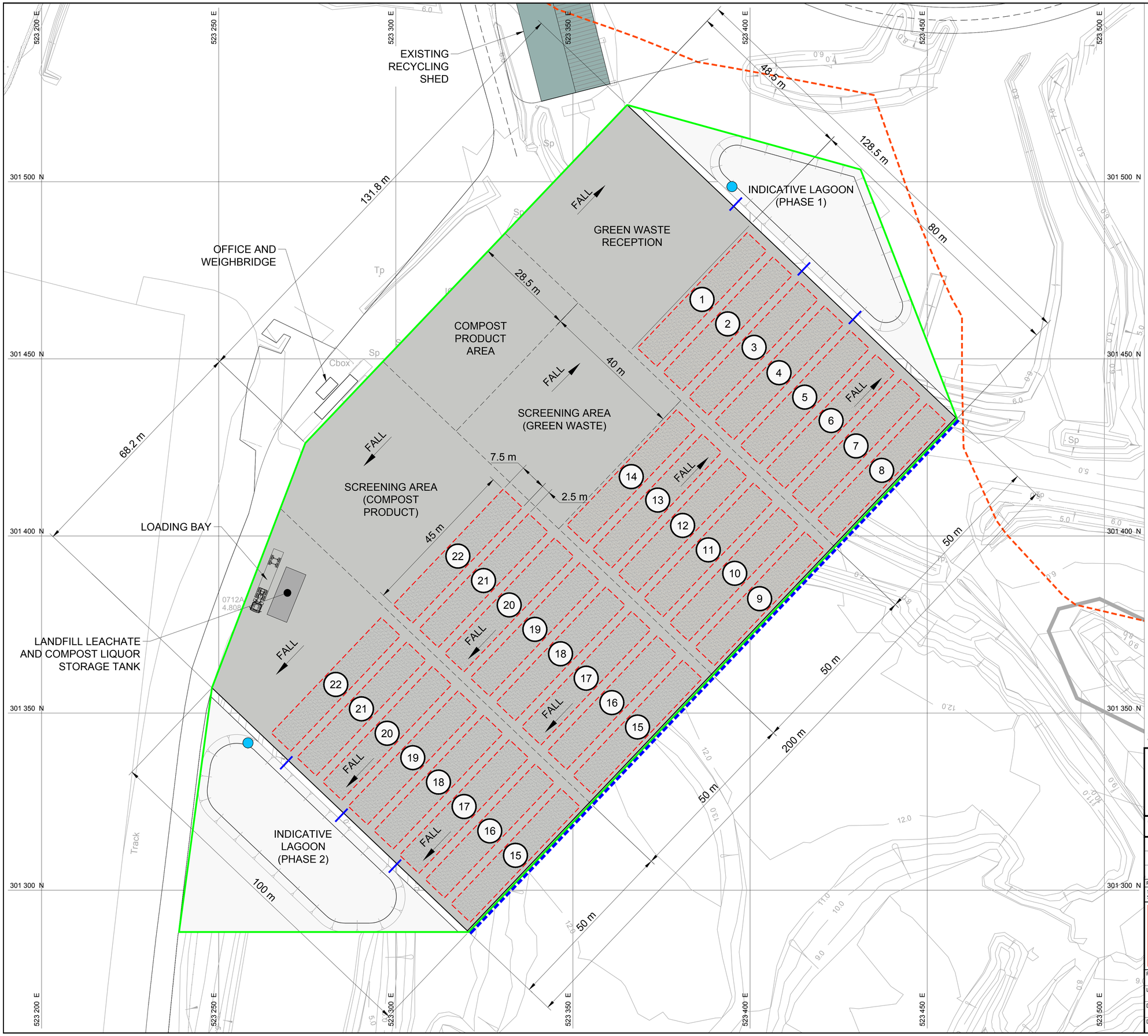
REV.	DATE	DRAWN	DESCRIPTION

Biffa

Biffa Waste Services Ltd
Redhill Landfill Site
Cormongers Lane,
Nutfeild, Redhill
RH1 4ER
Tel. 01737 765042
Mob: 07921 386021

E-mail phil.mumford@biffa.co.uk

PROJECT	Open Windrow Composting Facility	DRAWN	ECS
LOCATION	Eye Landfill	DATE	02/03/22
DRAWING TITLE	Environmental Setting	SCALE(S)	1:2,500
DRAWING No.	611-03	COMPUTER REF.	E5237400



LEGEND

- ENVIRONMENTAL PERMIT APPLICATION BOUNDARY
- COUNTY WILDLIFE SITE - 50 m OFFSET
- SURFACE WATER FLOW DIRECTION
- SURFACE WATER LAGOON EXTRACTION POINT
- SEALED OVERFLOW TO SURFACE WATER LAGOON

REFERENCE(S)

BASE MAP TAKEN FROM HBL DRAWING REF. 8878-HBL-XX-XX-DR-C-1009 DATED FEBRUARY 2021.

N

0 20 40

1:500 METRES

WSP GOLDER

GOLDER FILE REF	ENGINEER	REVIEWED BY
21451275-1002-EP-0004	A.G.	N.W.

REV.	DATE	DRAWN	DESCRIPTION

Biffa

Biffa Waste Services Ltd
Redhill Landfill Site
Cormongers Lane,
Nutfield, Redhill
RH1 4ER
Tel. 01737 765042
Mob: 07921 386021

E-mail phil.mumford@biffa.co.uk

PROJECT	Open Windrow Composting Facility	DRAWN	ECS
LOCATION	Eye Landfill	DATE	02/03/22
DRAWING TITLE	OWC Facility Layout	SCALE(S)	1:500
DRAWING No.	611-04	COMPUTER REF.	E5237500

APPENDIX A

Relevant Offences

WAMITAB

WASTE MANAGEMENT INDUSTRY TRAINING AND ADVISORY BOARD

CERTIFICATE No: 0133

CERTIFICATE OF TECHNICAL COMPETENCE

This Certificate confirms that

MR RICHARD HILL

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

Facility Type:

MANAGING LANDFILL OPERATIONS:

SPECIAL WASTE (LEVEL IV) - L4-A

WAMITAB INCORPORATED 1989

Authorising Signatures:

Director General _____

Director _____

Date of issue: 20 August, 1997

WAMITAB

WASTE MANAGEMENT INDUSTRY TRAINING AND ADVISORY BOARD

CERTIFICATE No: 06935

CERTIFICATE OF TECHNICAL COMPETENCE

This Certificate confirms that

Richard Hill

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

Treatment Non-Hazardous Waste (4TMNH)

WAMITAB INCORPORATED 2389

Authorising Signatures:

Director General _____

Director _____

Date of issue: 04 July 2005

Certificate No. CCC5412

Continuing Competence Certificate

This certificate confirms that

Richard Hill

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current to 29 February 2016:

TSNH Transfer - Non Hazardous Waste

Expiry Date: 29/02/2016

Awarded: 24/10/2013

Authorised

WAMITAB Chief Executive Officer

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

00048984

Certificate No. CCC5906

Continuing Competence Certificate

This certificate confirms that

Richard Hill

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current to 29 February 2016:

LH Landfill - Hazardous Waste

Expiry Date: 29/02/2016

Awarded: 02/01/2014

Authorised

WAMITAB Chief Executive Officer

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

00039161

Certificate No. CCC10896

Continuing Competence Certificate

This certificate confirms that

Richard Hill

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current for two years from 10/02/2016

LH	Landfill - Hazardous Waste
TMNH	Treatment - Non Hazardous Waste

Awarded: 10/02/2016

Expiry Date: 10/02/2018

Authorised

WAMITAB Chief Executive Officer

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

00098389

Certificate No. CCC16200

Continuing Competence Certificate

This certificate confirms that

Richard Hill

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current for two years from 02/02/2018

LH	Landfill - Hazardous Waste
TMNH	Treatment - Non Hazardous Waste

Awarded: 02/02/2018

Expiry Date: 02/02/2020

Authorised

WAMITAB Chief Executive Officer

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

00097856

Continuing Competence Certificate

This certificate confirms that

Richard Hill

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current for two years from 18/02/2020

LH	Landfill - Hazardous Waste
TMNH	Treatment - Non Hazardous Waste

Expiry Date: 18/02/2022

Verification date: 12/02/2020

Authorised:

WAMITAB Chief Executive Officer

Learner ID: 2443

Certificate No.: 5160476

Date of Issue: 18/02/2020

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

00128897

CIWM

Continuing Competence Certificate

This certificate confirms that

Richard Hill

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current for two years from 23/02/2022

LH	Landfill - Hazardous Waste
TMNH	Treatment - Non Hazardous Waste

Expiry Date: 23/02/2024

Verification date: 17/02/2022

Authorised:

Professional Services Director

Learner ID: 2443

Certificate No.: 5193589

Date of Issue: 23/02/2022

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

Scan code on reverse to authenticate that this is a genuine paper

CIWM

Continuing Competence Certificate

This certificate confirms that

Richard Hill

Has met the relevant requirements of the Continuing Competence scheme for the following award(s) which will remain current for two years from 23/02/2022

LH	Landfill - Hazardous Waste
TMNH	Treatment - Non Hazardous Waste

Expiry Date: 23/02/2024

Verification date: 17/02/2022

Authorised:

Professional Services Director

Learner ID: 2443

Certificate No.: 5193589

Date of Issue: 23/02/2022

CIWM Chief Executive Officer

The Chartered Institution of Wastes Management

Scan code on reverse to authenticate that this is a genuine paper

Form C2 Q3: Technically Competent Management

Mr Richard Hill

Email: richard.hill@biffa.co.uk

Contact: **Office** 01733 222255 **Mobile** 07736 598894

[redacted]

The above person is responsible for the following sites:

Permit Number	Site Address	Postcode
EPR/VP3399NP **EPR/BV4495IX**	Attlebridge Phases I & II Landfill Site Attlebridge Phase III Landfill Site Reepham Road Attlebridge Norwich Norfolk	NR9 5TD
EPR/QP3033BG	Bramford Landfill Site Papermill Lane Bramford Ipswich Suffolk	IP8 4DE
EPR/BP3537PP	Eye Landfill Site Eyebury Road Tanholt Lane Eye Peterborough	PE6 7TH
EPR/BP3895NX **EPR/BX0792IX**	Kilsby Phase I-VI Landfill Site Kilsby Phase VII Landfill Site Grove Farm Daventry Road Kilsby Daventry Northamptonshire	CV23 8XF
EPR/AP3895CA	Welford Quarry Landfill Site Cold Ashby Northants	NN6 7JF

APPENDIX C

Management Systems

Certificate of Registration

This is to certify that the Environmental Management System of:

Biffa Group

Coronation Road, Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TZ, United Kingdom

(Central function listed above. See appendix for additional locations)

applicable to:

The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

has been assessed and registered by NQA against the provisions of:

ISO 14001:2015

This registration is subject to the company maintaining an environmental management system, to the above standard, which will be monitored by NQA

Managing Director

Certificate No.	601
ISO Approval Date:	6 April 2004
Reissued:	30 April 2021
Valid Until:	2 September 2024
EAC Code:	39

UKAS MANAGEMENT SYSTEMS 0015

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Group Certificate No. 601 Coronation Road Cressex Business Park High Wycombe Buckinghamshire HP12 3TZ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Irlam Recycling M44 5BF Certificate No. 601/1 Resource Recovery Division Irlam Recycling Gilchrist Road Manchester M44 5BF United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - St Neots Recycling PE19 2HB Certificate No. 601/2 Unit 6-7 1 Marston Road St. Neots Cambridgeshire PE19 2HB United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - East Lothian Certificate No. 601/3 Unit 5 27 Distribution Road Macmerry East Lothian EH33 1RD United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

UKAS MANAGEMENT SYSTEMS
0015

ISO Approval Date:	6 April 2004
Reissued:	30 April 2021
Valid Until:	2 September 2024

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Waste Services Limited - Cottonmouth Landfill Site BT36 4QN Certificate No. 601/4 140 Mallusk Road Newtownabbey County Antrim BT36 4QN United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Leicester Certificate No. 601/5 Ball Mill Hoods Close Leicester LE4 2BN United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - South Bucks Certificate No. 601/6 Dropmore Road Depot Dropmore Road Burnham Buckinghamshire SL1 8ND United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Kilsyth Treatment & Transfer Plant G65 9LP Certificate No. 601/112 13 Kilsyth Road Twechar Glasgow G65 9LP United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

UKAS MANAGEMENT SYSTEMS
0015

ISO Approval Date:	6 April 2004
Reissued:	30 April 2021
Valid Until:	2 September 2024

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Municipal Limited - Forest of Dean Certificate No. 601/113 Valley Road Cinderford Gloucester Gloucestershire GL14 2NX United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Swindon Transfer Station - SN3 4PD Certificate No. 601/105 Bridge End Road, Swindon SN3 4PD United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - South Staffs Certificate No. 601/106 Poplars Land Fill Site Lichfield Road Cannock Staffordshire WS11 8NQ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Melton Certificate No. 601/107 Recycling Centre Lake Terrace Melton Mowbray Leicestershire LE13 0BZ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

UKAS MANAGEMENT SYSTEMS
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ISO Approval Date:	6 April 2004
Reissued:	30 April 2021
Valid Until:	2 September 2024

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Waste Services Limited - St Helens Transfer Station - WA9 1LT Certificate No. 601/109 Navigation Road, Pocket Nook, St Helens WA9 1LT United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Eversley Transfer Station RG27 8BP Certificate No. 601/110 Star Hill Sawmills Star Hill Hook Hampshire RG27 8BP United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Attlebridge Landfill Site NR9 5TD Certificate No. 601/111 Reepham Road Attlebridge Norwich NR9 5TD United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Bodmin Certificate No. 601/97 Windwhistle Depot, Windwhistle House Cooksland Road Bodmin Cornwall PL31 2RH United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

UKAS MANAGEMENT SYSTEMS
0015

ISO Approval Date:	6 April 2004
Reissued:	30 April 2021
Valid Until:	2 September 2024

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Municipal Limited - South Oxford & Vale of White Horse Certificate No. 601/98 Unit 126 Site 1 Station Road Abingdon Oxfordshire OX14 3DA United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Mid Kent - Swale Certificate No. 601/99 Gas Road Milton Regis Sittingbourne Kent ME10 2QB United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited -Wembley Transfer Station HA0 1ES Certificate No. 601/101 Wembley Transfer Station Marsh Road Wembley Middlesex HA0 1ES United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Ufton Landfill Site CV33 9PP Certificate No. 601/103 Ufton Landfill Site UftonNr Southam Leamington Spa Warwickshire CV33 9PP United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

UKAS MANAGEMENT SYSTEMS
0015

ISO Approval Date:	6 April 2004
Reissued:	30 April 2021
Valid Until:	2 September 2024

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Waste Services Limited - Colnbrook Landfill Site SL3 8AB Certificate No. 601/104 Sutton Lane Slough SL3 8AB United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Skelton Grange Landfill Site LS15 4HD Certificate No. 601/90 Skelton Grange Landfill Site Newsam Green Leeds LS15 9AD United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa West Sussex Limited - Brookhurst Wood RH12 4QD Certificate No. 601/91 Brookhurst Wood Langhurst Wood Road Horsham West Sussex RH12 4QD United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Anglesey Certificate No. 601/93 Angelsey Industrial Estate Gaerwen Anglesey LL60 6HR United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

UKAS MANAGEMENT SYSTEMS
0015

ISO Approval Date:	6 April 2004
Reissued:	30 April 2021
Valid Until:	2 September 2024

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Waste Services Limited - Bradford Transfer Station BD4 8YF Certificate No. 601/94 Bradford Transfer Station Peace Street Bradford West Yorkshire BD4 8YF United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Standen Heath Landfill - PO30 2PD Certificate No. 601/95 Plot 45, Manners View, Newport, Isle of Wight PO30 2PD United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Norwich Certificate No. 601/96 William Frost Way Longwater Business Park Norwich Norfolk NR5 0JS United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Meece Landfill Site ST15 0QN Certificate No. 601/84 Meece Landfill Site Swynnerton Nr Stone Staffordshire ST15 0QN United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

UKAS MANAGEMENT SYSTEMS
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ISO Approval Date:	6 April 2004
Reissued:	30 April 2021
Valid Until:	2 September 2024

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Municipal Limited - Manchester Certificate No. 601/85 Manchester 1st Floor Council Depot Hammerstone Road, Manchester M18 8EQ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Broxburn MRF - EH52 5AU Certificate No. 601/86 Unit 33B, 2/8 Westerton Road Broxburn EH52 5AU United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited -Trecatti Landfill Site CF48 4AB Certificate No. 601/87 Trecatti Landfill Site Pant-y-Waun Merthyr Tydfil Mid Glamorgan CF48 4AB United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Pebsham Landfill Site TN38 8AY Certificate No. 601/88 Freshfields Bexhill Road St. Leonards-on-Sea East Sussex TN38 8AY United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

UKAS MANAGEMENT SYSTEMS
0015

ISO Approval Date:	6 April 2004
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Valid Until:	2 September 2024

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Waste Services Limited - Tipton Transfer Station DY4 7BY Certificate No. 601/89 Tipton Transfer Station Chimney Road Tipton West Midlands DY4 7BY United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Stevenage HW - SG1 2BW Certificate No. 601/78 Leyden Road Stevenage SG1 2BW United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Arun Certificate No. 601/79 Harwood Road Depot Harwood Road Littlehampton West Sussex BN17 7AU United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Loughborough HW - LE12 5TR Certificate No. 601/80 Plot F & Car Park, Wymeswold Industrial Park Wymeswold Lane Burton on the Wolds LE12 5TR United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

UKAS MANAGEMENT SYSTEMS
0015

ISO Approval Date:	6 April 2004
Reissued:	30 April 2021
Valid Until:	2 September 2024

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Waste Services Limited - Bradford Recycling BD4 7EZ Certificate No. 601/81 Linton Street Bradford West Yorkshire BD4 7EZ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited-Sheffield HW - S20 3FG Certificate No. 601/82 Holbrook Rise Sheffield S20 3FG United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Poplars Landfill Site WS11 8EQ Certificate No. 601/83 Poplars Landfill Site Lichfield Road Cannock Staffordshire WS11 8EQ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Milton Keynes Transfer Station - MK6 1NE Certificate No. 601/72 Chesney Wold Milton Keynes MK6 1NE United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

UKAS MANAGEMENT SYSTEMS 0015

ISO Approval Date:	6 April 2004
Reissued:	30 April 2021
Valid Until:	2 September 2024

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Waste Services Limited - Sheffield Transfer Station - S9 5FE Certificate No. 601/73 359-361 Greenland Road, Sheffield, South Yorkshire S9 5FE United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Mid Kent JWP - Operations Centre Certificate No. 601/74 Gas Road Milton Pipes Sittingbourne Kent ME10 2QB United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Eye Landfill Site PE6 7TH Certificate No. 601/75 Eye Landfill Site Eyebury Road Peterborough PE6 7TH United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Edmonton MRF (Atlas) N9 0BD Certificate No. 601/76 Unit 2 Aztec 406 London Middlesex N9 0BD United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

UKAS MANAGEMENT SYSTEMS
0015

ISO Approval Date:	6 April 2004
Reissued:	30 April 2021
Valid Until:	2 September 2024

Certificate of Registration

Appendix to Certificate Number: 601

Includes Facilities Located at:

Biffa Waste Services Limited - Brookhurst Wood Landfill Site RH12 4QD Certificate No. 601/77 Brookhurst Wood Landfill Site Langhurst Wood Road Horsham West Sussex RH12 4QD United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Edmonton Transfer Station N17 0UN Certificate No. 601/65 Edmonton Transfer Station 81 Garman Road London N17 0UN United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Chelmsford Recycling CM3 3AW Certificate No. 601/66 Chelmsford Recycling Industrial Estate, Waltham Road Chelmsford CM3 3AW United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Atherstone HW - CV9 1JG Certificate No. 601/67 Unit 12 Fourways Atherstone CV9 1JG United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Waste Services Limited - Southampton TS & Recycling Centre Certificate No. 601/69 Link House Tower Lane Eastleigh SO50 6NZ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Dewsbury Transfer Station - WF13 3LX Certificate No. 601/70 Low Mill Lane Dewsbury WF13 3LX United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Avonmouth Recycling BS11 9HW Certificate No. 601/71 Unit 7 Yara Trading Estate St. Andrews Road Bristol BS11 9HW United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - St Austell Certificate No. 601/59 Tregongeeves Depot, Tregongeeves Lane, St Mewan St. Austell Cornwall PL26 7DS United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Municipal Limited - Bude Certificate No. 601/60 Kingshill Depot, Unit 15 & 16 Kingshill Industrial Estate Kings Hill, Bude Cornwall EX23 8QN United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Etwall IVC Composting DE65 6GX Certificate No. 601/61 Etwall Composting Boundary Road Etwall South Derbyshire DE65 6GX United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited- West Manchester MRF & Transfer Station and Workshop Certificate No. 601/62 Junction Works Bickershaw Lane Wigan WN2 5TB United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Leicester Transfer Station LE67 3NB Certificate No. 601/63 Snibston Drive Coalville Leicestershire LE67 3NB United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Waste Services Limited - Houghton le Spring Landfill Site DH4 4AU Certificate No. 601/64 The Quarry Quarry Row Houghton Le Spring Tyne And Wear DH4 4AU United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Waresley & Hartlebury Landfill Operations DY10 4JB Certificate No. 601/53 Waresley & Hartlebury Landfill Operations Unit 100 Hartlebury Trading Estate Hartlebury Worcestershire DY10 4JB United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Studley Grange Landfill Site SN4 9QT Certificate No. 601/54 Studley Swindon SN4 9QT United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Swarf (Foxyards) DY4 9AQ Certificate No. 601/55 Bean Road Tipton West Midlands DY4 9AQ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Waste Services Limited - Newstead Transfer Station - ST4 8HT Certificate No. 601/56 Newstead Materials Recycling Facility Alderflat Drive, Newstead Industrial Estate Trentham, Stoke on Trent Staffordshire ST4 8HX United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Crawley Certificate No. 601/57 Metcalf Way Depot Metcalf Way Crawley West Sussex RH11 7SU United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - East London Transfer Station IG11 0TT Certificate No. 601/58 Maybell Farm, Ripple Road, Barking, Essex IG11 0TT United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Edinburgh Transfer Station - EH5 1QD Certificate No. 601/45 West Shore Road Edinburgh EH5 1QD United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Municipal Limited - Portsmouth Certificate No. 601/47 Unit 26 A/B/C Alchorne Place Portsmouth PO3 5QL United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - North Somerset Certificate No. 601/49 . Unit 6a & 6b Westland Distribution Park Weston Super Mare BS24 9AB United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Cannock Certificate No. 601/50 Poplars Land Fill Site Lichfield Road Cannock Staffordshire WS11 8NQ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Ufton IVC CV33 9PP Certificate No. 601/51 In Vessel Composting Site Ufton Landfill Site Leamington Spa Warwickshire CV33 9PP United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Waste Services Limited - Cardiff Recycling CF10 4TS Certificate No. 601/52 Nationwide Works Viking Place Cardiff CF10 4TS United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Mid Kent - Ashford Certificate No. 601/39 Unit 6-8 Hanover Close Cobbs Wood Industrial Estate Ashford Kent TN23 1EJ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Attleborough HW - NR17 2QZ Certificate No. 601/40 Unit 51 Maurice Gaymer Road Attleborough NR17 2QZ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - East Hants & Winchester Certificate No. 601/41 Barfield Close Winchester Hampshire SO23 9SQ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Waste Services Limited - Bramford Landfill Site IP8 4DE Certificate No. 601/42 Paper Mill Lane Bramford Ipswich IP8 4DE United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - North Herts Landfill Site SG5 3RT Certificate No. 601/43 North Herts Landfill Site Bedford Road Hitchin Hertfordshire SG5 3RT United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Ugley Landfill Site CM22 6HT Certificate No. 601/44 Cambridge Road Ugley Bishop's Stortford Hertfordshire CM22 6HT United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Grimsby Transfer Station DN31 2RL Certificate No. 601/32 Grimsby Transfer Station Gilbey Road Grimsby South Humberside DN31 2RL United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Municipal Limited - Rutland Certificate No. 601/34 Rutland Contract, Unit 4 Station Court Whissendine Road, Ashwell Oakham, Rutland Leicestershire LE15 7LT United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Cardiff Transfer Station CF11 8DL Certificate No. 601/35 Cardiff Transfer Station Leckworth Industrial Estate Cardiff CF11 8DL United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Tandridge Certificate No. 601/36 Warren Lane Depot Warren Lane Oxted Surrey RH8 9DB United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - St Erth Certificate No. 601/37 St Erth Depot, St Erth Industrial Estate Rose an Grouse, Canonstown Hayle Cornwall TR27 6LP United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Waste Services Limited - Wilnecote Landfill Site B77 1LT Certificate No. 601/38 Rush Lane Dosthill Tamworth Staffordshire B77 1LT United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Poplars AD Plant WS11 8NQ Certificate No. 601/26 Poplars Anaerobic Digestion Facility (Known as Poplars AD) Cannock Staffordshire WS11 8NQ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Mid Kent - Maidstone Certificate No. 601/27 Park Wood Depot Bircholt Road, Park Wood Maidstone Kent ME15 9XY United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited Wednesbury Treatment Centre WS10 7NR Certificate No. 601/28 Wednesbury Treatment Centre Potters Lane Wednesbury West Midlands WS10 7NR United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Waste Services Limited - Risley Landfill Site WA3 6BY Certificate No. 601/29 Moss Side Farm Silver Lane Warrington WA3 6BY United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Hull Transfer Station Certificate No. 601/30 Bailing Plant, Stoneferry Road, Hull, HU8 8AU United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Redhill Landfill Site RH1 4ER Certificate No. 601/31 Patteson Court Landfill Cormongers Lane Redhill RH1 4ER United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Caerphilly MRF - CF82 7TR Certificate No. 601/20 Unit 3 Willow Way Dyffryn Business Park Caerphilly CF82 7TR United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Municipal Limited - Stratford on Avon Certificate No. 601/21 The Council Yard Avenue Farm Industrial Estate Stratford upon Avon Warwickshire CV37 0HR United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Westmill Landfill Site SG12 0ES Certificate No. 601/22 Westmill Farm Westmill Ware Hertfordshire SG12 0ES United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Burscough HW - L40 8LD Certificate No. 601/23 7 Tollgate Crescent Burscough Industrial Estate Ormskirk L40 8LT United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Lincoln Certificate No. 601/24 Lincoln Contract, Central Depot Stampend, Waterside South Lincoln Lincolnshire LN5 7JD United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Waste Services Limited - Glasgow Transfer Station G4 0LP Certificate No. 601/25 360 Pinkston Road Glasgow G4 0LP United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Nottingham Transfer Station NG4 2JR Certificate No. 601/14 Nottingham Transfer Station Private Road 2 NOTTINGHAM NG4 2JR United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Kilsby Landfill Site CV23 8XF Certificate No. 601/15 Grove Farm Daventry Road Rugby Warwickshire CV23 8XF United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - York Transfer Station - YO26 7QF Certificate No. 601/17 Unit 13 Marston Moor Business Park, Tockwith YO26 7QF United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Municipal Limited - Wirral Certificate No. 601/18 Dock Road South Wirral Cheshire CH62 4SQ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Aldridge MRF WS9 8EX Certificate No. 601/19 Westgate Aldridge Walsall Staffordshire WS9 8EX United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Epping Forest Certificate No. 601/20 Waltham Cross Depot New Ford Road Waltham Cross Hertfordshire EN8 7PG United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Shakespeare Farm Certificate No. 601/7 Shakespeare Farm Ratcliffe Highway Rochester Kent ME3 8RN United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Municipal Limited - Liskeard Certificate No. 601/8 Moorswater Depot Old Station Road Moorswater, Liskeard Cornwall PL14 4LA United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Roxby Landfill Site DN15 0BD Certificate No. 601/9 Winterton Road Scunthorpe South Humberside DN15 0BD United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Waste Services Limited - Derby MRF DE24 8EJ Certificate No. 601/10 Derby MRF Unit 4 Trafalgar Park Way Derby Derbyshire DE24 8EJ United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics
Biffa Municipal Limited - Warwick Certificate No. 601/12 Lower House Farm Birch Coppice Industrial Estate Atherstone CV9 2QA United Kingdom	The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Includes Facilities Located at:

Biffa Waste Services Limited - Cardiff Transfer Station CF10 5FX
Certificate No. 601/13
Cardiff Transfer Station Curran Embankment
Cardiff CF10 5FX
United Kingdom

The provision of full waste management services including collection, treatment and cleaning. The processing and disposal of waste and recyclable materials as well as the production and sale of energy and recovered commodities including aggregates, paper, glass, metals and plastics

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Group Standard
GS01

SHEQ

Group Integrated Management System

Aim and Purpose

Biffa recognises the benefits of a single Integrated Management System to achieve increased efficiency and effectiveness. The aim of this document is to define how the Group will implement a Group Integrated Management System in accordance with the requirements of ISO 9001, ISO14001 and ISO 45001 and recognised best practices.

Biffa will ensure that all operational practices will be managed through this and other supporting Group Standards and Management Operational Guidance in such a manner that they meet the expectations of customers and interested parties and prevent harm to the environment and to the health and safety of our colleagues, contractors, visitors or members of the public.

Scope and Requirement

This document applies to the management of facilities, people, training, services and equipment at all designated Biffa locations. It defines how Biffa can:

- Meet the requirements of its customers and other stakeholders and promote continual improvement
- Improve environmental performance through more efficient use of resources and reduction of waste, gaining a competitive advantage and the trust of stakeholders
- Proactively improve its Occupational Health and Safety performance in preventing injury and ill-health.

An integrated management system is a single system designed to manage multiple aspects of an organization's operations in line with multiple standards, such as those for quality, environmental and health and safety management.

In an integrated management system, the whole is greater than the sum of its parts. Successfully integrating your management systems can have a number of very tangible benefits for your organization, including:

- **Avoiding duplication of effort**
- **Making more effective use of senior management time**
- **Using resources to implement and manage systems in a more efficient manner**
- **Achieving more cost-efficient certification**
- **Reducing audit fatigue**

nqa.com/ims (March 2020)

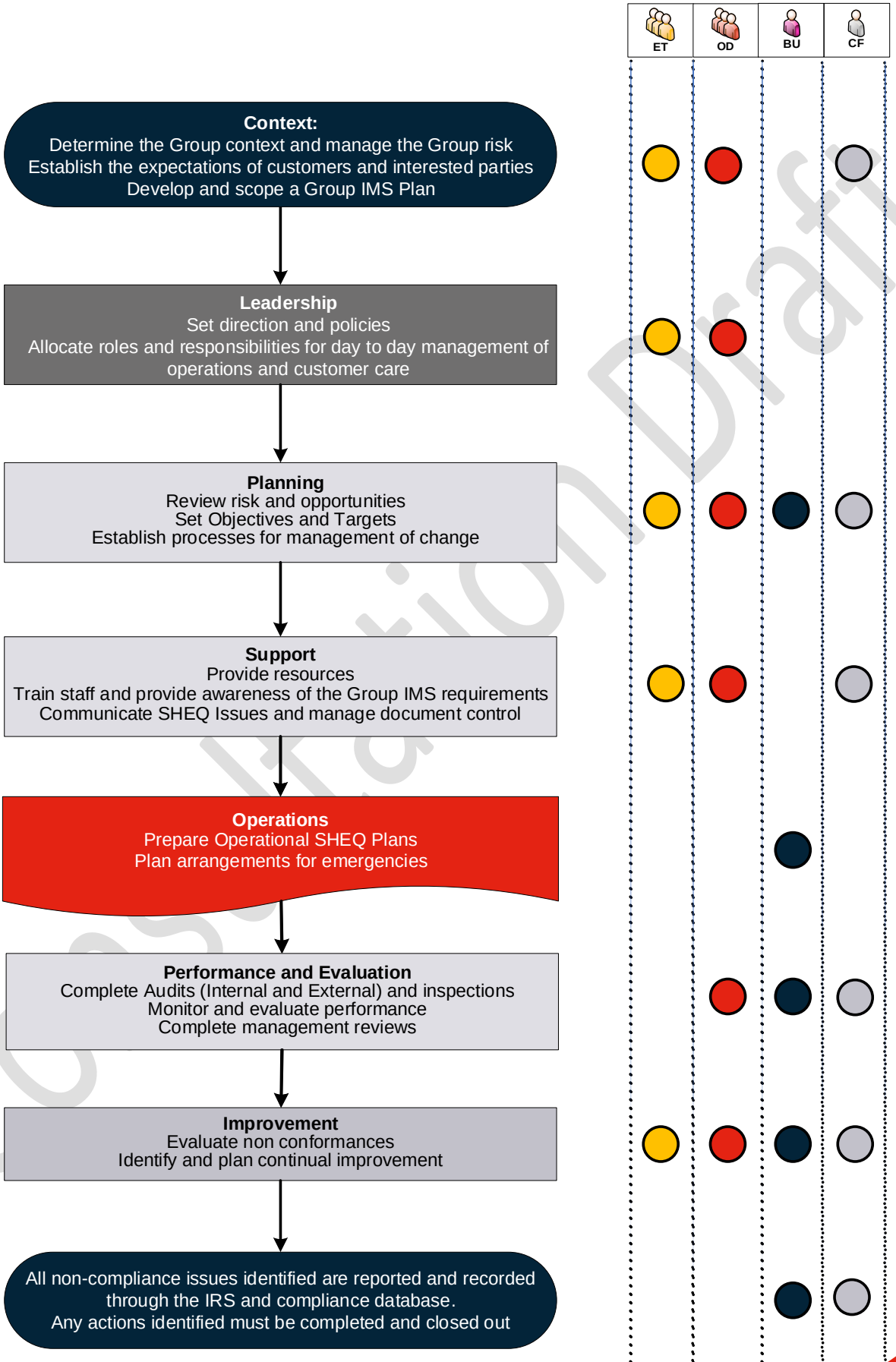
Roles and Responsibilities

Key personnel involved in implementing this Group Standard.

Who	Key Role in Process
 ET	**Group Executive Team** • Review Group context and the Group risk profile • Establish policies and approve the Group IMS plan • Provide resources to enable compliance with this Group Standard • Set direction, objectives and targets • Monitor and review Group performance • Implement business arrangements and establish a management structure
 OD	**The Operating Divisions:** • The responsible Line Manager will allocate responsibility for the day to day management of operational activities and customer service • Monitor and review performance • Establish processes for the management of change
 BU	**The Business Unit Manager:** • Ensure that the site's facilities, people, training, services and equipment meet the expectations of the Business Unit's customers and interested parties • Develop, monitor and review operational SHEQ Plans, risk assessments and safe systems • Ensure all non-compliance issues identified are reported and recorded through the IRS and the compliance database. Any actions that are identified must be completed and closed out • Provide training, supervision and instruction for all employees and contractors
 CF	**Central Functions:** **Procurement Department** • Support the business by enabling the procurement of associated services, resources and equipment required for compliance with this Group Standard **SHQ Department** • Provide coaching and support to Business Unit Managers • Carry out site inspections and audits to monitor compliance with the Group Standard • Inform the Executive Team of all health and safety issues that affect the business • Maintain and communicate a Group Integrated Management System Plan and Group Standards **L&D Department** • Provide suitable training arrangements to site operations which supports adherence with this Group Standard **Environmental and External Affairs Department** • Establish and maintain a Group Sustainability Strategy • Inform the Executive Team of all environmental issues that affect the business **Enterprise Risk Management and Internal Audit Team** • Maintain the Group consolidated risk register • Carry out audits in accordance with the terms of reference provided by the Group Audit Committee

Responsibility and Process Flowchart

This flowchart designates responsibilities at each stage of the process as shown by the dots



Internal and External References

Internal	External
Balanced Business Plan	ISO 9001 Quality Management System Standard
Group Policies	ISO 45001 Occupational Health and Safety Management System Standard
Group Sustainability Strategy	ISO 14001 Environmental Management System Standard
Group Consolidated Risk Register	ISO 19011 Guidelines for Auditing Management

Definitions, Abbreviations and Additional Guidance

Abbreviation	Definition
Biffa	Includes Biffa Waste Services Ltd and all Biffa Group companies
HSC	Health and Safety Co-ordinator (Appointed where there is more than one Business Unit Manager at the location)
BU	Business Unit. Managed on a day to day basis by the Business Unit Manager (Typically this will be Site Managers, Depot Managers, Workshop Managers, Landfill Managers, Plant Managers etc)
IMS	Integrated Management System
OD	Operating Division
OBi	Biffa Intranet
SHQ	Safety, Health and Quality Department

Document Control and Review

Document Status and Version Control

Document Title	Issue No	Issued by name	Function / Division	Biffa IMS Ref	Security Classification	Date of Issue	Next Review Date	Approved by:
GS01 Group Integrated Management System	1	P Gough	SHQ	Std\Grp\GS01 Group Integrated Management System	Unclassified	01/04/20	01/04/23	Paul Wright

APPENDIX D

Site Condition Report (.612)

REPORT

Site Condition Report

Open Windrow Composting Facility, Eye Landfill

Submitted to:

Biffa Waste Services Ltd

Coronation Road
Cressex
High Wycombe
HP12 3TZ

Submitted by:

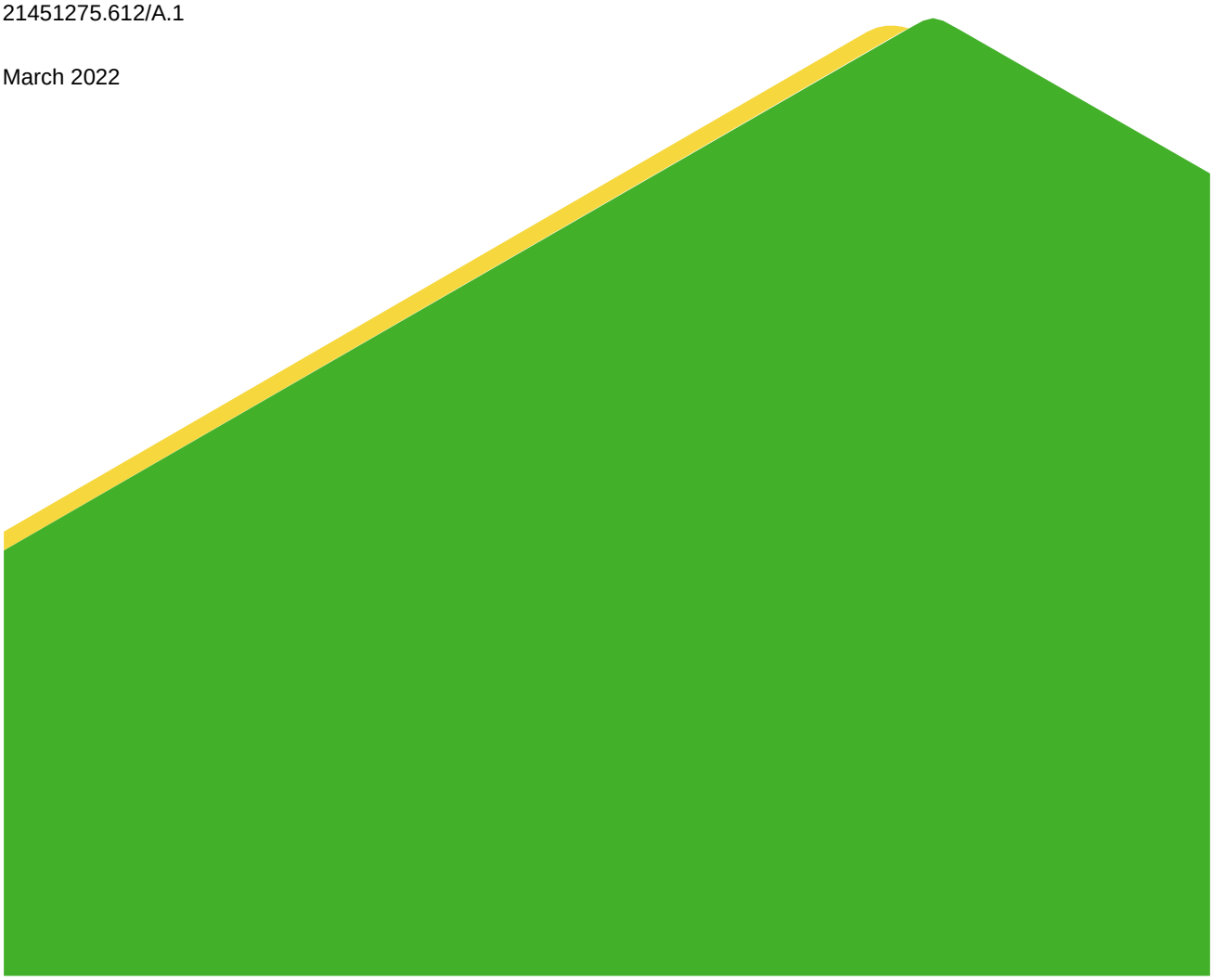
Golder, member of WSP

Attenborough House, Browns Lane Business Park, Stanton-on-the-Wolds,
Nottingham, NG12 5BL, UK

+44 0 115 937 1111

21451275.612/A.1

March 2022



Distribution List

Biffa Waste Services Ltd - 1 copy (PDF)

Environment Agency - 1 copy (PDF)

Golder, member of WSP - 1 copy (PDF)

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TABLES

FIGURES

1.0 INTRODUCTION

Biffa Waste Services Ltd (Biffa) has commissioned Golder, a member of WSP UK Ltd (Golder) to a prepare a Site Condition Report to support the application for a Standard Rules Environmental Permit for an Open Windrow Composting (OWC) Facility ('the Facility') at Eye Landfill, Eyebury Road, Eye, Peterborough, Cambridgeshire, PD6 7TH ('the Site').

This report presents the baseline conditions at the Facility prior to development in accordance with the information required by Sections 1 to 3 of the EA's Site Condition Report template (Environment Agency, 2008).

2.0 SITE DETAILS

The site details are presented in Table 612.1

Table 612.1: Site Details

Information Required	Detail
Name of the applicant	Biffa Waste Services Ltd
Activity address	Eye Landfill Eyebury Road Eye Peterborough Cambridgeshire PD6 7TH
National grid reference	TF 23296 01444 (Site Reception)

This report details the site condition at the time of the Environmental Permit application.

The following drawings detail the location, layout and environmental setting of the Site and are included in the Standard Rules Permit Application (Golder, 2022):

- Location Plan – Drawing 611-01
- Site Layout – Drawing 611-02
- Environmental Setting – Drawing 611-03
- Facility Layout – Drawing 611-04

3.0 CONDITION OF THE LAND AT PERMIT ISSUE

3.1 Environmental Setting

This section presents information regarding the environmental setting of the Facility, required by the EA's Site Condition Report template.

3.1.1 Local Geology

The Site has been the subject of numerous site investigations for both the excavation of mineral reserve and the subsequent landfill development.

The Jurassic Oxford Clay and Kellaways Sand underlie the whole of the Southern Extension. The Oxford Clay is well consolidated, calcareous clay which may be silty or sandy with thin cemented siltstone or mudstone and is known locally to be around 12 m in thickness. The Oxford Clay has been proven by seventeen boreholes within the Southern Extension. It is typically described as stiff, very closely fissured dark grey clay with frequent disseminated shell fragments. It dips gently from west to east and varies in elevation from (-1.37) m AOD in the west to 0.32 m AOD in the east.

Above the Oxford Clay are areas of virgin ground (comprising Quaternary River Terrace Deposits) and also inert fill, Made Ground and areas of historic waste deposition. The natural geological succession beneath the Site, where Quaternary Deposits are intact, is summarised in Table 612.2.

Table 612.2: Summary of Local Geology

Age	Formation	Elevation of Top of Formation (m AOD)
Quaternary	River Terrace Deposits	-
Jurassic	Oxford Clay	0.32 to (-5.31)
	Kellaways Sand	(-8.19) to (-13.58)

3.1.2 Hydrogeology

Aquifer Status

The near surface River Terrace Deposits (where present) and the Kellaways Sand are the principal water bearing strata at the Site. They are separated by the low permeability Oxford Clay which is an aquitard (i.e. does not transmit water at a significant rate).

The groundwater beneath the Site is principally contained in the Kellaways Sand which are classified as a Secondary A Aquifer (comprise permeable layers that can support local water supplies, and may form an important source of base flow to rivers). Although not indicated on the MAGIC website (Defra, 2021) as present within the Site area, in areas of virgin ground where River Terrace Deposits remain, groundwater could be present, and classified as a Secondary A Aquifer, however these are limited given the surrounding areas of quarrying and landfilling that have taken place.

Groundwater Source Protection Zones

For a Permit with Standard Rules SR2021 No1 (previously SR2012 No8), activities shall not be carried out within '*a groundwater source protection zone 1 or 2, or where a source protection zone has not been defined then within 250 m of any well, spring or borehole used for the supply of water for human consumption. This must include private water supplies*'.

Groundwater source protection zones have been defined by the Environment Agency around public drinking water supply sources. The zones show the risk of contamination from any activities that may cause pollution to the respective source. These zones are defined as:

- Inner zone (Zone 1): 50-day travel time from any point on the water table to the source (minimum radius of 50 m).
- Outer zone (Zone 2): 400-day travel time from a point below the water table. Zone 2 has a minimum radius of 250 or 500 m around the source.
- Total catchment: defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source.

As shown on Figure 612.1, the site is not located within an Environment Agency defined Zone 1 or 2 source protection zone for public water supplies. The nearest are located beyond Peterborough to the west. An outer protection zone, at its closest, is located approximately 8.9 km to the northwest of the Site. No total catchment is defined for the sources northwest of the Site. A 'sub-surface activity' is noted 6.4 km southwest of the Site.

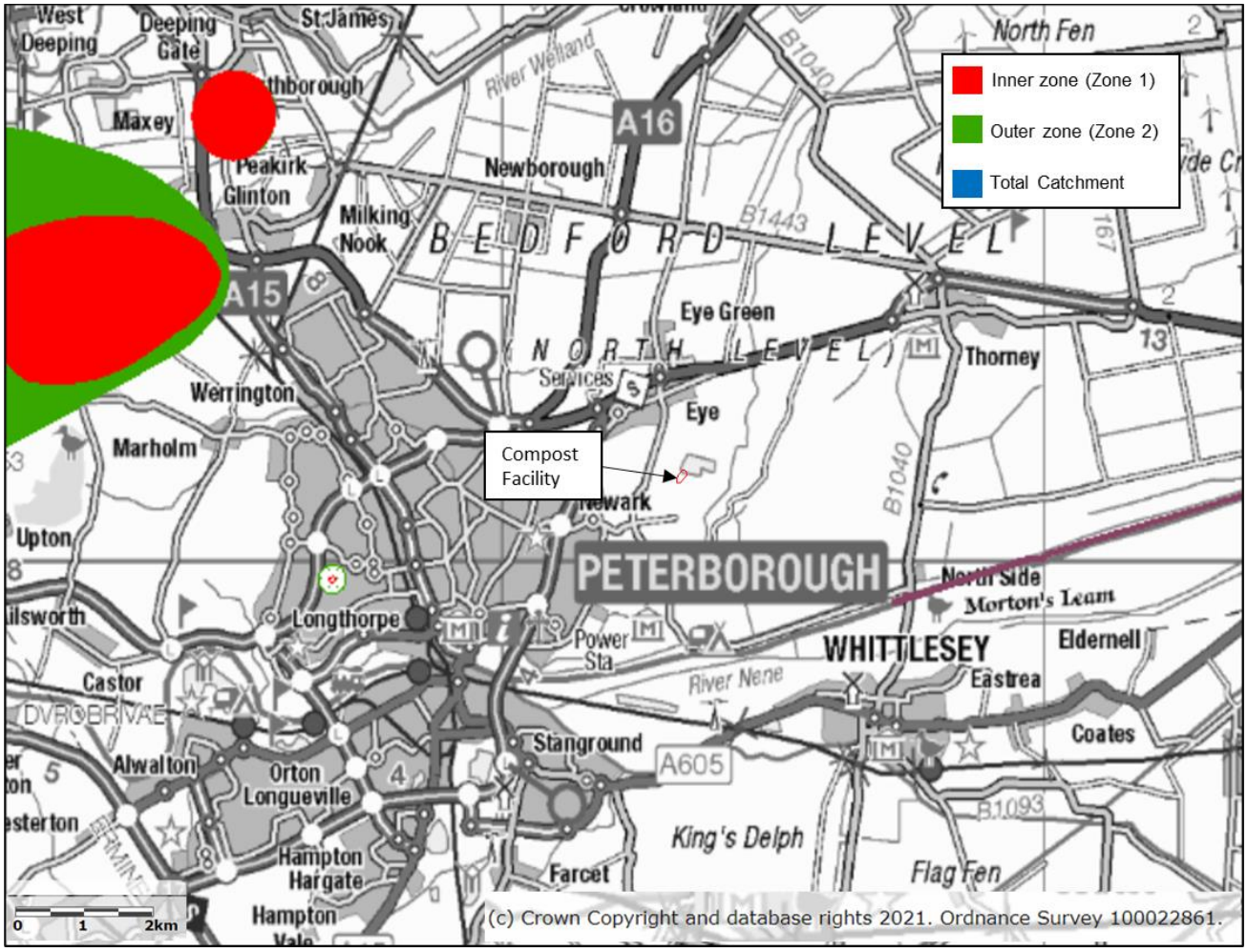

Figure 612.1: Groundwater Source Protection Zones. Obtained from the MAGIC website [Defra, 2020].

Groundwater Abstractions

Publicly available information regarding current groundwater and surface water abstractions within a 5 km radius of the Site has been obtained from the Environment Agency (data received by Golder 7 July 2021) and Peterborough Council (email received by Golder 2 July 2021). Details of licensed abstractions provided by the Environment Agency are presented in Table 612.3 and their locations shown on Figure 612.2.

Table 612.3: Licensed Groundwater Abstractions

Licence No.	Orig. Effective Date	Name	Secondary Description	Point Name	Max Annual Quantity	Max Daily Quantity
5/32/11/*G/0091	01/05/1979	Chapman	General Agriculture Spray Irrigation - Direct	Two Bores At Flag Fen Farm	50,000	650
AN/032/0011/001/R01	01/04/2017	Aggregate Industries UK Ltd	Extractive Dust Suppression, General Washing/Process Washing, Mineral Washing, Mineral Products Process Water	Catchpit At Thorney, Peterborough	1,170,281	4,283
AN/032/0011/035	29/05/2018	C Horrell Ltd	General Agriculture Spray Irrigation - Storage	Nene Sands And Gravels At Thorney	50,000	4,020
AN/032/0011/037	28/09/2018	Landlogical Thorney Ltd	Mineral Products Dewatering	Pasture House Farm	1,892,160	5,184
AN/032/0011/044	31/01/2020	Aggregate Industries UK Ltd	Mineral Products Dewatering	Bar Pastures Quarry [Extension to Pode Hole Quarry]	-	-

One private groundwater abstraction was identified by Peterborough City Council within 5 km of the Site, a borehole at Chase Farm, Bridge Hill Road, Newborough, Peterborough, PE6 7SA (reference PWS009 on Figure 612.2).

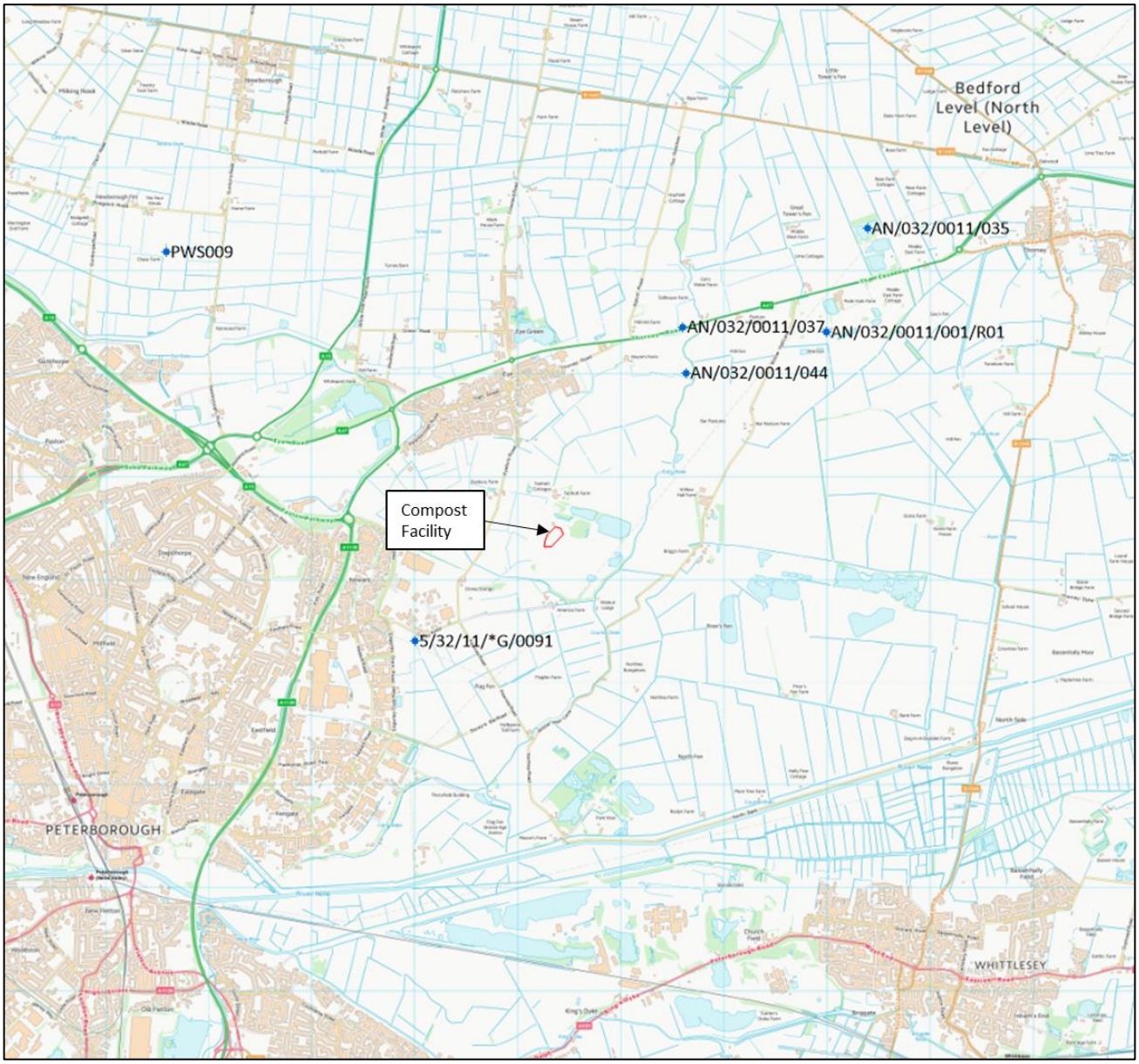

Figure 612.2: Licensed and Private Groundwater Abstractions

3.1.3 Surface Waters

Local Watercourses

Local watercourses and features are shown on Drawing 611-03 of the EP Application (Golder, 2022).

The area lies within the catchment of the River Nene, which is located approximately 2.5 km to the south. Drainage within the area has been heavily modified by manmade drainage channels to lower the natural water levels and drain the area to render it suitable for modern farming practices.

Cat's Water Drain is located approximately 600 m to the southeast of the OWC Facility. It is a natural watercourse which flows in a southerly direction. It has been canalised and is usually dry adjacent to the landfill but is prone to rapid fluctuation in levels. It is maintained by the Internal Drainage Board (IDB). The base of the drain had been surveyed as being 1.63 m AOD adjacent to the landfill. Other drains, including Counter Drain located 300 m to the south of the Site and flowing in an easterly direction, discharge into the Cat's Water Drain. Cat's Water Drain discharges to the Dog-in-a-Doublet pumping station approximately 3 km south of the development, which pumps flows into the River Nene.

A number of surface water ponds are located in the central parts of Eye Landfill to the north and northeast of the proposed compost pad. 'Clear Water Lagoon' is a large lake located between the Central Area and the Southern Extension, managed by Biffa and there are additional lakes to the west of the Clear Water Lagoon which all form part of the mineral extraction and landfill restoration. There are two silt lagoons which are substantially filled with silt to the northeast of the pad and a third silt lagoon which is partially filled with silt and with some standing water to the north of the pad. Where these lagoons are filled and dry at the surface, vegetation has naturally regenerated.

With regard screening criteria for a Permit with Standard Rules SR2021 No1: Composting in Open Systems – Installations, activities shall not be carried out within '*10 m of any watercourse'*. There are no watercourses within 10 m and this requirement is therefore met.

Existing Site Drainage

The footprint of the Compost Pad currently comprises an area of bare earth and rough ground currently used for soil stockpiling, waste recycling and for the storage of empty bins and skips and equipment. It is also crossed by the internal haul road to the landfill. The land is relatively flat lying at approximately 4 m AOD.

To the south of the Compost Pad is Area 1 of the Southern Extension, which was historically filled with both inert and domestic waste, with no engineered containment, to flat lying surrounding ground levels. This also currently comprises bare earth and rough ground.

The general surface water run-off across this area and from operational parts of the Southern Extension Landfill is managed by ditches which outfall to a series of settlement/attenuation lagoons, some of which discharge into Cat's Water Drain via connecting drains. The OWC Facility will have a self-contained drainage system and will not adversely affect the existing underlying drainage network.

Planning permission for an IVC facility (14/01307/MMFUL, dated 31 July 2015) included a flood risk assessment (FRA). An EP (EPR/AP3433WD) was also issued, but the facility was not constructed. The FRA noted that enquiries made of the local authority and Environment Agency reported no flooding incidents at the Site within the boundary area. Surface water flows from the landfill were assessed in the original FRA on the basis of a rainfall event with a 1 in 100 year return period, and the same return period was used (and approved by the Environment Agency) in the FRA for the IVC Facility including design of the drainage systems.

Surface Water Abstractions

Publicly available information regarding current surface water abstractions within a 5 km radius of the Site has been obtained from the Environment Agency (data received by Golder, 7 July 2021) and Peterborough City Council (email received by Golder, 2 July 2021). Details of licensed abstractions provided by the Environment Agency are presented in **Table 612.4**.

Table 612.4: Licensed Surface Water Abstractions

Licence No.	Orig. Effective Date	Name	Secondary Description	Point Name	Max Annual Quantity Note 1	Max Daily Quantity Note 1
5/32/11/*S/0053A	01/03/1966	Coles	General Agriculture	Drain At Buke Horn Farm	4,546	364
5/32/11/*S/0059	26/03/1966	Northlands Farm (Thorney) Ltd	General Agriculture	Drains Near Northey Farm	60,000	3,000
5/32/11/*S/0061	01/04/1977	J R Fisher & Son	General Agriculture	Gores Drain A - B - C	27,277	1,527
5/32/11/*S/0081	01/08/1973	P J Lee & Sons Ltd	General Agriculture	Levitts Drove Drain At Thorney	62,000	5,000
5/32/11/*S/0086	01/01/1977	TE Darby & Sons	General Agriculture	Field Drains Adj South Drn "G - L", Impounded Farm Ditches & Brick Reservoir, South Drain & Adj Field Drns "C - D", South Main Drain, Unnamed Farm Dyke "M - Z", Carr Dyke Newborough	40,915	4,696
5/32/11/*S/0094	01/05/1980	The Whitebread Charity	General Agriculture	Un-Named Drain "F-G"	16,000	1,250
5/32/11/*S/0098	01/10/1983	James Sutton Farming Co Ltd	General Agriculture	New Ten Foot Drain, Thorney River	18,000	1,100
5/32/11/*S/0102	01/05/1984	Skeels	General Agriculture	Drain In Newborough, Drain Near Bull Bridge Farm, Drain Near Pranks Farm, Green Drain, Hundreds Drain, Middle Drain, Newborough Main Drain, Turves Drain	24,000	1,580
5/32/11/*S/0106	01/04/1985	Bradshaw	General Agriculture	Newborough Main Drain, Side Drain In Newborough Fen	12,000	2,000
5/32/11/*S/0107	01/04/1985	IJ & DJ White	General Agriculture	Internal Farm Drain Near Middle Level Drain, Middle Drain, Near Counter Drain, Newborough Main Drain	20,000	2,000
5/32/11/*S/0109	01/05/1985	Belmont Farms	General Agriculture	Middle Drain Newborough Fen, Drain At Newborough Fen	35,000	1,300
5/32/11/*S/0111	01/04/1986	Bradshaw	General Agriculture	South Drain, Newborough	3,000	500
5/32/11/*S/0112	01/06/1986	J and LD Boor	General Agriculture	Points A - C (Green Bank Drain, Crowland), Point D-E (Field Drains, Crowland)), Point F-G - (Hundreds Drain, Crowland)	15,000	2,000
5/32/11/*S/0114	01/07/1986	Cave	General Agriculture	Farm Drain "H", Farm Drains "F-G", Highland Drain "I", Middle Drain "A", Middle Drain "C-D", Newborough Main Drain "B"	17,000	4,000

Licence No.	Orig. Effective Date	Name	Secondary Description	Point Name	Max Annual Quantity Note 1	Max Daily Quantity Note 1
5/32/11/*S/0116	02/03/1987	Hunt - Pain	General Agriculture	Middle Drove Drain - "C To D"	86,500	1,250
5/32/11/*S/0117	01/03/1987	Harris	General Agriculture	Freshwater Drain, Lords Drain, Middle Drain	23,000	1,200
5/32/11/*S/0118	01/03/1987	Godfrey	General Agriculture	Watercourse At Newborough 2,3,4,6,7,8,9,11,12,13	36,000	1,200
5/32/11/*S/0120/A	08/03/2014	Northlands Farm (Thorney) Limited	General Agriculture	Gores Drain "28-29", "29-30"	27,000	1,718
5/32/11/*S/0122	01/02/1988	Bradshaw	General Agriculture	Catchwater Drain, Un-Named Drain,Newborough	4,500	1,000
5/32/11/*S/0132	31/12/1992	Bradshaw	General Agriculture	South Main Drain, Trib South Main Drain, Newborough	27,272	2,020
5/32/11/*S/0144/R 01	01/11/2017	N Woodroffe & Sons	General Agriculture	Highland Drain At Thorney, Hundreds Drain At Thorney, Newborough Main Drain, Highland Drain At Thorney, New South Eau Drain At Thorney	55,000	3,000
5/32/11/*S/0154/R 01	01/04/2017	P J Lee And Sons Limited	General Agriculture	New Ten Foot Drain, Levitts Drove Drain	19,5500	5,184
5/32/11/*S/0159/R 02	01/04/2020	Stevenson	General Agriculture	Middle Drain, Thorney, Drain At Thorney - To Reservoir	27,600	1,500
5/32/11/*S/0169/R 01	19/05/2020	J & A Woodroffe Farms Limited	General Agriculture	Highland Drain, Newborough Main Drain	33,000	700
AN/032/0011/034	29/05/2018	C Horrell Ltd	General Agriculture	Reaches 2-11 Un-Named Drain, North Level Main Drain, Inland Water Unnamed Drain Thorney 'Reach 1'	50,000	4,020

Note 1: Units not identified by EA, assumed m^3

No private surface water abstractions were identified by Peterborough City Council within 5 km of the Site.

3.2 Pollution History

3.2.1 Pollution incidents that may have affected land

Based on the information presented in a previous Environmental Permit Application for an In-Vessel Composting facility at the Site (Crestwood Environmental Ltd, 2014), no reported pollution incidents have occurred within the proposed Permit boundary. Pollution prevention at the Biffa facility at Eye Landfill has a very good compliance rating.

3.2.2 Historical land-uses and associated contaminants

Based on historical mapping of the Site (1886 to 2013) presented in the previous IVC Facility EP Application (Crestwood Environmental Ltd, 2014), the historical land uses include agricultural, quarrying and landfilling activities. Associated contaminants from these activities could include:

- Hydrocarbons from machinery leaks or spills from stored products;
- Pesticides/herbicides;
- Fertilizer; and
- Landfill waste and leachate (e.g. pH, organics, metals, sulphates, nitrogen).

3.2.3 Any visual/olfactory evidence of existing contamination

See Section 3.3 (Historical Contamination).

3.2.4 Evidence of damage to pollution prevention measures

No pollution prevention measures are present at the Facility.

3.3 Historical Contamination

The Facility will be developed on Area 1 of the Southern Extension Area at Eye Landfill (see Drawing 611-02 of the EP Application (Golder, 2022)). Area 1 covers approximately 5 ha and was historically filled with both inert and domestic waste, with no engineered containment, to flat lying surrounding ground levels. The Area is uncapped and is an area of rough grassland.

A site investigation was undertaken in the Southern Extension Area in 1999 (Golder, 2000) and further information has been obtained during mineral extraction and landfill operations including boreholes drilled for environmental monitoring. The ground beneath the Southern Extension consists of clay, peat, sand and gravel strata that has areas of historic Made Ground and inert fill:

- Areas of historic Made Ground are very variable, but typically consist of inert sands, silts and clays with fragments of brick, concrete, plastic, glass and wood, etc. These materials date back to the 1960s and 1970s and were deposited by early operators at the Site. The thickness of the Made Ground encountered varies from 0.2 m to 4.6 m. In some areas, pockets of Made Ground consist of bagged domestic-type waste with wood, plastic, metal, brick, etc. The thickness of waste varies from 0.6 m to 3.7 m.
- Areas of inert fill typically consist of silts deposited from mineral extraction operations.

The OWC Facility will be developed at, or just above, existing ground level. Only development of the two surface water lagoons will require excavation below existing ground level.

It is not known if these excavations will encounter any isolated pockets of historical waste and no remediation or validation has already been undertaken in this area. Biffa has already shown that, in development of Cells 4 and 5 and in development of the Miscanthus Beds, it has removed any isolated pockets of historic waste encountered and disposed to landfill and Biffa undertakes to continue taking this precautionary approach in development of the OWC Facility.

3.4 Baseline Soil and Groundwater Conditions

The baseline surface water quality, groundwater levels and groundwater quality were determined at the Site prior to the development of the Southern Extension Landfill.

Laboratory testing of shallow groundwater encountered at 15 trial pit locations during a ground investigation of the Eye Landfill Southern Extension (Golder, 2000 – as Appendix A1 of Golder 2008) included indicator parameters, major ions and metals. Many of the trial pits encountered previously deposited wastes associated with Area 1 on which the Facility is to be developed (see Section 3.3). The results showed that concentrations of metals such as arsenic, cadmium, chromium, copper, lead, mercury, nickel, vanadium and zinc were often below the laboratory limit of detection. Chloride concentrations were observed up to 694 mg/l. Ammoniacal nitrogen was detected at concentrations up to 316 mg/l and electrical conductivity measurements were as high as 4400 μS/cm. These data, along with some high Biological and Chemical Oxygen Demand (BOD and COD) results, are likely to be indicative of the presence of perched water within the historical waste.

Groundwater level and quality monitoring from monitoring boreholes was also completed prior to the development of the Southern Extension Landfill and presented within the Hydrogeological Risk Assessment (HRA) (Golder, 2008b). Groundwater was monitored within the River Terrace Deposits and also the Kellaways Sand.

Groundwater in the River Terrace Deposits was unconfined and groundwater in Kellaways Sand was confined. The River Terrace Deposits groundwater flow direction under natural conditions was stated as being to the southeast. The groundwater flow direction in the Kellaways Sand was stated as being towards the north.

Groundwater quality data for the period 2003 to 2007 were also presented and discussed. No long-term trends were identified in the groundwater quality from either the River Terrace Deposits or Kellaways Sand. Concentrations of ammoniacal nitrogen were in excess of the UK Drinking Water Standard (DWS) of 0.39 mg/l in all boreholes in both strata. Concentrations of chloride exceeded the DWS of 250 mg/l in four boreholes within the River Terrace Deposits and one within the Kellaways Sand. Nickel concentrations also exceeded the DWS of 0.02 mg/l in three boreholes within the River Terrace Deposits and three within the Kellaways Sand. Consideration of the results concluded that the groundwater was impacted by an anthropogenic source that was not leachate from the existing landfilled area, and from poor background water quality in the Kellaways Sand.

Subsequent groundwater monitoring has been undertaken as part of the Environmental Permit for the landfill. This provides a more recent baseline prior to the development of the proposed Facility. Recent water data is presented in the 2020 Environmental Monitoring Annual Review (Biffa, 2021). With respect to the area monitoring around the Facility (and southern extension), the following points were made in the review:

- Groundwater levels around the southern extension area in 2019/2020 ranged between 2.29 m AOD and 4.51 m AOD in boreholes BH02, BH08, BH09, BH40A and BH22A (within the River Terrace Deposits) and BH22B and BH40B (within the Kellaways Sand). Boreholes BH02 and BH08 are immediately to the west of the proposed Facility. Other boreholes tended to have a groundwater level that ranged from -1.66 m AOD to 1.73 m AOD.
- Boreholes BH01, BH13, BH15, BH40A and BH45A (within the River Terrace Deposits) and BH14, BH15, BH40A, BH45A and BH45B have trigger levels associated with them and are sampled monthly for ammoniacal nitrogen and quarterly for cadmium (from all but BH45A), nickel, toluene, potassium (BH40A, BH40B and BH45B only) and mecoprop (BH40A, BH40B and BH45B only).
- During 2019/2020 ammoniacal nitrogen concentration remained stable in the trigger boreholes. Concentrations were compliant expect at BH14 where the limit for this borehole of 0.8 mg/l was exceeded in November and December 2020. The highest concentrations of ammoniacal nitrogen were measured in BH45A (max. 14.6 mg/l in April 2020), but the trigger level at this location is 17.63 mg/l.
- Potassium concentration fluctuated in BH45A during the review period and exceeded the trigger level in May, August and November 2019 and 2020.

- Nickel, cadmium, toluene and mecoprop concentrations were below the trigger levels.
- Surface water, with respect to the Southern Extension, is monitored at SW03 (downstream on Cat's Water Drain, south of the Southern Extension), SW04 (Cell 3 within the Southern Extension area), SW07 (Cat's Water Drain east of the Southern Extension), SW09 (downstream on Cat's Water Drain, south of the Southern Extension), SW10 (upstream on Cat's Water Drain), SW12 (downstream on Cat's Water Drain, southwest of the Southern Extension). SW07 is only monitored when water is being discharged. All locations on Cat's Water Drain except SW10 are also downstream of the other parts of Eye Landfill site.
- A trigger level of 3 mg/l ammoniacal nitrogen and 30 mg/l suspended solids applies to SW07. Ammoniacal nitrogen concentrations in surface water decreased over the review period. The trigger level was not exceeded. The trigger for suspended solids was also not exceeded.

Groundwater and surface water monitoring will continue to be undertaken at the wider landfill Site in accordance with the existing Environmental Permits, and the required data and reports submitted to the Environment Agency.

There is no baselines soil information within the Facility footprint. The Facility is located on an area of historical landfilling (see Section 3.3).

4.0 PERMITTED ACTIVITIES

4.1 Permitted Activities

Within the planning application boundary for the Facility, the Environmental Permit would be for the operation of a green waste OWC Facility. Permitted activities would include those presented in Table 609.5.

Table 609.5: Permitted Activities

Process/Activity	WFD Annex II Operations	Limitations
Main Activity		
Activity 1 - biological treatment of waste by composting. Listed in Schedule 1 of the EPR under S5.4 A(1) (b) (i) The recovery or a mix of recovery and disposal of non-hazardous waste with a capacity exceeding 75 tonnes a day involving biological treatment.	R3 – recycling and reclaiming organic substances which are not used as solvents.	The activity is limited to: (a) treatment of waste by composting (b) sanitisation, stabilisation and maturation (c) using negative aeration systems with abatement where relevant
Associated Activities		
Activity 2 – physical treatment of waste	R3 – recycling and reclaiming organic substances which are not used as solvents.	The activity is limited to: (a) physical treatment of waste restricted to storage, sorting, shredding, blending and screening (b) managing storage of feedstock prior to windrow formation to prevent anaerobic conditions

Process/Activity	WFD Annex II Operations	Limitations
		(c) use of negative aeration is permitted where the air extracted is treated by an abatement system
Activity 3 – storage	R13 – storage of waste pending any of the operations numbered R1 to R12. Excludes temporary storage, pending collection, on the site where it is produced.	This activity is limited to secure storage of: (a) compatible waste before composting (feedstock) (b) liquid waste consisting of dirty water or liquor (or both) in purpose-built lagoons or tanks (c) finished compost (including finished screened material waiting for dispatch) and non-composted fraction (d) quarantined waste in covered skips or covered piles for no longer than 5 days
Activity 4 – storage of raw materials and waste generated on site, including: (a) chemicals (b) lubrication oil (c) antifreeze (d) diesel (e) activated carbon (f) spent air abatement filter media		

A plan showing the activity layout for the Facility is included as Drawing 611-04 of the EP Application (Golder, 2022). An Environmental risk assessment for the proposed Facility is included in the Environmental Permit application (Golder, 2022).

It should be noted that the landfill leachate storage tank that is located within the proposed Environmental Permit boundary is already present on Site and is used to store landfill leachate before tankering off Site. This tank will be removed and replaced on top of the new compost pad hardstanding. Any surplus compost liquor that needs to be removed from the Facility will also go to this tank. Given the tank will mainly be used for the management of landfill leachate, it will be managed under the Environmental Permit for the landfill and will not be included in the operations to be managed under the Facility Environmental Permit.

4.2 Non-permitted Activities Undertaken

No non-permitted activities are included within the Environmental Permit for the Facility. The use of the shared Site entrance, reception and weighbridge for management and administrative activities, and use of the Recycling Shed for the storage of plant, equipment and small amounts of bagged compost product, do not form part of the Environmental Permit and are not located within the proposed Environmental Permit boundary.

5.0 REFERENCES

1) Biffa Waste Services, 2021. Eye North Eastern and Southern Landfill Site Environmental Monitoring Annual Review 2020.

2) Crestwood Environmental Ltd, 2014. Application for a Bespoke Environmental Permit for an In-Vessel Composting (IVC) Facility. Eye Composting. Ref: CE-EC-0596-RP01, V1, dated July 2014.

3) Defra, 2021. MAGIC website. https://magic.defra.gov.uk/. Accessed on 30 June 2021.

4) Environment Agency, 2008. Site Condition Report Template. V2.0 dated 4 August 2008.

5) Golder, Member of WSP Ltd, 2022. Standard Rules Permit Application Supporting Document, Open Windrow Composting Facility, Eye Landfill. Ref. 21451275.610.

6) Golder Associates UK Ltd, 2021. Eye Landfill - Green Waste Open Windrow Composting Facility Planning Application - Supporting Statement. Ref: 21482103.601/A.0, dated 16 December 2021.

7) Golder Associates UK Ltd, 2008a. Section A Environmental Setting and Installation Design Eye Southern Extension Landfill. Ref: 07415290224.520.A.1, dated July 2008.

8) Golder Associates UK Ltd, 2008b. Section A Environmental Setting and Installation Design Eye Southern Extension Landfill. Ref: 07415290224.520.A.1, dated July 2008.

9) Golder Associates UK Ltd, 2000. Ground Investigation of Eye Landfill Southern Extension. Ref. 99523561, dated February 2000.

Signature Page

Golder, member of WSP

Anna Goodwin
Associate Hydrogeologist

Nicola White
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Date: 8 March 2022

AG/NW/ab

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golder.com

APPENDIX E

Water and Flood Risk Assessment (.605)

REPORT

Biffa Waste Services Ltd

Eye Landfill - Green Waste Open Windrow Composting Facility

Water and Flood Risk Assessment

Submitted to:

Biffa Waste Services Ltd
Coronation Road
Cressex
High Wycombe
Buckinghamshire
HP12 3TZ

Submitted by:

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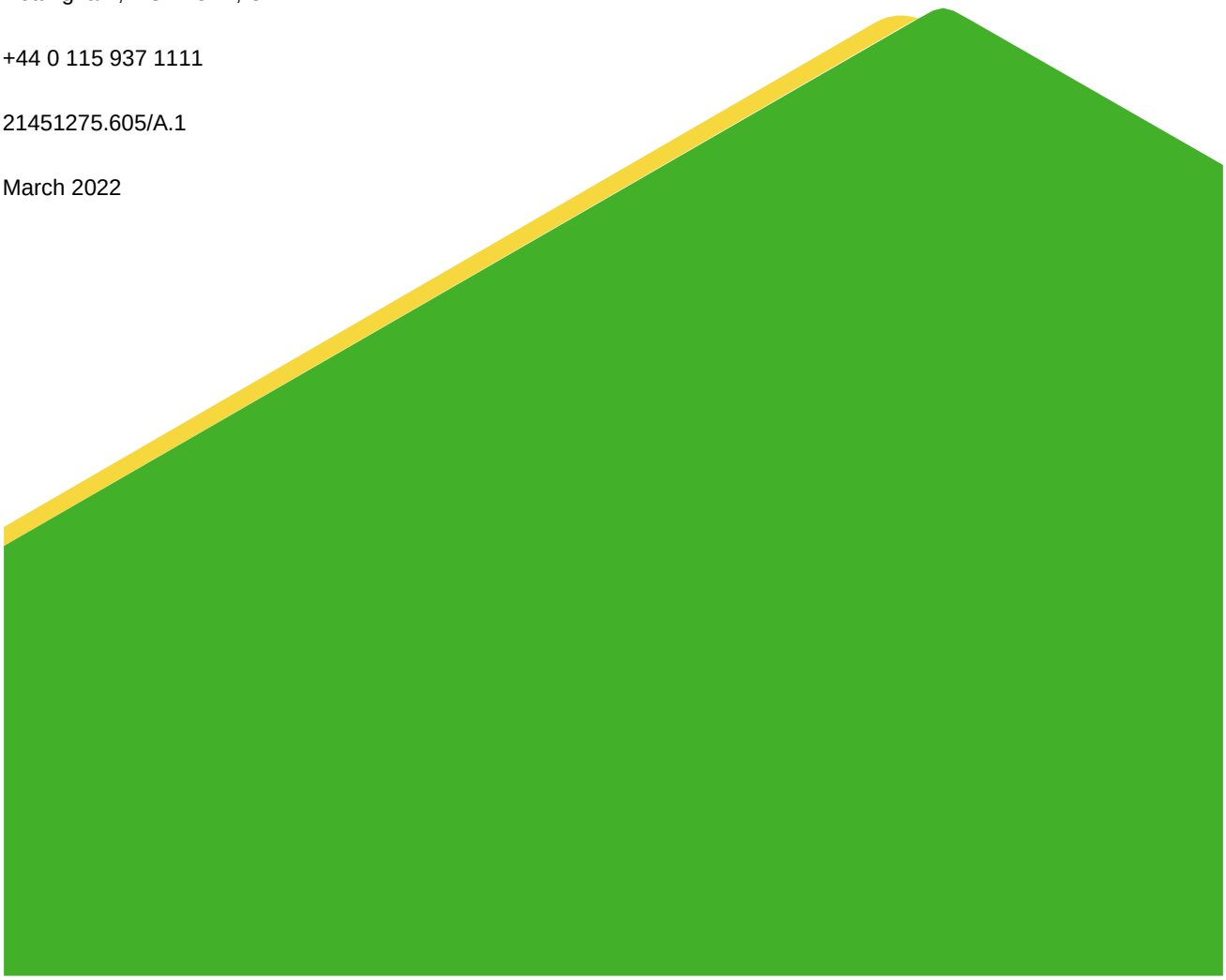
21451275.605/A.1

March 2022



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1.0 INTRODUCTION

1.1 Terms of Reference

Biffa Waste Services Ltd ('Biffa') proposes to develop a green waste Open Windrow Composting (OWC) Facility ('OWC Facility') at Eye Landfill, Eyebury, Peterborough, Cambridgeshire, PE6 7TH (the 'Site').

This report presents a Water and Flood Risk Assessment in support of both the planning application and standard rules permit application. This report should be read in conjunction with the main text of the Supporting Statement which includes:

- A detailed description of the proposed development (see Section 5.2 of the Supporting Statement);
- Drawings (Drawings 1 to 5); and

1.2 Information on the other assessments undertaken. Scope of the Report

The assessment has been carried out in accordance with the National Planning Policy Framework (NPPF) and associated Technical Guidance.

The proposed development lies within the Environment Agency's delineated Flood Zone 1 and is therefore deemed to be at low risk of flooding. Flood Zone 1 comprises land assessed as having a <0.1% (less than 1 in 1000) Annual Exceedance Probability (AEP) of fluvial flooding in any year.

As the area of the planning application is greater than 1 ha, the National Planning and Policy Framework (NPPF) states that the application must be accompanied by a site-specific Flood Risk Assessment (FRA).

It is proposed to operate the facility under an Environmental Permit with Standard Rules '*SR2021 No1 Composting in Open Systems - Installations'*. In order to do so, a number of screening criteria in relation to water and flood risk are required to be met, i.e. the activities shall not be carried out within:

- A groundwater source protection zone 1 or 2, or where a source protection zone has not been defined then within 250 m of any well, spring or borehole used for the supply of water for human consumption. This must include private water supplies; and
- 10 m of any watercourse.

This report also provides screening of the above requirements.

The application site forms part of a larger landfill site and will be self-contained in drainage terms and so a proportionate approach to the FRA is taken, noting the following:

- The drainage proposals follow similar principles to those previously approved for an In-Vessel Composting (IVC) Facility (IVC Facility) by permission 14/01307/MMFUL dated 31 July 2015 in a similar location at the site (not implemented) and under Environmental Permit EPR/AP3433WD in terms of flood risk;
- Identifying leachate drainage requirements under a Standard Rules SR2021 No1: Composting in Open Systems – Installations and the Best Available Techniques (BAT) for best practice operations proposed by Biffa;
- The scheme fits within the approved surface water management scheme and discharge under Environmental Permit EPR/BP3537PP (for the non-hazardous landfill in the Northeastern and Southern Extensions);
- Providing reference to PCC's Strategic Flood Risk Assessment and Flood Risk Management Strategy; and
- Consideration is given to climate change effects.

2.0 BASELINE CONDITIONS

2.1 Surface Water

2.1.1 Local Watercourses

Local watercourses and features are shown on **Drawing 3 – Environmental Setting** in the Supporting Statement.

The area lies within the catchment of the River Nene, which is located approximately 2.5 km to the south. Drainage within the area has been heavily modified by manmade drainage channels to lower the natural water levels and drain the area to render it suitable for modern farming practices.

Cat's Water Drain is located approximately 600 m to the southeast of the OWC Facility. It is a natural watercourse which flows in a southerly direction. It has been canalised and is usually dry adjacent to the landfill but is prone to rapid fluctuation in levels. It is maintained by the Internal Drainage Board (IDB). The base of the drain had been surveyed as being 1.63 m AOD adjacent to the landfill. Other drains, including Counter Drain located 300 m to the south of the Site and flowing in an easterly direction, discharge into the Cat's Water Drain. Cat's Water Drain discharges to the Dog-in-a-Doublet pumping station approximately 3 km south of the development, which pumps flows into the River Nene.

A number of surface water ponds are located in the central parts of Eye Landfill to the north and northeast of the proposed compost pad. 'Clear Water Lagoon' is a large lake located between the Central Area and the Southern Extension, managed by Biffa and there are additional lakes to the west of the Clear Water Lagoon which all form part of the mineral extraction and landfill restoration. There are two silt lagoons which are substantially filled with silt to the northeast of the pad and a third silt lagoon which is partially filled with silt and with some standing water to the north of the pad. Where these lagoons are filled and dry at the surface, vegetation has naturally regenerated.

With regard screening criteria for a Permit with Standard Rules SR2021 No1: Composting in Open Systems – Installations), activities shall not be carried out within '*10 m of any watercourse'*. There are no watercourses within 10 m and this requirement is therefore met.

2.1.2 Existing Site Drainage

The footprint of the Compost Pad currently comprises an area of bare earth and rough ground currently used for soil stockpiling, waste recycling and for the storage of empty bins and skips and equipment. It is also crossed by the internal haul road to the landfill. The land is relatively flat lying at approximately 4 m AOD.

To the south of the Compost Pad is Area 1 of the Southern Extension, which was historically filled with both inert and domestic waste, with no engineered containment, to flat lying surrounding ground levels. This also currently comprises bare earth and rough ground.

The general surface water run-off across this area and from operational parts of the Southern Extension Landfill is managed by ditches which outfall to a series of settlement/attenuation lagoons, some of which discharge into Cat's Water Drain via connecting drains. The OWC Facility will have a self-contained drainage system and will not adversely affect the existing underlying drainage network.

The FRA which accompanied the planning application for the IVC Facility noted that enquiries made of the local authority and Environment Agency reported no flooding incidents at the Site within the boundary area. Surface water flows from the landfill were assessed in the original FRA on the basis of a rainfall event with a 1 in 100 year return period, and the same return period was used (and approved by the Environment Agency) in the FRA for the IVC Facility including design of the drainage systems.

2.1.3 Surface Water Abstractions

Publicly available information regarding current surface water abstractions within a 5 km radius of the Site has been obtained from the Environment Agency (data received by Golder, 7 July 2021) and Peterborough City Council (email received by Golder, 2 July 2021). Details of licensed abstractions provided by the Environment Agency are presented in **Table FRA1**.

Table FRA1: Licensed Surface Water Abstractions

Licence No.	Orig. Effective Date	Name	Secondary Description	Point Name	Max Annual Quantity Note 1	Max Daily Quantity Note 1
5/32/11/*S/0053A	01/03/1966	Coles	General Agriculture	Drain At Buke Horn Farm	4,546	364
5/32/11/*S/0059	26/03/1966	Northlands Farm (Thorney) Ltd	General Agriculture	Drains Near Northey Farm	60,000	3,000
5/32/11/*S/0061	01/04/1977	J R Fisher & Son	General Agriculture	Gores Drain A - B - C	27,277	1,527
5/32/11/*S/0081	01/08/1973	P J Lee & Sons Ltd	General Agriculture	Levitts Drove Drain At Thorney	62,000	5,000
5/32/11/*S/0086	01/01/1977	TE Darby & Sons	General Agriculture	Field Drains Adj South Drn "G - L", Impounded Farm Ditches & Brick Reservoir, South Drain & Adj Field Drns "C - D", South Main Drain, Unnamed Farm Dyke "M - Z", Carr Dyke Newborough	40,915	4,696
5/32/11/*S/0094	01/05/1980	The Whitebread Charity	General Agriculture	Un-Named Drain "F-G"	16,000	1,250
5/32/11/*S/0098	01/10/1983	James Sutton Farming Co Ltd	General Agriculture	New Ten Foot Drain, Thorney River	18,000	1,100
5/32/11/*S/0102	01/05/1984	Skeels	General Agriculture	Drain In Newborough, Drain Near Bull Bridge Farm, Drain Near Pranks Farm, Green Drain, Hundreds Drain, Middle Drain, Newborough Main Drain, Turves Drain	24,000	1,580
5/32/11/*S/0106	01/04/1985	Bradshaw	General Agriculture	Newborough Main Drain, Side Drain In Newborough Fen	12,000	2,000
5/32/11/*S/0107	01/04/1985	IJ & DJ White	General Agriculture	Internal Farm Drain Near Middle Level Drain, Middle Drain, Near Counter Drain, Newborough Main Drain	20,000	2,000
5/32/11/*S/0109	01/05/1985	Belmont Farms	General Agriculture	Middle Drain Newborough Fen, Drain At Newborough Fen	35,000	1,300
5/32/11/*S/0111	01/04/1986	Bradshaw	General Agriculture	South Drain, Newborough	3,000	500
5/32/11/*S/0112	01/06/1986	J and LD Boor	General Agriculture	Points A - C (Green Bank Drain, Crowland), Point D-E (Field	15,000	2,000

Licence No.	Orig. Effective Date	Name	Secondary Description	Point Name	Max Annual Quantity Note 1	Max Daily Quantity Note 1
				Drains, Crowland)), Point F-G - (Hundreds Drain, Crowland)		
5/32/11/*S/0114	01/07/1986	Cave	General Agriculture	Farm Drain "H", Farm Drains "F-G", Highland Drain "I", Middle Drain "A", Middle Drain "C-D", Newborough Main Drain "B"	17,000	4,000
5/32/11/*S/0116	02/03/1987	Hunt - Pain	General Agriculture	Middle Drove Drain - "C To D"	86,500	1,250
5/32/11/*S/0117	01/03/1987	Harris	General Agriculture	Freshwater Drain, Lords Drain, Middle Drain	23,000	1,200
5/32/11/*S/0118	01/03/1987	Godfrey	General Agriculture	Watercourse At Newborough 2,3,4,6,7,8,9,11,12,13	36,000	1,200
5/32/11/*S/0120/A	08/03/2014	Northlands Farm (Thorney) Limited	General Agriculture	Gores Drain "28-29", "29-30"	27,000	1,718
5/32/11/*S/0122	01/02/1988	Bradshaw	General Agriculture	Catchwater Drain, Un-Named Drain,Newborough	4,500	1,000
5/32/11/*S/0132	31/12/1992	Bradshaw	General Agriculture	South Main Drain, Trib South Main Drain, Newborough	27,272	2,020
5/32/11/*S/0144/R 01	01/11/2017	N Woodroffe & Sons	General Agriculture	Highland Drain At Thorney, Hundreds Drain At Thorney, Newborough Main Drain, Highland Drain At Thorney, New South Eau Drain At Thorney	55,000	3,000
5/32/11/*S/0154/R 01	01/04/2017	P J Lee And Sons Limited	General Agriculture	New Ten Foot Drain, Levitts Drove Drain	19,5500	5,184
5/32/11/*S/0159/R 02	01/04/2020	Stevenson	General Agriculture	Middle Drain , Thorney, Drain At Thorney - To Reservoir	27,600	1,500
5/32/11/*S/0169/R 01	19/05/2020	J & A Woodroffe Farms Limited	General Agriculture	Highland Drain, Newborough Main Drain	33,000	700
AN/032/0011/034	29/05/2018	C Horrell Ltd	General Agriculture	Reaches 2-11 Un-Named Drain, North Level Main Drain, Inland Water Unnamed Drain Thorney 'Reach 1'	50,000	4,020

Note 1: Units not identified by EA, assumed m^3

No private surface water abstractions were identified by Peterborough City Council within 5 km of the Site.

2.2 Groundwater

2.2.1 Aquifer Status

The near surface River Terrace Deposits (where present) and the Kellaway Sands are the principal water bearing strata at the Site. They are separated by the low permeability Oxford Clay which is an aquitard (i.e. does not transmit water at a significant rate).

The groundwater beneath the Site is principally contained in the Kellaway Sands which are classified as a Secondary A Aquifer (comprise permeable layers that can support local water supplies, and may form an important source of base flow to rivers). Although not indicated on the MAGIC website (Defra, 2021) as present within the Site area, in areas of virgin ground where River Terrace Deposits remain, groundwater could be present, and classified as a Secondary A Aquifer, however these are limited given the surrounding areas of quarrying and landfilling that have taken place.

2.2.2 Groundwater Source Protection Zones

For a Permit with Standard Rules SR2021 No1: Composting in Open Systems – Installations), activities shall not be carried out within '*a groundwater source protection zone 1 or 2, or where a source protection zone has not been defined then within 250 m of any well, spring or borehole used for the supply of water for human consumption. This must include private water supplies*'.

Groundwater source protection zones have been defined by the Environment Agency around public drinking water supply sources. The zones show the risk of contamination from any activities that may cause pollution to the respective source. These zones are defined as:

- Inner zone (Zone 1): 50-day travel time from any point on the water table to the source (minimum radius of 50 m).
- Outer zone (Zone 2): 400-day travel time from a point below the water table. Zone 2 has a minimum radius of 250 or 500 m around the source.
- Total catchment: defined as the area around a source within which all groundwater recharge is presumed to be discharged at the source.

As shown on **Figure FRA1**, the site is not located within an Environment Agency defined Zone 1 or 2 source protection zone for public water supplies. The nearest are located beyond Peterborough to the west. An outer protection zone, at its closest, is located approximately 8.9 km to the northwest of the Site. No total catchment is defined for the sources northwest of the Site. A 'sub-surface activity' is noted 6.4 km southwest of the Site.

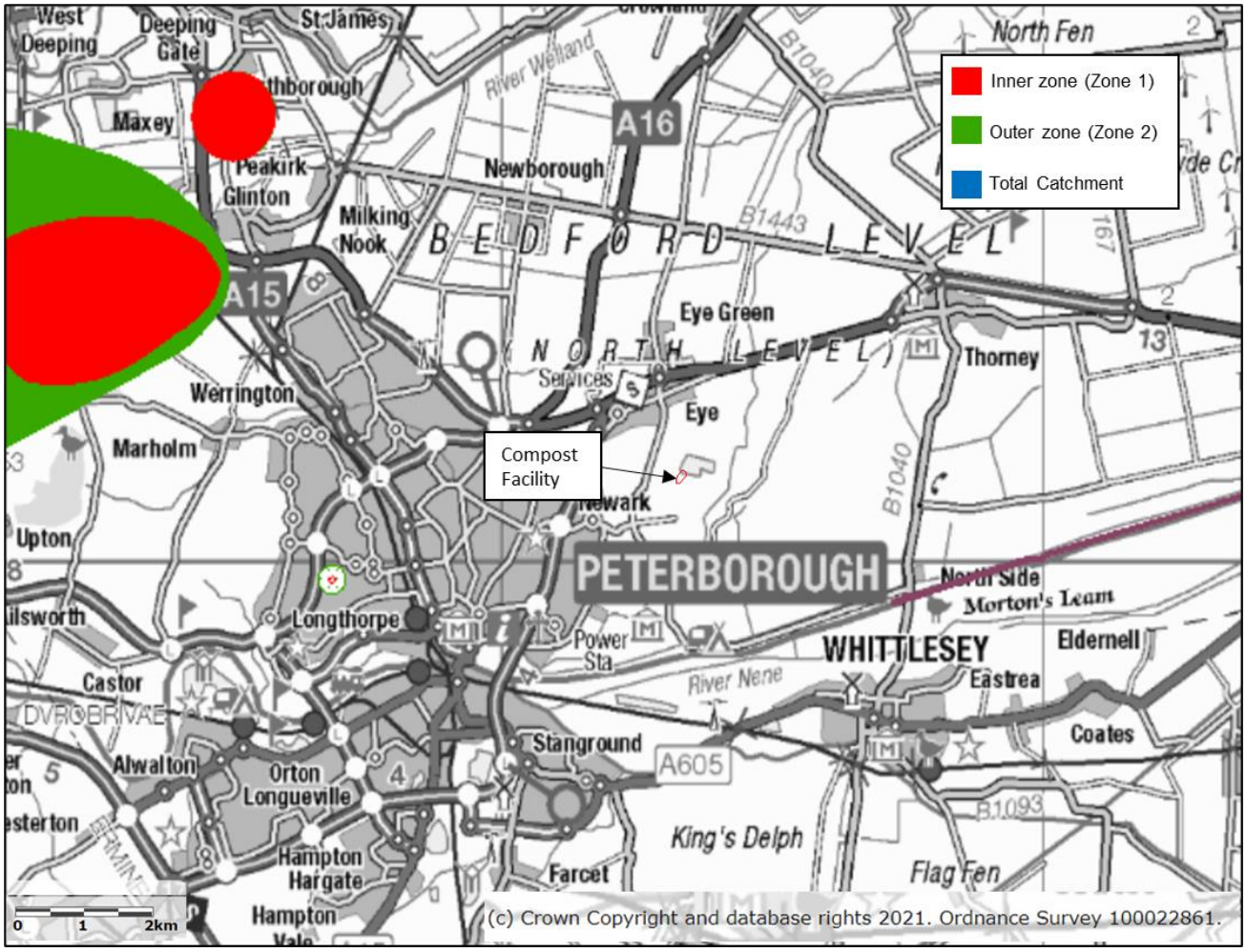

Figure FRA1: Groundwater Source Protection Zones. Obtained from the MAGIC website [Defra, 2020].

2.2.3 Groundwater Abstractions

Publicly available information regarding current groundwater and surface water abstractions within a 5 km radius of the Site has been obtained from the Environment Agency (data received by Golder 7 July 2021) and Peterborough Council (email received by Golder 2 July 2021). Details of licensed abstractions provided by the Environment Agency are presented in **Table FRA2** and their locations shown on **Figure FRA2**.

Table FRA2: Licensed Groundwater Abstractions

Licence No.	Orig. Effective Date	Name	Secondary Description	Point Name	Max Annual Quantity	Max Daily Quantity
5/32/11/*G/0091	01/05/1979	Chapman	General Agriculture Spray Irrigation - Direct	Two Bores At Flag Fen Farm	50,000	650
AN/032/0011/001/R01	01/04/2017	Aggregate Industries UK Ltd	Extractive Dust Suppression, General Washing/Process Washing, Mineral Washing, Mineral Products Process Water	Catchpit At Thorney, Peterborough	1,170,281	4,283
AN/032/0011/035	29/05/2018	C Horrell Ltd	General Agriculture Spray Irrigation - Storage	Nene Sands And Gravels At Thorney	50,000	4,020
AN/032/0011/037	28/09/2018	Landlogical Thorney Ltd	Mineral Products Dewatering	Pasture House Farm	1,892,160	5,184
AN/032/0011/044	31/01/2020	Aggregate Industries UK Ltd	Mineral Products Dewatering	Bar Pastures Quarry [Extension to Pode Hole Quarry]	-	-

One private groundwater abstraction was identified by Peterborough City Council within 5 km of the Site, a borehole at Chase Farm, Bridge Hill Road, Newborough, Peterborough, PE6 7SA (reference PWS009 on **Figure FRA2**).

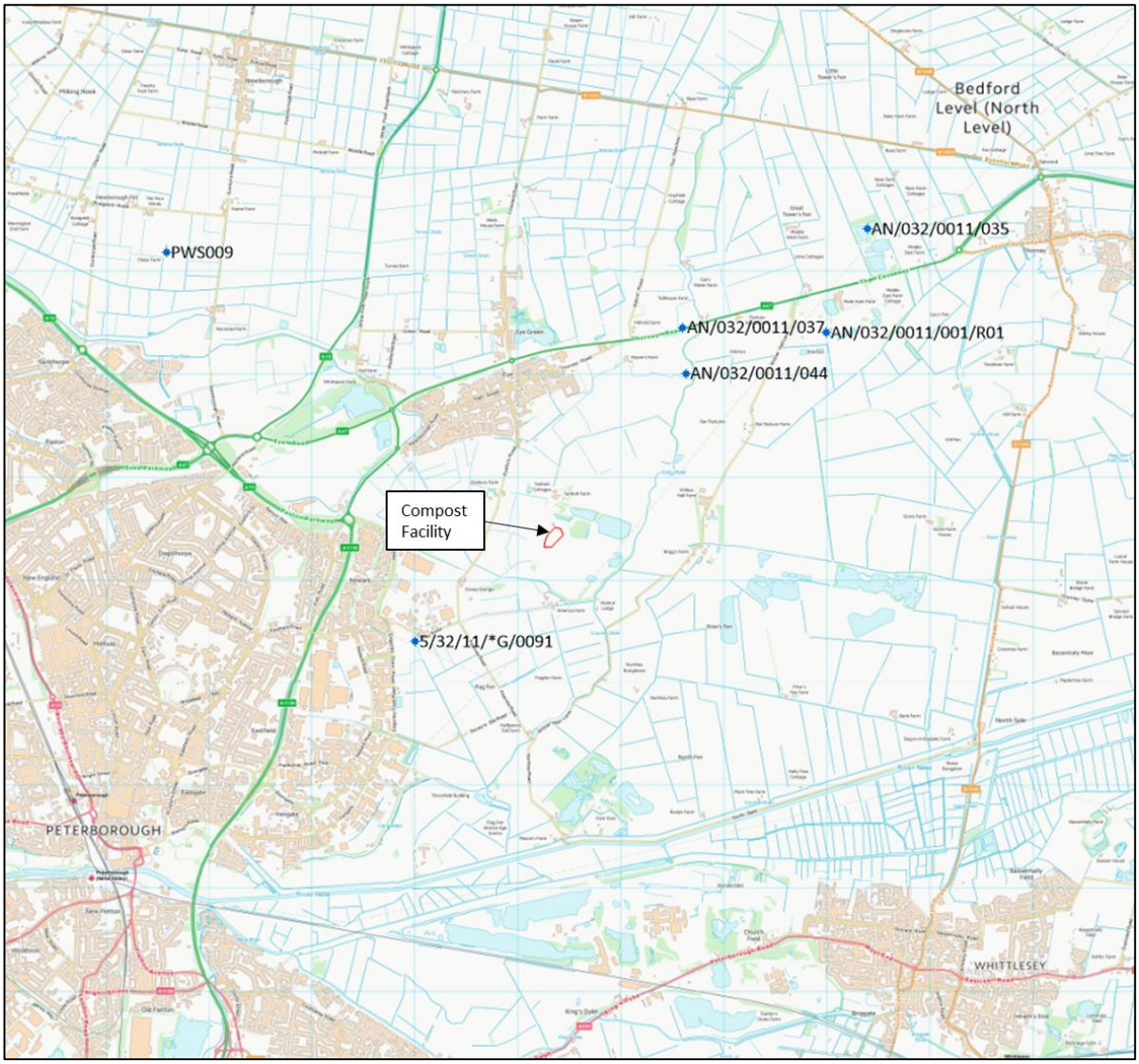

Figure FRA2: Licensed and Private Groundwater Abstractions

2.3 Flood Risk

The main potential sources of flooding are from rivers or fluvial flooding, the sea or tidal waters, overflowing sewers/drains, overland runoff from high ground, from reservoirs, canals and other artificial sources and groundwater. Each of these are addressed in the following sections.

2.3.1 Flooding from Rivers or Fluvial Flooding

With reference to the indicative flood maps published by the Environment Agency, the Site is shown to be located entirely within Flood Zone 1 (Low risk), as shown by **Figure FRA3** below.

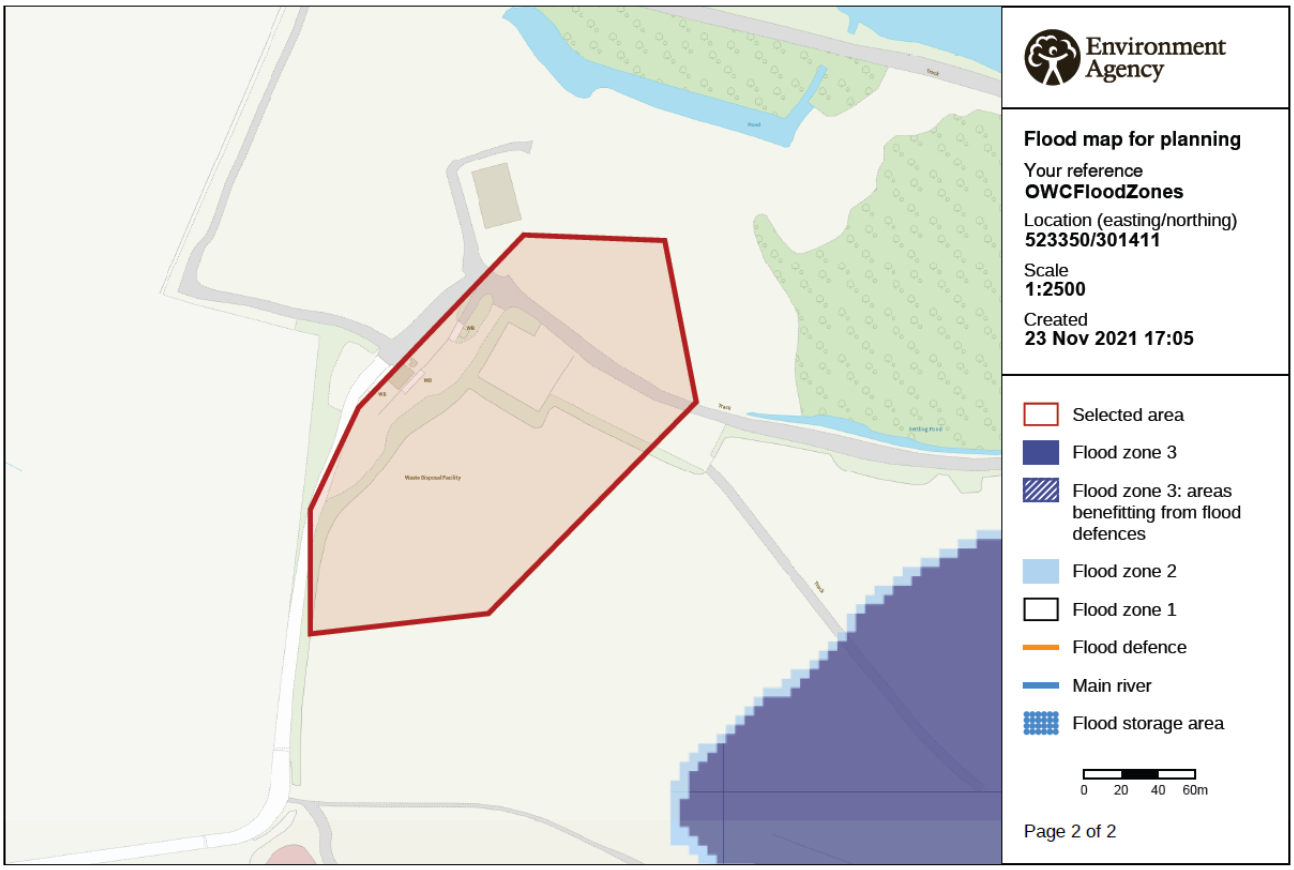

Figure FRA3: Environment Agency Flood Zones

The proposed development lies within the Environment Agency's delineated Flood Zone 1 and is therefore deemed to be at low risk of flooding. Flood Zone 1 comprises land assessed as having a <0.1% (less than 1 in 1,000) Annual Exceedance Probability (AEP) of fluvial flooding in any year.

However, it should be noted that the Environment Agency flood maps only cover water courses with substantial catchment areas and do not cover all ditch courses and brooks that maybe susceptible to flooding.

2.3.2 Flooding from Overland Run-off

The site is not at risk of overland run-off due to the surrounding site's fully operational infrastructure. The risk from run-off is considered low as it is a closed drainage system with shallow gradients and kerbing. The surrounding area is relatively flat and naturally flows to the landfills drainage system. The 'Clear Water Lagoon' and other nearby silt lagoons will provide sufficient capacity to deal with surface water run-off and surface water run-on is not likely to occur.

Flooding from this source has therefore not been considered further.

2.3.3 Flooding from Existing Sewers and Drains

The Site lies within an operational landfill and has no sewer system connection or system local to it. It is unlikely that any sewer system will be placed across the Site and flooding from this source can also be discounted due to the robust nature of the current site's infrastructure.

Flooding from this source has therefore not been considered further.

2.3.4 Flooding from Ditches and Natural Ponds

Flooding from this source can be discounted due to the topography of the site. The pond and ditches near the proposed development are at a lower elevation than the proposals.

2.3.5 Flooding from Groundwater

The local geology comprises permeable River Terrace Deposits which, where present, are water bearing in the surrounding area, however directly beneath the Site this has largely been excavated and backfilled with lower permeability materials that have more limited potential for groundwater flow.

Based on data from boreholes adjacent to the Compost Facility (BH2 and BH8), the average groundwater level in the superficial deposits where present is approximately 3 m AOD, approximately 1 m below the proposed elevation of the composting area (4 m AOD). Water bodies in the area are considered to lie above the water table and not therefore contributing factor.

The flood risk from this source is not significant and has not therefore considered further.

3.0 DESCRIPTION OF SCHEME IN RELATION TO DRAINAGE

3.1 Site Layout

A detailed description of the development is provided in Section 5.2 of the Supporting Statement. Details specific to the management of water, and flood risk, are provided below. A drawing of the proposed OWC Facility layout, with drainage details, is shown on **Drawing 4 – OWC Facility Layout**.

3.1.1 Compost Pad

All waste shall be stored and treated on an impermeable surface with sealed drainage system.

The Compost Pad will be approx. 200 m x 128.5 m with two surface water storage lagoons approx. (2 x 2,080 m^3) along the northeast and southwest edges. The Facility will comprise a closed system designed to prevent run-on and with appropriate gradients, kerbs, and engineered lagoons to provide containment and the storage capacity required for management of surface water and flood risk.

The Compost Pad and surface water lagoons will be constructed at or just above (<1.0 m) existing ground level. The Pad will drain to the lagoons under gravity.

The area of the Composting Pad will be prepared by the placement of engineered clay fill and grading to formation level, followed by placement of sub-grade aggregate material, and installation of nominal 200 mm thick re-enforced concrete pad. The pad will be laid with falls of 1(v) in 100(h) to the northeast (Phase 1) and southwest (Phase 2) as shown on **Drawing 3 – Layout of OWC Facility**. The windrows will be aligned in the direction of drainage so as not to impede flow.

The Composting Pad will have a 300 mm high reinforced concrete kerb around the margin increased to 500 mm on the down slope margins. All joints will be fully sealed.

Biffa will avoid the use of buried pipes and drains, which would otherwise get readily clogged with compost. The use of open channels and short large diameter pipes will be used whenever possible which can be visually inspected and readily/manually maintained.

3.1.2 Surface Water Lagoons

Two surface water lagoons will be constructed along the northeast and southwest edges of the compost pad serving Phase 1 and Phase 2 respectively. The surface water lagoons will be constructed with a engineered clay liner and/or a geomembrane liner.

The Composting Pad and lagoons will be graded such that incident rainfall that is not absorbed by the compost or released during the composting process (as steam) will be directed to the northeast or southwest boundaries which in turn will drain to the lagoons. The lagoon and pad will have sufficient capacity to manage all surface water generated including allowance for the effects of climate change.

Water accumulating in the lagoons may be spray irrigated back onto the compost windrows to maintain moisture levels necessary for composting.

3.1.3 Leachate Storage Tank

Excess leachate from landfill operations at Eye Landfill that cannot be managed on Site is removed from site by road tanker for disposal at an appropriately authorised facility. Leachate is pumped to an above ground storage tank at the Site Reception from where it is transferred to road-going tanker for removal.

This tank will be re-positioned on the Compost Pad and accessed from the loading bay. This tank will also be used for the transfer of surface water (compost liquor) that cannot be managed on Site from the surface water lagoons to road-going tanker for disposal at a suitably permitted facility.

3.2 Lagoon Design/Mitigation

For the purpose of this assessment and the inclusion of appropriate climate change allowance, an assumed lifespan to 2040 is assumed for the development.

The surface water lagoon has been designed to provide sufficient capacity to satisfactorily deal with surface water run-off from the green waste OWC Facility in a 1 in 100 year storm event.

Calculations to support the design of the lagoon to the north of the Site are presented in **Appendix FRA1**. These calculations are based upon rainfall estimates from a worst case 1 in 100 year storm event taken from the Flood Estimation Handbook Web Service (FEH, 2021). The catchment area of Peterborough has a 6 hour 1 in 100 year storm rainfall event of 89.90 mm. A climate change allowance of 20% has been applied in accordance with a site lifetime to 2040.

Using the methodology from the CIRIA SuDS Manual (CIRIA, 2015), for the 1 in 100 year return period storm +20% climate change, the rainfall storage volume required for each lagoon is 1,386 m^3 (total of 2,772 m^3 for both lagoons based on the total contributing area of 2.5 ha).

If water recirculation use and associated evaporation losses are discounted (which is a conservative assumption as a good proportion of the recirculated water would be absorbed by the compost material) and it is assumed that the quality of the water accumulating in the lagoon will not meet the parameters for discharge via the permitted landfill site surface water outfalls, these volumes will have to be removed from site by suction tanker.

The maximum volume one suction tanker can remove is around 34 m^3. It will therefore take 82 tankers to empty the lagoon in a 100 year return period storm +20% climate change. It can be expected that each tanker will make a return trip in an hour – with two tankers in operation and 11 trips per day each it would take up to four days to empty the lagoons.

It is likely that storms of lesser magnitude would be expected within two/three days of a major storm (above) whilst tanker operations are in place, which may result in the lagoon further flooding. Therefore, it is proposed that the lagoon should be 1.5x the maximum 1 in 100 year storm event +20% for climate change i.e. 4,158 m^3 (2,079 m^3 per lagoon).

3.3 Residual Risks

There is the possibility of a flood in excess of the design standard (1.5x the maximum 1 in 100 year storm event +20% for climate change) that, if occurred, might conceivably cause some flooding to the development. However, such an event would have a very low probability and the risk of flooding impacts to surrounding areas at Eye Landfill would be extremely small. It is therefore considered that the residual risk associated with flooding are not significant.

4.0 ASSESSMENT OF EFFECTS

4.1 Surface Water Flows

Surface water run-off from the OWC facility will be contained within a closed system.

4.2 Climate Change

Environment Agency climate change guidance for the National Planning Policy Framework (EA, 2021) indicates that climate change is likely to have an impact on river flows, sea levels, rainfall intensity, wave height and wind speed, therefore, the risk of flooding is likely to increase in the future. Precautionary climate sensitivity ranges from the Environment Agency guidance are shown below in **Table FRA3**.

Table FRA3: Climate Change Sensitivity Ranges

Applies across all of England	Total Potential Change Anticipated for '2020s' (2015 to 2039)	Total Potential Change Anticipated for '2050s' (2040 to 2069)	Total Potential Change Anticipated for '2080s' (2070 to 2115)
Upper End	10%	20%	40%
Central	5%	10%	20%

Given the site has a proposed lifetime to 2040, climate change has been included within the calculations at up to 20%. This is also within the range predicted specifically for the Nene Management Catchment within the River Basin Management Plan (up to 17% to the 2050s).

4.3 Drainage Systems

The capacity of the wider landfill, together with the level of predicted flows through the system as a whole, means that climate change effects are unlikely to increase the risk of flooding from the landfill to the proposed OWC Facility to any significant degree.

4.4 Fluvial Flooding

Predicted increases in rainfall due to climate change could mean that there will be higher flows and water levels in the watercourses. The combination of these potential effects could therefore result in an increased risk of fluvial flooding downstream from the Cat's Water Drain. However, the Cat's Water Drain is a deep mostly dry incised channel managed by the Internal Drainage Board. It is considered that climate change effects are unlikely to increase the risk of fluvial flooding to any significant degree.

4.5 Run-off

The OWC Facility is designed as a closed system with surface water lagoons designed to store 1.5x the maximum 1 in 100 year storm event +20% for climate change. It is considered that climate change effects are unlikely to increase the risk of flooding due to surface water run-off to any significant degree.

5.0 SEQUENTIAL TEST

5.1 Overview

The overall aim of the Sequential Test is to steer new development to Flood Zone 1. Where there are no reasonably available sites in Flood Zone 1, local planning authorities allocating land in Local Plans or determining planning applications for development at any particular location should take into account the flood risk vulnerability of land uses and consider reasonably available sites in Flood Zone 2, applying the Exception Test if required. Only where there are no reasonably available sites in Flood Zones 1 or 2 should the suitability of sites in Flood Zone 3 be considered, taking into account the flood risk vulnerability of land uses and applying the Exception Test if required.

5.2 Sequential Test

With reference to Annex 3 of the NPPF, *Flood Risk vulnerability classification*, '*Waste Treatment*' is classified as a '*Less Vulnerable*' use. Such a development is appropriate within Flood Zone 1. The proposed development in this case is located within Flood Zone 1 and therefore satisfies the Sequential Test.

5.3 Exception Test

As the proposed development satisfies the Sequential Test it is not necessary to apply the Exception Test.

6.0 CONCLUSIONS

The risk of flooding within or adjacent to the proposed OWC Facility will be effectively mitigated by the proposed contained drainage design and arrangements for ensuring that adequate capacity is maintained.

7.0 REFERENCES

1) Defra, 2021. MAGIC website. https://magic.defra.gov.uk/. Accessed on 30 June 2021.

2) Environment Agency, 2021. https://www.gov.uk/guidance/flood-risk-assessments-climate-change-allowances

3) FEH, 2021. https://fehweb.ceh.ac.uk/. Accessed on 28 September 2021.

Signature Page

Golder, member of WSP

Nicola White
Project Manager

Chris McDonald
Project Director

Date: 3 March 2022

NW/CM/ab

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APPENDIX FRA1

Lagoon Storage Calculations

Design Criteria

Pond to contain the runoff volume from the 6-hour 1 in 100 year rainfall event, assuming no withdrawals.
Pumping capacity to remove 6-hour 1 in 100 year runof volume in 24 hours.

Pond Sizing Calculations

6-hr 1 in 100 yr storm

Catchment area	12850	m² (all paved)
Paved area runoff coefficient	1.00	
6-hr 1 in 100-year rainfall	89.90	mm
Climate change allowance	20%	
Runoff volume	1386.258	m3

Pond Dimensions

Assumptions

Pond lining	concrete	
Side slopes	0	H: 1V (vertical walls)
max. length	80	m
max. water depth	5.0	m
dead storage depth	1.0	m (for sediment, pumping)
min. freeboard	1.0	m (for wave action, exceedance floods)

Depth (m)	Width (m)	Length (m)	Area (m2)	Volume (m3)	
0	10	52	520	0.0	
1	10	52	520	520.0	top of dead storage
2	10	52	520	1040.0	
3	10	52	520	1560.0	
4	10	52	520	2080.0	
5	10	52	520	2600.0	bottom of freeboard
6	10	52	520	3120.0	

active storage volume	2080.0	m3	
required storage volume	2079	m3	4158.774
	ok		

Pumping rate

6-hr 1 in 100-year runoff volume	1386.258	m3
Required emptying time	24	hr
Required pumping rate	57.8	m3/hr
	0.016	m3/s

GOLDER

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APPENDIX F

Bioaerosol Risk Assessment (.603)

REPORT

Biffa Waste Services Ltd

Eye Landfill - Green Waste Open Windrow Composting Facility

Bioaerosol Risk Assessment

Submitted to:

Biffa Waste Services Ltd

Coronation Road
Cressex
High Wycombe
HP12 3TZ

Submitted by:

Golder, member of WSP

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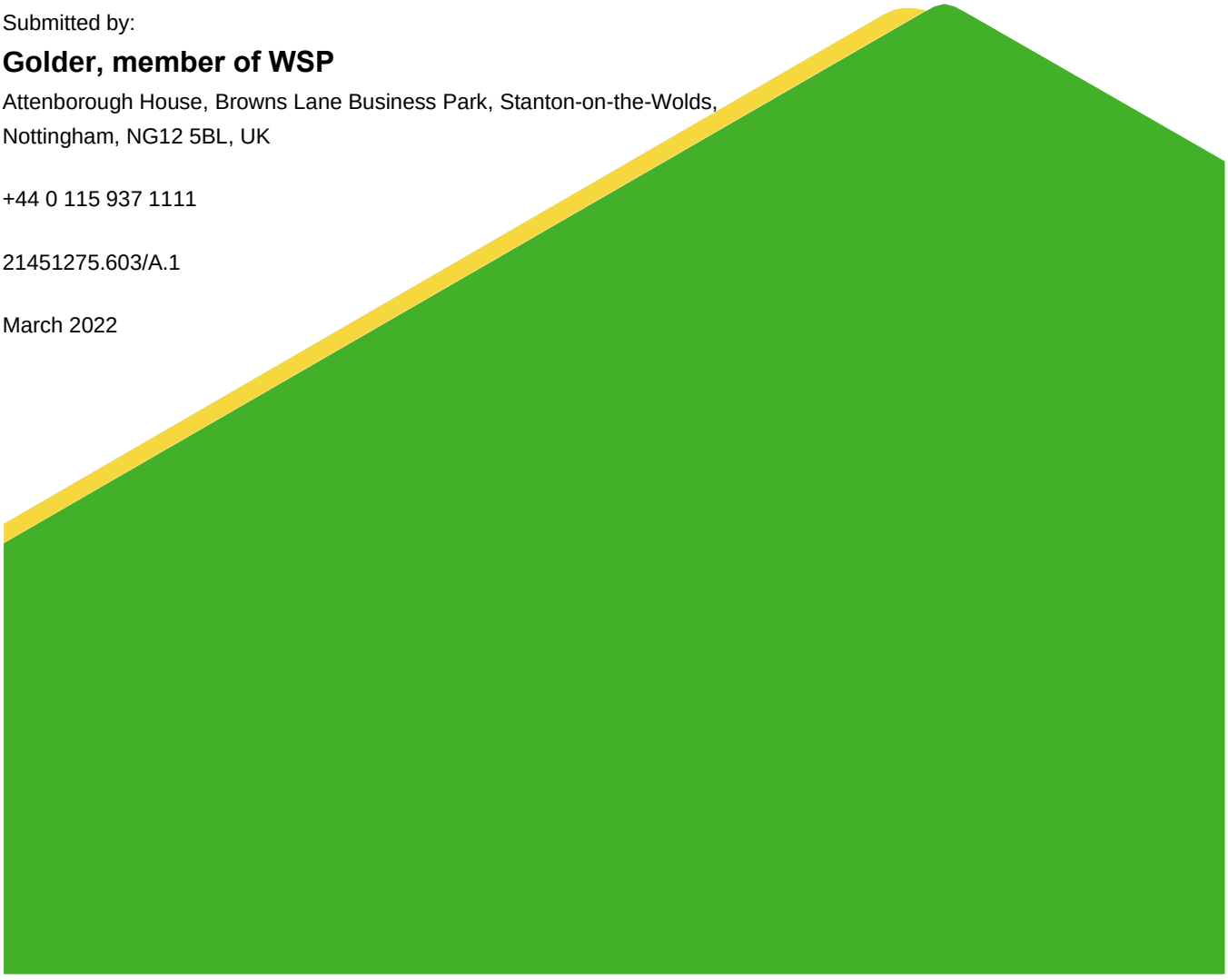
March 2022



Distribution List

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Peterborough City Council - 1 copy (pdf)

Golder, member of WSP - 1 copy (pdf)

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FIGURES

1.0 INTRODUCTION

1.1 Background

Golder Associates (UK) Ltd (Golder) has been requested by Biffa Waste Services Ltd (Biffa) to prepare a Bioaerosal Risk Assessment (BRA) for the proposed development and operation of a green waste Open Windrow Composting (OWC) Facility (the 'OWC Facility') at Eye Landfill, Eyebury Road, Eye, Peterborough, Cambridgeshire, PE6 7TH (the 'Site').

Composting is a process of controlled biological decomposition of biodegradable materials under managed conditions that are predominantly aerobic and that allow the development of thermophilic temperatures as a result of biologically produced heat that convert the inputs to compost and/or mulch. Open windrow composting operations include the storage, physical treatment and composting of specified biodegradable wastes. The composting will be carried out in an open (outdoor) system i.e. turned windrows, and under predominantly aerobic conditions and not under deliberately anaerobic conditions.

This report has been prepared to evaluate the potential risks to human health from bioaerosols and has been prepared in accordance with the Environment Agency's '*Guidance on the evaluation of bioaerosol risk assessments for composting facilities'* (2009).

Reference is also made to drawings that accompany the Supporting Statement.

1.2 Project Description

Vehicles delivering green waste to the OWC Facility will use the existing site access from Eyebury Road and 700 m long entrance road leading to the Site Reception and weighbridge. The Site Reception includes employee and visitor parking.

All waste shall be stored and treated on an impermeable surface with sealed drainage system. The Compost Pad will be approx. 200 m x 128.5 m with two surface water storage lagoons approx. (2 x 2,080 m^3) along the northeast and southwest edges. The Facility will comprise a closed system designed to prevent run-on and with appropriate gradients, kerbs, and engineered lagoons to provide containment and the storage capacity required for management of surface water and flood risk.

The Compost Pad and surface water lagoons will be constructed at or just above (<1.0 m) existing ground level. The Pad will drain to the lagoons under gravity. Water accumulating in the lagoons may be spray irrigated back onto the compost windrows to maintain moisture levels necessary for composting.

Composting operations will include:

- Waste acceptance and inspection;
- Shredding and screening, with materials placed in a windrow;
- Aeration and turning of windrows such that the green waste passes progressively through the site, going through sanitisation and stabilisation (and optional maturation) stages; and
- Screening to provide compost product and dispatch. Most product will be dispatched in bulk Heavy Commercial Vehicle (HCVs).

There is an existing Recycling Shed used in recycling operations with current planning permission for use until 31 December 2021. Biffa is applying to retain the Recycling Shed for use in OWC operations including the storage of plant and equipment and small amounts of bagged compost product.

Excess leachate from landfill operations at Eye Landfill that cannot be managed on Site is removed from site by road tanker for disposal at an appropriately authorised facility. Leachate is pumped to an above ground storage tank at the Site Reception from where it is transferred to road-going tanker for removal.

This tank will be re-positioned on the Compost Pad and accessed from the loading bay. This tank will also be used for the transfer of surface water (compost liquor) that cannot be managed on Site from the surface water lagoons to road-going tanker for disposal at a suitably permitted facility.

Compost will be produced in accordance with PAS 100:2018 which is a Publicly Available Specification (PAS) that sets out requirements for the process of composting, the selection of input materials, the minimum quality of composted materials and the storage, labelling and traceability of compost products. It specifies requirements for a Quality Management System (QMS) for the production of composts to ensure they are consistently fit for their intended uses. It also requires Hazard Analysis and Critical Control Point (HACCP) assessment, which the composter takes into account when developing, implementing and reviewing the QMS

1.3 Bioaerosols and Health Impacts

Bioaerosols consist of airborne particles which contain micro-organisms such as bacteria, fungi and viruses or parts of living organisms, such as plant pollen, spores and endotoxins from bacterial cells or mycotoxins from fungi. They are generally less than 10 µm in size and are not filtered out by hairs and specialised cells that line the nose. Due to their airborne nature and small size, many bioaerosols can penetrate the human respiratory system (EA, 2009).

Bioaerosol exposure has been associated with human health effects, including respiratory illness (inflammation of the respiratory system, coughs and fever), gastrointestinal illness, eye irritation and dermatitis. Of particular concern at waste management facilities is aspergillosis, which is caused by *Aspergillus fumigatus* and has been reported to cause severe respiratory infections and long term chronic respiratory conditions (EA, 2009; EA, 2018).

2.0 SITE DESCRIPTION AND ENVIRONMENTAL SETTING

2.1 General

Eye Landfill is located at Eyebury Rd, Peterborough PE6 7TH, approximately 1 km southeast of the village of Eye and approximately 4 km east of Peterborough and is owned and operated by Biffa Waste Services Ltd. The centre of the landfill (**Drawing 1 – Site Location and Land under Applicant's Control**) lies at National Grid Reference TF 238 020 and covers a total area of approximately 82 hectares (ha) and consists of four areas of landfill, as follows:

- The Central Area (~24 ha) was filled with putrescible waste from 1982 to 2000 and has been restored.
- The Northern Extension (~7 ha) was filled with non-hazardous waste and with some asbestos between approximately 2000 and 2005 and has been restored.
- The Northeastern Extension (~11 ha) was filled with non-hazardous waste between approximately 2005 and 2011 and has been restored.
- The Southern Extension (~15 ha) is the current operational landfill area for non-hazardous and stable non-reactive hazardous waste (i.e. asbestos waste).

Eye Landfill also has the following infrastructure and features:

- A Wildlife Corridor to the east of the Southern Extension to mitigate ecological impacts of its development. The Wildlife Corridor sits astride the path of a high voltage transmission line passing SSW to NNE.

- The Cat's Water Drain is a natural watercourse along the eastern boundary which flows southwards. It is maintained by the District Internal Drainage Board (IDB) and has been canalised adjacent to the Site.
- An 'Archaeological Exclusion Zone' between the Northern and Northeastern Extension Areas.
- 'Clean Water Lagoon' is a large lake located between the Central Area and the Southern Extension.
- The Green Wheel footpath passes west to east to along the northern edge of the Clean Water Lagoon.
- Gas Utilisation Compound and two Leachate Storage Lagoons.
- Miscanthus Beds for the treatment of leachate.
- Site Reception (including office, two weighbridges, welfare facilities and car park).
- Recycling Shed with a permit for waste transfer and materials recycling activities; and
- Silt Lagoons to the north and northeast of the Site Reception.

2.2 Topography

The Ordnance Survey Map Sheet 142 for Peterborough and Surrounding Area indicates that the topography is very flat with an approximate elevation of 4 metres above Ordnance Datum (m AOD).

2.3 Access

Eye Landfill is accessed along a 700 m entrance road from Eyebury Road.

2.4 Southern Extension Landfill and Miscanthus Beds

The Southern Extension Area is approximately 39.5 ha and was formed by extraction of sand and gravel from 1966 with infilling and partial restoration of the void with various materials from 1978. The Southern Extension comprises three distinct areas:

- Area 1 is approximately 5 ha and was historically filled with both inert and domestic waste, with no engineered containment, to flat lying surrounding ground levels. The Area is uncapped and is an area of rough grassland.
- Area 2 is approximately 11 ha and was excavated for sand, gravel and the underlying clay leaving in part an open void which is partially flooded (with water levels currently controlled by pumping). It is being developed for non-hazardous waste disposal (Cells 1, 2, 3, 6, 7, 8).
- Area 3 is approximately 23.5 ha and was variously excavated (from 1966) and then backfilled filled (from 1978). Site investigation records show that it was backfilled with primarily inert fill (with some non-hazardous waste materials) and has no engineered containment or capping. It was backfilled to surrounding ground levels and was returned to agricultural use many years ago. Part of Area 3 has subsequently been developed for non-hazardous waste disposal (Cells 4, 5) and another part of Area 3 has been used for the development of Miscanthus Beds for the treatment of landfill leachate. Other parts of Area 3 remain in agricultural use.

2.5 Wildlife Corridor

Historically, some parts of Southern Extension Area were left without significant disturbance after quarrying and before landfill operations and, as such, developed into a diverse mosaic of habitats including ponds. Consequently, Biffa developed a Wildlife Corridor to the east of the Southern Extension and to the west of the Cat's Water Drain to mitigate and compensate ecological impacts of landfill development. The Wildlife Corridor sits astride the path of a high voltage transmission line passing SSW to NNE. The Wildlife Corridor remains actively managed by Biffa and is highly regarded by stakeholders.

2.6 Environmental Receptors

The Site is located in a sparsely populated area, with houses and small mixed groups of residential properties with farm and commercial buildings on Eyebury Road (to the west), Oxney Road (to the south) and Willow Hall Lane (to the east). Key receptors are located as follows (distances measured from the Composting Pad):

- America Farm Cottage – 520 m to S;
- America Farm Commercial Estate – 350 m to SSW;
- Owls Rest and Walnut Lodge – 610 m to SE;
- Willow Holt – 1,190 m to E;
- Willow Hall Farm and commercial property – 1,290 m to E;
- Tanholt Farm – 260 m to N;
- Tanholt Farm (out buildings) – 260 m to N;
- Tanholt Cottage – 365 m to NNW;
- Eyebury Cottages and new residential property – 610 m to NW;
- Eyebury Farm – 680 m to NW;
- Oxney Grange - 850 m to WSW;
- Amblewood Kennels & Residential Properties – 380 m to S

Statutory Designated Receptors (distances measured from Composting Pad) are as follows:

- Eye Gravel Pit (SSSI) – 2,130 m to N;
- Eye Green (LNR) – 1,710 m to N;
- Dogsthorpe Star Pit (SSSI) – 1,980 m to NW;
- Dogsthorpe Star Pit (LNR) – 1,980 m to NW;
- Nene Washes (SPA) – 2,830 m to S and SE;
- Nene Washes (Ramsar) - 2,830 m to S and SE; and
- Nene Washes (SAC) – 3,150 m to SSE.

Three County Wildlife Sites (CWS) were recorded within the desk study the details of which are provided in **Table BRA1** and as **Figure BRA1** below.

Table BRA1: County Wildlife Sites

Site name	Grid Reference	Area (ha)	Reason for Designation
Cats Water Drain	TL227989 - TF245021	1.46	*This site qualifies because it supports at least five species of submerged, floating and emergent vascular plant per 20 metre section.*
Eye Green Gravel Pit	TF231034	13.09	*This site qualifies for its habitat mosaic (site of more than 10 ha in extent which supports three or more semi-natural habitat features).*
Eyebury Road Pits	TF2301	25.08	*The site contains standing water bodies with 15 submerged, floating and emergent species and is a site of more than 10 ha in size which supports three or more habitat features in close association.*

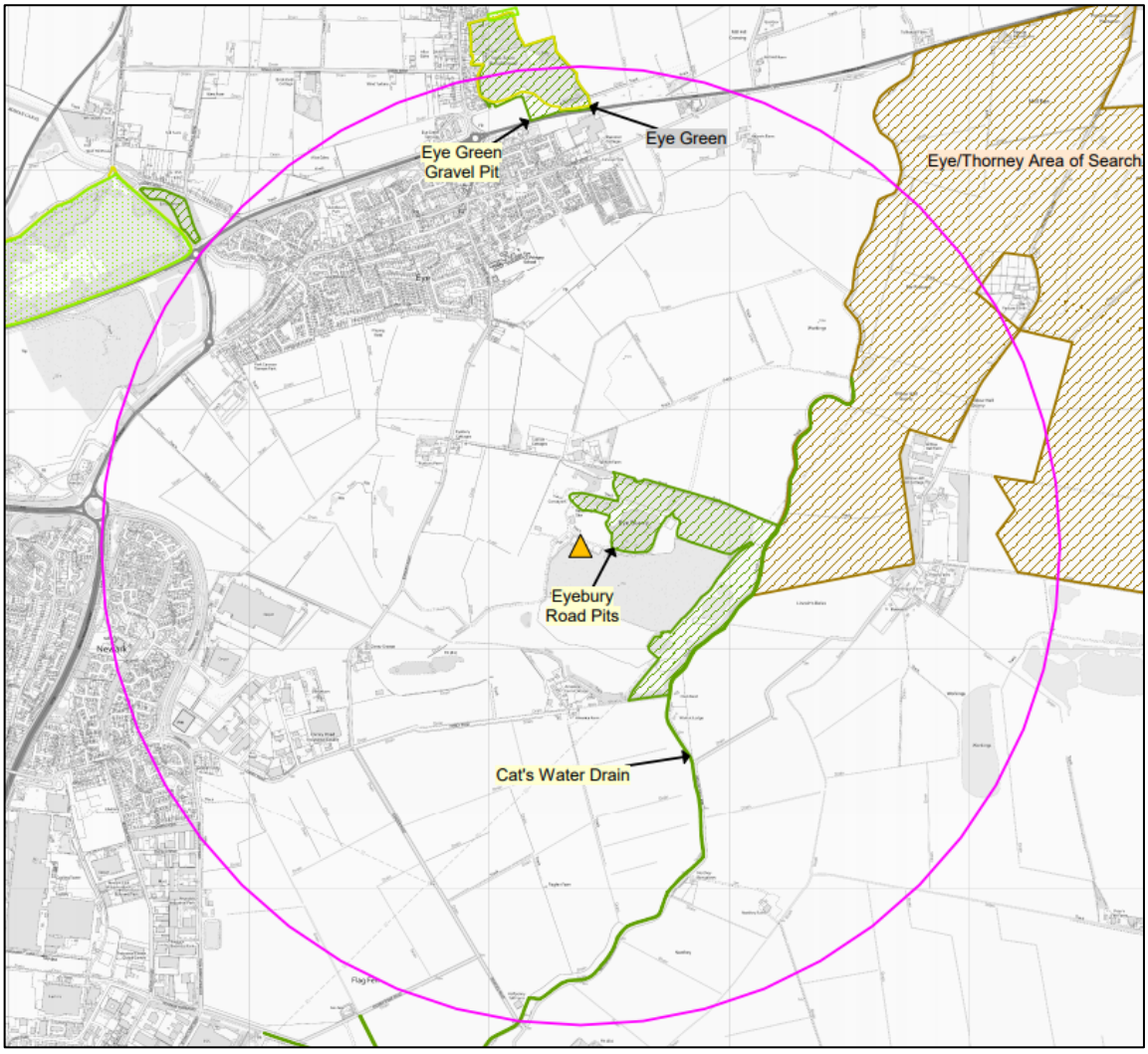

Figure BRA1: County Wildlife Sites within 2 km of the Site

Eyebury Road Pits CWS occupies areas silt lagoons to the north and northeast of the application boundary, the lakes further to the northeast, and overlaps the Wildlife Corridor on the eastern side. It is important to note that the CWS is designated for the presence of aquatic, emergent and marginal aquatic vegetation. As such, there are no habitat synergies between the CWS and the footprint of the OWC Facility and the areas between them which is dominated by operational landfill and hard bare ground.

2.7 OWC Operations

A detailed description of the development and operation is provided in the Supporting Statement.

The maximum capacity of the Site in accordance with the Environmental Permit is proposed to be 75,000 tpa. The actual throughput of the site is proposed to be 50,000 tpa. The OWC Facility will operate six days per week excluding eight Bank Holidays i.e. 304 operational days per year.

Waste shall only be accepted if it is of a type listed in accordance with the requirement of an Environmental Permit with Standard Rules SR2021 No 1 'Composting in Open Systems - Installations'. The types of waste that will be accepted include green wastes and animal manures but do not include any catering waste or wastes containing any other animal by-products that are covered by the Animal By-Products Regulations.

2.8 Meteorological Conditions

The closest Meteorological Station is Wittering located about 18 km west of the Site. Five years of meteorological data between 2016 and 2020 show the predominant wind direction to be from the southwest. The wind rose is presented in **Figure BRA2** and **Table BRA2** shows the percentage of wind direction of the five year period.

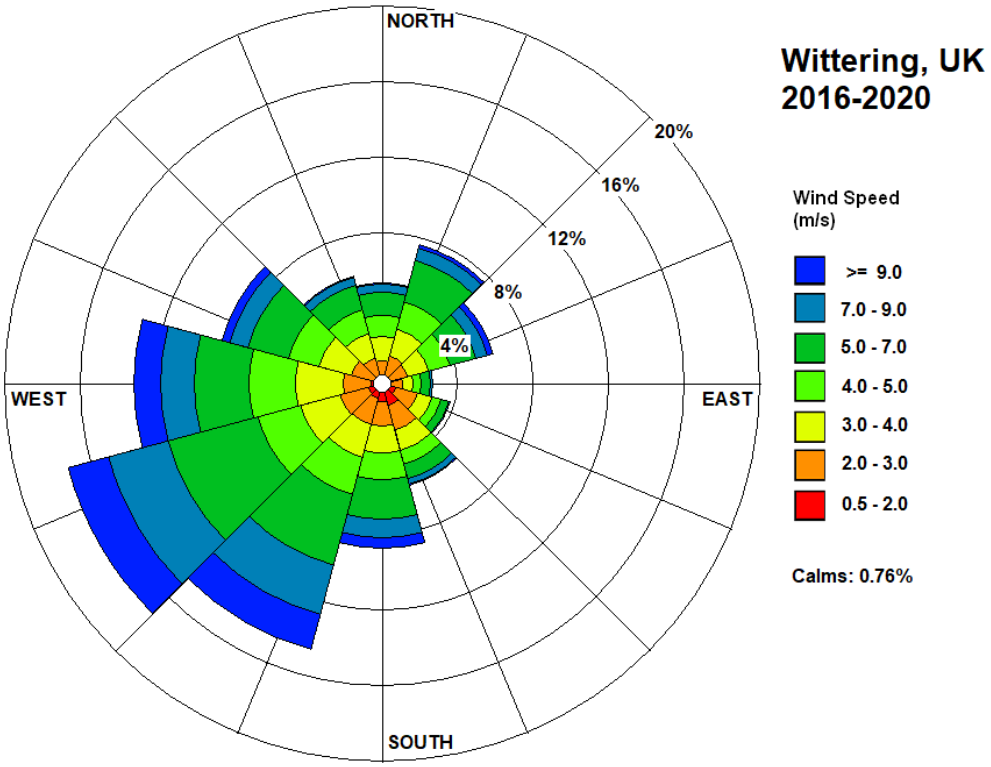

Figure BRA2: Wittering Windrose 2016 to 2020

Table BRA2: Wind Direction Occurrence (%) at Wittering

Wind Direction	Degrees	Occurrence %
North	346 - 15	5.3
NNE - NE	16 - 45	7.6
NE - ENE	46 - 75	6.1
East	76 - 105	2.7
ESE - SE	106 - 135	3.7
SE-SSE	136 - 165	5.6
South	166 - 195	8.7
SSW - SW	196 - 225	14.5
SW - WSW	226 - 255	17.2
West	256 - 285	13.1
WNW - NW	286 - 315	8.8
NW-NNW	316 - 345	5.9

2.9 Sensitive Receptors

Key sensitive receptors are given in **Table BRA3**.

Table BRA3: Sensitive Receptors

Receptor	Type	Distance (m)	Direction from Site
America Farm Cottage	Residential	520	S
America Farm Commercial Estate	Commercial	350	SSW
Owls Rest and Walnut Lodge	Residential	610	SE
Willow Holt	Residential	1,190	E
Willow Hall Farm	Residential and Commercial	1,290	E
Tanholt Farm	Residential	260	N
Tanholt Farm (out buildings)	Commercial	260	N
Tanholt Cottage	Residential	365	NNW
Eyebury Cottages and new property	Residential	610	NW
Eyebury Farm	Residential	680	NW
Oxney Grange	Residential	850	WSW
Kennels & Residential Properties	Residential and Commercial	380	S
Eye Green	LNR	1,710	N
Dogsthorpe Star Pit	SSSI	1,980	NW
Dogsthorpe Star Pit	LNR	1,980	NW
Nene Washes	SPA	2,830	S and SE
Nene Washes	Ramsar	2,830	S and SE
Nene Washes	SAC	3,150	SSE

3.0 RISK ASSESSMENT

3.1 Methodology

The methodology to evaluate the potential risks associated of the OWC Facility from bioaerosols to human health has been taken from the Environment Agency *Guidance on the evaluation of bioaerosol risk assessments for composting facilities* (2009). This involves four stages:

- **Hazard Identification** - The situation that could lead to harm. Including what sources of hazard(s) are present and what are their properties/what data is available? Is this substance toxic (or situation hazardous) and how toxic (hazardous) is it?
- **Exposure Assessment** - Evaluate the plausibility of the hazard being realised at the receptor - by which mechanisms, allowing an assessment of the probability, magnitude and duration of exposure. Who (or what) is exposed, how long and often?

- **Risk Estimation** - Of what relative scale is the probability and extent of possible harm? How big a risk is this? This includes the probability and frequency of a hazard being present, potential pathways and possible harm.
- **Risk Characterisation** - How significant is the risk and what are the uncertainties?

These four stages are considered below.

3.2 Hazard Identification

Bioaerosol is (EA, 2009) a general term to describe micro-organisms suspended in the air. These micro-organisms include fungi and bacteria, as well as their components such as mycotoxins, endotoxins and glucans. Bioaerosols are generally less than 10 µm in size and are not filtered out by hairs and specialised cells that line the nose. Due to their airborne nature and small size, many bioaerosols can penetrate the human respiratory system, resulting in inflammatory and allergic responses.

Although bioaerosols are ubiquitous, waste and waste management operations provide environments that are conducive to their growth, particularly composting, which requires micro-organisms to support the process. Bioaerosols are therefore certain to be associated with composting, and in particular, activities such as shredding and turning, which release the micro-organisms into the air.

The Environment Agency's current policy position on composting and potential health effects from bioaerosols (2007) is that they will: "*take into account the potential effects of bioaerosols on human health when authorising new waste composting facilities or changes to existing facilities. To do this, applicants will have to provide us with a site-specific bioaerosol risk assessment if there is a workplace or dwelling within 250 m of the composting site boundary... The assessment must be based on clear scientific evidence and show that bioaerosols can and will be maintained at appropriate levels at any workplace or boundary of a dwelling*"

This site-specific bioaerosol risk assessments provides Biffa with the basis for identifying operational controls on site and allows it to target controls where exposures to significant hazards are of greatest concern. Biffa seeks to demonstrate that the OWC Facility is being operated safely and responsibly without undue risks to public health or to the environment.

Open windrow composting may potentially result in the dispersal of bioaerosols downwind. Bioaerosols may be released through site activities such as shredding, turning and screening, which have been shown to cause episodic release of bioaerosols. Turning of material causes the highest release level due to the movement of compost material. Steam form heat generated from the composting process may also contribute to bioaerosol dispersal and vehicle movements upon dried surfaces may also lead to the raising of dusts.

The hazards from bioaerosol exposure, as discussed below, may include chronic or acute illness.

3.3 Exposure Assessment

3.3.1 Pathways of Exposure

Potential pathways of exposure are:

- Inhalation: breathing via nose or mouth;
- Ingestion: eating or swallowing;
- Absorption: through skin or via the eyes (directly or indirectly);
- Contact: with the surface of the skin or eyes; and
- Injection: by high pressure equipment/contaminated sharp objects.

The most important or significant pathway of exposure from bioaerosols at sensitive receptors within the vicinity of the Site is inhalation.

3.3.2 Potential Emissions Levels

The OWC Facility is subject to development and therefore no site-specific monitoring has been carried out to date; therefore, to consider potential emission levels, SNIFFER Report '*Measurement and Modelling of Emissions from Three Composting Sites*' (2007) has been used to provide monitoring data covering shredding, turning, and screening activities, as well as static emissions from windrows. The monitoring equipment was located at 1.8 m above ground for background samples, to represent the average height of a sensitive receptor. Two bioaerosol species were sampled within this report, Actinomycetes and *Aspergillus fumigatus* for which the Environment Agency's thresholds (EA, 2009) for these species are given in **Table BRA4**.

Table BRA4: Environment Agency Threshold Exposures

Bioaerosol	Threshold (cfu/m^3)	Result if Threshold Exceeded
Actinomycetes	20,000	Work related respiratory disorders at continuous exposures over 100,000 cfu/m^3
Aspergillus fumigatus	100,000 to 1,000,000	Sensitization if exposed repeatedly
	100,000,000	Hypersensitivity Pneumonitis

The SNIFFER Report covered the summer, autumn and winter periods and **Table BRA5** shows the upwind and downwind concentration and process contribution calculated as the difference from both concentrations.

Table BRA5: Potential Bioaerosol Process Contributions from a Windrow Site

	Upwind (cfu/m^3)	Downwind (cfu/m^3)	Process Contribution (cfu/m^3)
Actinomycetes			
Summer	0	7,100	7,100
Autumn	56,900	76,400	19,500
Winter	6,800	8,600	1,800
Aspergillus fumigatus			
Summer	1,300	1,400	100
Autumn	0	1,500	1,500
Winter	0	0	0

The SNIFFER report also provided seasonal bioaerosol concentrations from composting activities. These are outlined in **Table BRA6**.

Table BRA6: Maximum Potential Bioaerosol Emissions from Site Activities

	Summer (cfu/m^3)	Autumn (cfu/m^3)	Winter (cfu/m^3)
Actinomycetes			
On incoming waste	-	766,200	-
Next to incoming waste	-	147,700	6,100
Screening	-	2,460,000	-

	Summer (cfu/m^3)	Autumn (cfu/m^3)	Winter (cfu/m^3)
Shredding	-	-	40,900
Windrow	18,900	-	-
Mature Compost	-	-	4,900
Aspergillus fumigatus			
On incoming waste	-	45,800	-
Next to incoming waste	-	8,700	15,500
Screening	-	6,400	-
Shredding	-	-	7,600
Windrow	8,700	-	-
Mature Compost	-	-	23,500

The SNIFFER Report shows seasonal variation in bioaerosols, with concentrations being highest in the autumn. In addition, the majority of sampled concentrations were shown to be reduced below 1,000 cfu/m^3 by 250 m downwind of the site.

3.3.3 Emissions Classification of Site Activities

An emissions classification can be drawn from the identified Site activities based on the above data. **Table BRA7** below presents the classification and comments regarding each class and activity. Deliveries and operations would be restricted to the currently consented hours of the existing landfill: Monday to Saturdays 07:00 to 18:00 hours; and No working on Sundays and Bank Holidays (i.e. up to 66 hours per week)

Table BRA7: Emissions Classification for Site Activities

Emissions Class	Site Activities	Comments	Hours per week
Low	Vehicle movements, site maintenance, material storge, sampling, testing and quality control of compost, site staff and visitors.	Constant activities but low level of material agitation.	66
Low to Medium	Incoming vehicles carrying green waste and unloading.	Average 8 HCVs per day (15 minutes each). Low to medium level of agitation of newly imported whole green waste material.	12
Low to Medium	Excavator used to organise incoming waste into heaps and remove unsuitable materials.	Campaign-led. One hour per day.	6
Low to Medium	Loading shovel moving green waste from incoming heaps to shredder.	Campaign-led. Two hours per day.	12
Medium	Shredding and screening of green waste and ejection to first windrow.	Campaign-led. Newly imported green waste material. Activity to take place in a designated shredding area.	20

Emissions Class	Site Activities	Comments	Hours per week
High	Excavator lifting, aerating and moving feedstock from one windrow to the next. (Sanitisation Phase)	Campaign-led. Average two hours per day, but not necessarily every day. High instantaneous release of bioaerosols in actively agitating materials.	12
Medium	Excavator lifting, aerating and moving feedstock from one windrow to the next. (Stabilisation and Maturation Phases)	Campaign-led. Average one hour per day, but not necessarily every day.	6
Medium	Loading and screening of composted waste and ejection to heap.	Campaign-led.	6
Low to Medium	Vehicle loading and transportation of finished products.	Average 4 HCVs per day (30 minutes each). Low to medium level of agitation of compost product.	12
Very High	Accidents leading to elevated release events.	Rare due to management systems and processes.	<1

3.4 Risk Estimation

The risk estimation is calculated using the probability of harm and the magnitude of the consequence. Each factor is assigned a score and, from these, the risk is calculated for each potential receptor from operations on site due to bioaerosol release.

3.4.1 Probability of Harm

The probability of harm examines the likelihood of someone being exposed. To determine the probability of exposure, variable factors and criteria must be taken into account, these are outlined in **Table BRA8** and **Table BRA9**.

Table BRA8: Factors Determining the Probability of Harm

Factor	Description
Receptor	The proportion of time that a receptor is present at the location. A receptor is only affected when present. In a residential property, a value of 1 is assumed, equivalent to continual occupancy. At a commercial property, a value of 0.25 is equivalent to slightly more than a 40-hour working week.
Wind Direction	The proportion of time averaged over 1 year that wind blows towards the receptor – no modification is made for wind speed. Probability factors are calculated as the proportion of the time that the wind blows to the receptor from any part of the biological activity for all release cases. Average climatic data is used to calculate wind direction probabilities.
Emission Classification	Classification as to the frequency of bioaerosol release from each identified Site activity. This is identified in **Table BRA7** showing the hours per week of operations for each Site activity.

Table BRA9: Criteria for the Probability of Harm

Probability Classification	Description of Probability
Negligible	Exposure of less than 25 hours per year (0.5 hours per week).
Low	Exposure of 25 to 100 hours per year (<2 hours per week).
Medium	Exposure of 100 to 250 hours per year (<5 hours per week).
High	Exposure of >250 hours per year (>5 hours per week).

Table BRA10: Probability of Harm Factors for Receptors within 1 km

Receptor	Receptor Factor	Distance (m)	Sensitivity Factor*	Direction from Site	% of Wind Blowing to Receptor
America Farm Cottage	1	520	0	S	5.3%
America Farm Commercial Estate	0.25	350	0	SSW	7.6%
Owls Rest and Walnut Lodge	1	610	0	SE	5.9%
Tanholt Farm	1	255	0.25	N	8.7%
Tanholt Farm (out buildings)	0.25	250	0.25	N	8.7%
Tanholt Cottage	1	365	0	NNW	5.6%
Eyebury Cottages	1	610	0	NW	5.6%
Eyebury Farm	1	680	0	NW	5.6%
Oxney Grange	1	850	0	WSW	7.6%
Kennels & Residential Properties	1	380	0	S	5.3%

**The sensitivity factor based on distance is given such that receptors <75 m from activity is 1 reducing in increments of 0.25 until receptors at distances >300 m are 0.*

Based on the factors in **Table BRA10** above, the probability classification has been estimated for the probability criteria using:

$$Weekly\ emission\ hours\ (\text{Table BRA7}) \times \%\ of\ Wind\ Blowing\ to\ Receptor\ \times Receptor\ Factor \times Sensitivity\ Factor\ (based\ on\ distance)$$

Table BRA11 shows the probability of harm at each receptor for each emissions class and associated site activities.

Table BRA11: Probability of Harm at Receptors within 1 km

Receptor	Emissions Classification				
	Low	Low- Medium	Medium	High	Very High
	Vehicle movements, Site maintenance, material storage	Waste reception, shredding	Vehicle loading, transportation of finished products, stabilisation	Screening, windrow formation, windrow turning	Accidents leading to elevated release events
America Farm Cottage	Negligible	Negligible	Negligible	Negligible	Negligible
America Farm Commercial Estate	Negligible	Negligible	Negligible	Negligible	Negligible
Owls Rest and Walnut Lodge	Negligible	Negligible	Negligible	Negligible	Negligible
Tanholt Farm	Low	Negligible	Negligible	Negligible	Negligible
Tanholt Farm (out buildings)	Negligible	Negligible	Negligible	Negligible	Negligible
Tanholt Cottage	Negligible	Negligible	Negligible	Negligible	Negligible
Eyebury Cottages	Negligible	Negligible	Negligible	Negligible	Negligible
Eyebury Farm	Negligible	Negligible	Negligible	Negligible	Negligible
Oxney Grange	Negligible	Negligible	Negligible	Negligible	Negligible
Kennels & Residential Properties	Negligible	Negligible	Negligible	Negligible	Negligible

3.4.2 Magnitude of Consequences

The consequences of the hazard consider the nature of the source, the hazard and the receptor. **Table BRA12** gives an indication of the magnitude of consequences for different bioaerosol concentration exposure. The category of consequence is therefore assigned to the magnitude of risk for assessment based upon levels of micro-organisms expected at or adjacent to the source.

Table BRA12: Magnitude of Consequences

Category	Indicative (cfu/m^3)	Consequence
Negligible	<300	No observable effect on individuals or populations. No effect on local ecosystem, individual species, or local features. Low range of natural environmental levels.
Mild	300 to 1,000	No observable effect on health of individuals. No observable effect at the population level or on local ecosystem. Mid-range of natural environmental levels.
Moderate	1,000 to 3,000	Health effects generally not noted.

Category	Indicative (cfu/m^3)	Consequence
		Short term: no significant impacts on robust individuals, populations or ecosystems. Potential minor health or nuisance impacts for vulnerable individuals (frail/elderly/sick). Continuous long term: robust individuals unaffected. Potential health effects on vulnerable individuals (frail/elderly/sick). No observable effect on local ecosystem. Upper-range natural environmental levels.
High	3,000 – 10,000	Short-term: no significant impacts on robust individuals. Vulnerable individuals affected including welfare and nuisance. Continuous long term: vulnerable individuals affected including health, welfare and nuisance. Potential effects on population structure or size and local ecosystem impacts possibly detectable. Equivalent to occupational exposure levels. High range of natural environmental levels.
Severe	10,000 – 30,000	Short term and long term: some robust individuals affected including health, welfare, and nuisance. Local dysfunction of communities if continuous. Local ecosystem changes detectable. Short term highest natural environmental levels for specific events e.g. harvesting.
Very Severe	30,000 – 100,000	Probable effects on robust individuals. Widespread effects on the functioning of communities and ecosystems. Rare natural environmental levels.
Extremely Severe	>100,000	Widespread health effects. Impacts on the functioning of regionally important ecosystems. Maximum of natural environmental events.

Based on indicative emission levels discussed in Section 3.3.2 and receptor locations, the magnitude of consequences at the receptor locations is presented in **Table BRA13**. The SNIFFER (2007) report states that concentrations are likely to be reduced to less than 1000 cfu/m^3 by 250 m downwind of release, resulting in all receptors having a mild magnitude of consequence. In the absence of monitoring data, the sum of the average process contribution concentrations of Actinomycetes and *Aspergillus fumigatus* reported in **Table BRA5** and **Table BRA6** (SNIFFER, 2007) were used as a conservative assumption.

Table BRA13: Magnitude of Consequence Risk at Receptors within 1 km

Receptor	Emissions Classification				
	Low	Low to Medium	Medium	High	Very High
America Farm Cottage	Mild	Mild	Mild	Mild	Mild
America Farm Commercial Estate	Mild	Mild	Mild	Mild	Mild
Owls Rest and Walnut Lodge	Mild	Mild	Mild	Mild	Mild
Tanholt Farm	Mild	Mild	Mild	Mild	Mild
Tanholt Farm (out buildings)	Mild	Mild	Mild	Mild	Mild

Receptor	Emissions Classification				
	Low	Low to Medium	Medium	High	Very High
Tanholt Cottage	Mild	Mild	Mild	Mild	Mild
Eyebury Cottages	Mild	Mild	Mild	Mild	Mild
Eyebury Farm	Mild	Mild	Mild	Mild	Mild
Oxney Grange	Mild	Mild	Mild	Mild	Mild
Kennels & Residential Properties	Mild	Mild	Mild	Mild	Mild

3.5 Significance of Risk

By examining the probability of harm (**Table BRA11**) and magnitude of consequence (**Table BRA13**) the magnitude of the risk may be determined using a risk estimation matrix (**Table BRA14**).

Table BRA14: Risk Estimation Matrix

Probability	Magnitude of Consequence						
	Negligible	Mild	Moderate	High	Severe	Very Severe	Extremely Severe
Negligible	1	2	3	4	5	6	7
Low	2	4	6	8	10	12	14
Medium	3	6	9	12	15	18	21
High	4	8	12	16	20	24	28

Categories of tolerability, shown in **Table BRA15**, have been assigned to the estimated risk scores based on the position of the score in the matrix.

Table BRA15: Tolerability Criteria

Level	Criteria
Acceptable	Risks are in the low and low/medium ranges and are likely to be acceptable in all circumstances.
Tolerable	Risks are in the medium range and are likely to be acceptable where best available techniques (BAT) are employed to mitigate risks.
Unacceptable	Risks are in the high and very high range and are unlikely to be acceptable under any circumstances.

Table BRA16 uses the risk estimation matrix to classify the significance of risk from the site operations. The risk assessment indicates the risks to offsite receptors are all at an acceptable level given the distance (≥250 m) to the source. The risk to receptors is classed as tolerable for the emission classifications medium, high and very high, which includes activities such as screening, windrow formation, and turning, as well as accidents.

Table BRA16: Significance of Risk from Site Operations

Receptor	Emissions Classification				
	Low	Low to Medium	Medium	High	Very High
America Farm Cottage	2	2	2	2	2
America Farm Commercial Estate	2	2	2	2	2
Owls Rest and Walnut Lodge	2	2	2	2	2
Tanholt Farm	4	2	2	2	2
Tanholt Farm (out buildings)	2	2	2	2	2
Tanholt Cottage	2	2	2	2	2
Eyebury Cottages	2	2	2	2	2
Eyebury Farm	2	2	2	2	2
Oxney Grange	2	2	2	2	2
Kennels & Residential Properties	2	2	2	2	2

4.0 RISK MITIGATION MEASURES

Best Available Techniques (BAT) should be used where the classification is tolerable to mitigate any risks; however, this classification is not identified for the proposed OWC Facility. Nevertheless, the Best Available Techniques (BAT) Reference Document for Waste Treatment document (2018) outlines techniques to limit diffuse dust, odour and bioaerosols emissions and Biffa will adopt key management measures listed below:

- Covering of green waste in transit to and from the Site.
- Regular housekeeping (e.g. keeping the site, moving machines and loaders in order and clean).
- Site surfaces such as roads and tracks are regularly dampened down and/or swept to suppress dust and bioaerosols. Binders can be used to prolong dust suppression.
- The plant and machinery are well maintained to avoid generation of dust.
- Effective management of moisture, temperature and air supply of all material liable to generate dust and bioaerosols.
- Maintenance of adequate moisture content throughout the composting process to avoid the input feedstocks, composting materials and finished compost drying out and potentially generating dust and bioaerosols when handled.
- Batch irrigation is undertaken when the parameters for moisture content fall below the critical limits. Water is applied evenly.
- Weather conditions and wind direction are monitored and taken into account when undertaking major process activities.

- The formation or turning of windrows or piles as well as screening and shredding are not undertaken in the case of adverse meteorological conditions (e.g. when the wind speed is too low or too high or the wind blows in the direction of sensitive receptors).
- Windrows are orientated to take into account the direction of the prevailing wind. The smallest possible area of composting mass is exposed to the prevailing winds to reduce the dispersion of pollutants from the windrow surface.
- The windrows and piles are preferably located at the lowest elevation within the overall site layout.
- Physical barriers such as earth banks or walls or a tree boundary can reduce dust and bioaerosols emissions leaving a site. The use of enclosures for screens and hoppers can be useful in reducing dust and bioaerosols dispersal.

5.0 CONCLUSION

The risk assessment indicates that the potential impact on all receptors is at an acceptable level given the distance (≥250 m) to the source. The risk to receptors is classed as Acceptable for all emission classifications including high and very high.

The best available techniques outlined above will be used as good practice.

It is recommended that the risk should be reviewed after the first year of operation or sooner if there are any changes to the proposed site design or operations.

6.0 REFERENCES

1) BREF, 2018, Best Available Techniques (BAT) Reference Document for Waste Treatment document, Industrial Emissions Directive 2010/75/EU, Integrated Pollution Prevention and control, doi:10.2760/407967

2) EA, 2018, Environmental monitoring of bioaerosols at regulated facilities, Technical guidance Note (Monitoring) M9, Version 2, Environment Agency.

3) EA, 2009, Guidance on the evaluation of bioaerosol risk assessments for composting facilities. Environment Agency.

4) SNIFFER, 2007, Measurement and Modelling of Emissions from Three Composting Sites.

Signature Page

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3 March 2022

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APPENDIX G

Ecological Appraisal (.602)

REPORT

Biffa Waste Services Ltd

Eye Landfill - Green Waste Open Windrow Composting Facility

Preliminary Ecological Appraisal

Submitted to:

Biffa Waste Services Ltd
Coronation Road
Cressex
High Wycombe
HP12 3TZ

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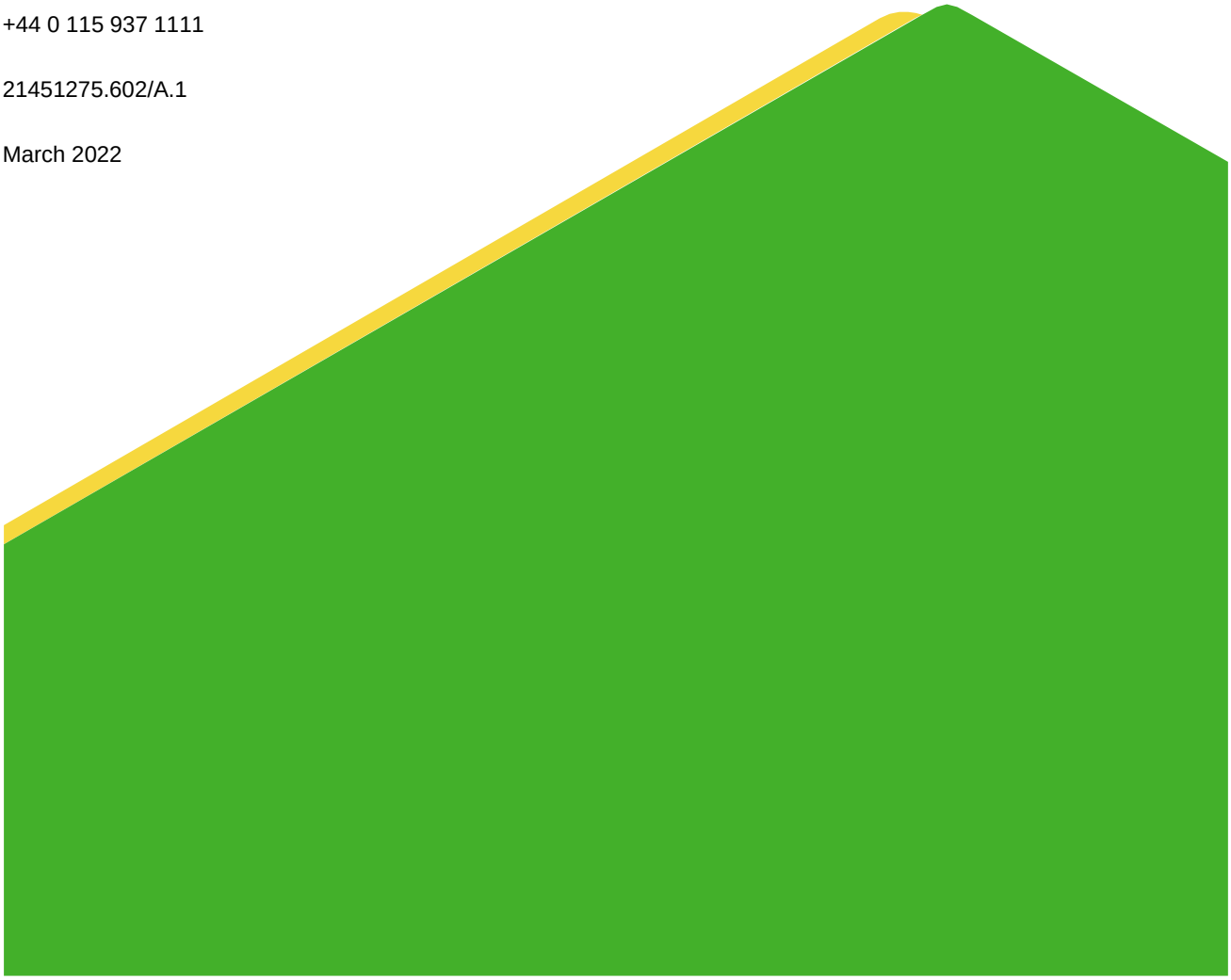
March 2022



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1.0 INTRODUCTION

1.1 General

Golder Associates (UK) Ltd (Golder) has been requested by Biffa Waste Services Ltd (Biffa) to a prepare a Preliminary Ecological Appraisal (PEA) of land proposed for the development and operation of a green waste Open Windrow Composting (OWC) Facility (the 'Facility') at Eye Landfill, Eyebury Road, Eye, Peterborough, Cambridgeshire, PE6 7TH (the Site).

Composting is a process of controlled biological decomposition of biodegradable materials under managed conditions that are predominantly aerobic and that allow the development of thermophilic temperatures as a result of biologically produced heat that convert the inputs to compost and/or mulch. Open windrow composting operations include the storage, physical treatment and composting of specified biodegradable wastes. The sanitisation stage of composting will be carried out in an open (outdoor) system i.e. turned windrows, and under predominantly aerobic conditions and not under deliberately anaerobic conditions.

This PEA is prepared to support both a planning application and standard rules permit application and should be read in conjunction with the Supporting Statement. Reference may also made to drawings that accompany the Supporting Statement.

1.2 Project Description

Vehicles delivering green waste to the OWC Facility will use the existing site access from Eyebury Road and 700 m long entrance road leading to the Site Reception and weighbridge. The Site Reception includes employee and visitor parking.

All waste shall be stored and treated on an impermeable surface with sealed drainage system. The Compost Pad will be approx. 200 m x 128.5 m with two surface water storage lagoons approx. 2,080 m^3 each along the northeast and southwest edges. The Facility will comprise a closed system designed to prevent run-on and with appropriate gradients, kerbs, and engineered lagoons to provide containment and the storage capacity required for management of surface water and flood risk.

The Compost Pad and surface water lagoons will be constructed at or just above (<1.0 m) existing ground level. The Pad will drain to the lagoons under gravity. Water accumulating in the lagoons may be spray irrigated back onto the compost windrows to maintain moisture levels necessary for composting.

Composting operations will include:

- Waste acceptance and inspection;
- Shredding and screening, with materials placed in a windrow;
- Aeration and turning of windrows such that the green waste passes progressively through the site, going through sanitisation and stabilisation (and optional maturation) stages; and
- Screening to provide compost product and despatch. Most product will be despatched in bulk Heavy Commercial Vehicle (HCVs).

There is an existing Recycling Shed used in recycling operations with current planning permission for use until 31 December 2021. Biffa is applying to retain the Recycling Shed for use in OWC operations including the storage of plant and equipment and small amounts of bagged compost product.

Excess leachate from landfill operations at Eye Landfill that cannot be managed on Site is removed from site by road tanker for disposal at an appropriately authorised facility. Leachate is pumped to an above ground storage tank at the Site Reception from where it is transferred to road-going tanker for removal.

This tank will be re-positioned on the Compost Pad and accessed from the loading bay. This tank will also be used for the transfer of surface water (compost liquor) that cannot be managed on Site from the surface water lagoons to road-going tanker for disposal at a suitably permitted facility.

Compost will be produced in accordance with PAS 100:2018 which is a Publicly Available Specification (PAS) that sets out requirements for the process of composting, the selection of input materials, the minimum quality of composted materials and the storage, labelling and traceability of compost products. It specifies requirements for a Quality Management System (QMS) for the production of composts to ensure they are consistently fit for their intended uses.

1.3 Objective

This PEA is provided to inform of potential ecological constraints and opportunities that will influence the development of the Site. This appraisal presents a summary of ecological features that are, or have the potential to be, ecological constraints, or indeed opportunities, to the development of the Site. It also recommends additional survey work that may be required, if applicable.

Planning guidelines, international commitments, legislation and planning policies relevant to the protection, conservation and enhancement of nature conservation interests were taken into account in the process. Priority Habitats and Species listed on Section 41 of the NERC[1] Act 2006 (formerly UK BAP priority species) and habitats and species listed on the local Biodiversity Action Plan (LBAP) form the context for the habitat and, to a certain extent, the species surveys recommended for the Site.

This PEA is also prepared to consider the risk screening criteria, developed by the Environment Agency for issue of an Environmental Permit with Standard Rules SR2021 No1: composting in open systems – installations.

The spatial scope of the PEA is indicated in **Drawing 1 – Phase 1 Habitat Survey** and comprises the land that is being considered for Site development.

2.0 SITE DESCRIPTION AND APPRAISAL CONTEXT

2.1 Eye Landfill

Eye Landfill is located at Eyebury Rd, Peterborough PE6 7TH, approximately 1 km southeast of the village of Eye and approximately 4 km east of Peterborough and is owned and operated by Biffa Waste Services Ltd ('Biffa'). The centre of the landfill lies at National Grid Reference TF 238 020 and covers a total area of approximately 82 hectares (ha) and consists of four areas of landfill, as follows:

- The Central Area (~24 ha) was filled with putrescible waste from 1982 to 2000 and has been restored.
- The Northern Extension (~7 ha) was filled with non-hazardous waste and with some asbestos between approximately 2000 and 2005 and has been restored.
- The Northeastern Extension (~11 ha) was filled with non-hazardous waste between approximately 2005 and 2011 and has been restored.
- The Southern Extension (~15 ha) is the current operational landfill area for non-hazardous and stable non-reactive hazardous waste (i.e. asbestos).

[1] Natural Environment and Rural Communities (HMSO, 2006)

Eye Landfill also has the following infrastructure and environmental features:

- A 'Wildlife Corridor' to the east of the Southern Extension to mitigate ecological impacts of its development. The Wildlife Corridor sits astride the path of a high voltage transmission line passing SSW to NNE;
- The Cat's Water Drain is a semi-natural watercourse along the eastern boundary which flows southwards. It is maintained by the District Internal Drainage Board (IDB) and has been canalised adjacent to the site;
- An 'Archaeological Exclusion Zone' between the Northern and Northeastern Extension Areas;
- 'Clear Water Lagoon' is a large lake located between the Central Area and the Southern Extension;
- The Green Wheel footpath passes west to east to along the northern edge of the Clear Water Lagoon;
- Gas Utilisation Compound and two Leachate Storage Lagoons;
- Miscanthus Beds for the treatment of leachate;
- Site Reception (including office, two weighbridges, welfare facilities and car park);
- A Recycling Shed; and
- Silt Lagoons to the north and northeast of the Site Reception.

2.1.1 Topography

The Ordnance Survey Map Sheet 142 for Peterborough and Surrounding Area indicates that the topography is very flat with an approximate elevation of 4 metres above Ordnance Datum (m AOD).

2.1.2 Access

Eye Landfill is accessed from Eyebury Road along a 700 m entrance road to the Site Reception.

2.2 Southern Extension Landfill

2.2.1 Description

The Southern Extension Area is approximately 39.5 ha and was formed by extraction of sand and gravel from 1966 with infilling and partial restoration of the void with various materials from 1978. The Southern Extension comprises three distinct areas:

- Area 1 is approximately 5 ha and was historically filled with both inert and domestic waste, with no engineered containment, to flat lying surrounding ground levels. The Area is uncapped and is an area of rough grassland.
- Area 2 is approximately 11 ha and was excavated for sand, gravel and the underlying clay leaving in part an open void which is partially flooded (with water levels currently controlled by pumping). It is being developed for non-hazardous waste disposal (Cells 1, 2, 3, 6, 7, 8) and small amounts of stable non-reactive hazardous wastes (asbestos) in dedicated sub-cells.
- Area 3 is approximately 23.5 ha and was variously excavated (from 1966) and then backfilled filled (from 1978). Site investigation records show that it was backfilled with primarily inert fill (with some non-hazardous waste materials) and has no engineered containment or capping. It was backfilled to surrounding ground levels. It is being developed for non-hazardous waste disposal (Cells 4, 5) and small amounts of stable non-reactive hazardous wastes (asbestos) in dedicated sub-cells. Biffa has also developed a series of Miscanthus Beds in parts of Area 3 (wrapped around the southern edge of Cells 4 and 5) which extend to the southern parts of Area 1. All parts of Area 3 to the south of the Miscanthus Beds have been returned to agriculture.

2.2.2 Historical Development and Ecology

The original planning application by Butterley Aggregates Ltd. for landfill development in the Southern Extension was submitted to the planning authority in 1994 with details of the phased development of the Southern Extension. Planning permission (Reference 94/00004/MMFUL) was granted on 7 July 1999 by PCC. The Permission had a number of conditions, including the following:

- Condition 3. *Prior to the commencement of the development hereby permitted an ecological survey to identify the presence of protected species under the Wildlife and Countryside Act 1981 shall be undertaken. If protected species are found a mitigation strategy shall be submitted prior to the commencement of the development, for the written approval of the Local Planning Authority for consultation with English Nature. The development shall subsequently be implemented in accordance with the approved details*; and
- Condition 30. *Prior to the commencement of the development hereby permitted, a detailed scheme showing how the nature conservation value of the lake and former silt lagoons immediately north of the application site will be enhanced shall be submitted to and approved in writing by the Local Planning Authority. Such a scheme shall include the provision of shallow areas within the lake, landscaping and the establishment of a reed bed on the former silt lagoons. The scheme shall also provide for the management of these areas for a minimum period of 5 years from completion of any land forming works, this shall include provision for the replacement of seeding or planting which is removed, dies or becomes diseased, with planting of similar size and species during the next planting season. The development shall subsequently be implemented in accordance with the approved details*.

Ecological assessments and proposals to mitigate and compensate for ecological impacts and to manage ecological areas were submitted to PCC under Conditions 3 and 30 in the following reports and letters (not reproduced here):

- Southern Extension and Lakes, Preliminary Ecological Assessment (Golder, 2007)[2]
- Eye Landfill, Southern Extension and Lakes, Ecological Appraisal Report (Golder, 2007)[3]
- Eye Landfill Southern Extension Area: Mitigation Scheme (Golder, 2007)[4]
- Eye Landfill Southern Extension, Method Statement for Mitigation and Compensation: Water Voles, Bats, Birds, Reptiles and Invertebrate Communities (Golder, 2008)[5]; and
- Eye Landfill, Southern Extension Ecological Management Plan for Wildlife Corridor and Lakes Area, (Golder, 2008)[6].

The works documented in the above reports resulted in a comprehensive mitigation and management scheme that included creation and management of the Wildlife Corridor, the translocation of *inter alia* Great Crested

[2] Golder Associates (UK) Ltd, *Southern Extension and Lakes, Preliminary Ecological Assessment,* 07514290053.501, Version B.0, March 2007;

[3] Golder Associates (UK) Ltd, *Eye Landfill, Southern Extension and Lakes, Ecological Appraisal Report*, 07514290053.502, Version A.0, August 2007;

[4] Letter from Golder Associates (UK) Ltd, *Eye Landfill Southern Extension Area: Mitigation Scheme,* 07514290224.501, dated 29 August 2007;

[5] Golder Associates (UK) Ltd, *Eye Landfill Southern Extension, Method Statement for Mitigation and Compensation: Water Voles, Bats, Birds, Reptiles and Invertebrate Communities*, 07514290224.508, Version A.0, dated May 2008; and

[6] Golder Associates (UK) Ltd, *Eye Landfill, Southern Extension Ecological Management Plan for Wildlife Corridor and Lakes Area,* 07514290053.510, Version A.0, July 2008.

Newt (GCN) from the Southern Extension Area to the Wildlife Corridor and enhancement and management of the Lakes area.

The mitigation and management scheme continues to be managed by Biffa and ecological monitoring is carried out AB Ecology Ltd. Annual ecological monitoring reports have been prepared by Golder and AB Ecology since 2012.

It is important to note that the ecological monitoring report 2020[7] confirms that the GCN fence is maintained and continues to exclude GCN from the Southern Extension Area.

2.2.3 Current Status

Landfilling in the Southern Extension today operates under planning permission 15/01059/WCMM dated 29 June 2015 as amended by Non-Material Amendment 17/01687/NONMAT dated 6 September 2017. Condition C2 states that the permission is for a limited period expiring on 31 December 2021. Biffa is not likely to have completed the site within this timeframe. Biffa anticipates that filling non-hazardous waste will be completed by end March 2023 and will continue to receive small amounts of stable non-reactive hazardous wastes (SNRHW, primarily wastes containing asbestos) until end 2025. Biffa is therefore seeking to obtain permission to extend filling by four years filling (to 31 December 2025) plus two years to complete the restoration (31 December 2027).

This application for OWC Facility does not predicate Biffa obtaining permission to extend the timescale for filling the Southern Extension to 31 December 2025.

3.0 METHODOLOGY

3.1 Background Data Search and Previous Studies

A desk study pertaining to the proposed development of the OWC Facility was undertaken in July 2021 to obtain up-to-date ecological information held by the local biological records centre. The following ecological information was requested from the Cambridgeshire and Peterborough Environmental Records Centre (CPERC):

- Records of non-statutory sites designated for nature conservation value within 2 km of the Site boundary; and
- Records of legally protected and notable species within 2 km of the Site boundary.

Information on statutory sites of nature conservation interest within 5 km of the Site was obtained from:

- Multi Agency Geographical Information for the Countryside (MAGIC) website (http://magic.defra.gov.uk); and
- JNCC website (www.jncc.defra.gov.uk).

Ordnance Survey (OS) and satellite mapping was also used to gain contextual habitat information. To date, a number of ecological studies have been undertaken at the broader landfill site, including Extended Phase 1 habitat surveys, protected species translocations (great crested newt and water vole) and extensive habitat creation projects including the creation of the nearby 'Wildlife Corridor'. The Wildlife Corridor was created to link existing habitats to the north, south and east of the Site such as the network of drains and ditches, including Cat's Water Drain County Wildlife Site (CWS) (forms the eastern boundary of the Wildlife Corridor) and the

[7] AB Ecology Ltd, *Eye Landfill Ecolocgical Monitoring Report 2020*, 2020/001/01, Version V.1, November 2020

Lakes to the north of the Southern Extension Area (part of the Eyebury Road Pits CWS), to facilitate greater migration of species within the local landscape.

3.2 Environment Agency Basic Conservation Screening Report

The Environment Agency provided a Nature and Heritage Conservation Screening Report, dated 27 April 2021 (**Appendix PEA1**). The Screening Report was used to optimise the location of the Compost Pad and it is noted that the Report was centred upon an earlier proposed Pad location, several tens of metres to the east. It identified:

- Protected Habitats – Fens (<50 m); and
- Protected Species – Water Vole (<250 m).

In the accompanying map (**Appendix PEA1**), the Fenland Habitat is identified to be present in the following areas:

- Southern Extension Landfill Cells 1 to 8;
- Miscanthus Beds (Leachate treatment);
- Area 1;
- Cemex's former sand and gravel operations; and
- Silt lagoons.

The Fenland Habitat excludes:

- Site reception, haul road and skip park; and
- Area around a pond to the north of Recycling Shed.

3.3 Preliminary Ecological Appraisal

Survey methods for this PEA were in accordance with CIEEM (2017) '*Guidelines for Preliminary Ecological Appraisal*' (second edition). The Extended Phase 1 Habitat Survey involved Site survey to map all areas of habitat on and up to 50 m from the Site boundary (where access allowed). The survey procedure followed the guidance provided in the 'Handbook for Phase 1 Habitat Survey' (JNCC, 2010).

3.4 Protected Species Assessment

The suitability of habitats to support protected and notable species was assessed at the same time as the Phase 1 Habitat Survey and any incidental evidence of such species was recorded, where encountered. Species that may be present given the Site context and geographical location are:

- Bats;
- Badger;
- Breeding birds;
- Water vole; and
- Great crested newt.

4.0 RESULTS

4.1 Desk Study

4.1.1 Statutory Designated Sites

Statutory Designated Receptors (distances measured from Composting Pad) are as follows:

- Eye Gravel Pit (SSSI) – 2,130 m to N;
- Eye Green (LNR) – 1,710 m to N;
- Dogsthorpe Star Pit (SSSI) – 1,980 m to NW;
- Dogsthorpe Star Pit (LNR) – 1,980 m to NW;
- Nene Washes (SPA) – 2,830 m to S and SE;
- Nene Washes (Ramsar) - 2,830 m to S and SE; and
- Nene Washes (SAC) – 3,150 m to SSE.

All statutory designated sites are over ca. 1.5 km from the Site and there are no ecological pathways between them. Operational areas of the landfill have already been sterilised by the approved construction and landfilling operations and ecological species of conservation concern (water vole and GCN) have already been translocated from the landfill areas and neighbouring habitats under licence from Natural England. These areas are subject to ongoing ecological management including maintenance of the GCN fence. It is concluded that the OWC Facility development will not damage the interests of the SSSIs, SAC, SPA and LNRs within the desk study area and, as such, statutory sites are not considered any further in this report.

4.1.2 Non-statutory Designated Sites

Three County Wildlife Sites (CWS) were recorded within the desk study the details of which are provided in **Table PEA1** and as shown in **Figure PEA1** below.

Table PEA1: County Wildlife Sites

Site name	Grid Reference	Area (ha)	Reason for Designation
Cats Water Drain	TL227989 - TF245021	1.46	This site qualifies because it supports at least five species of submerged, floating and emergent vascular plant per 20 metre section.
Eye Green Gravel Pit	TF231034	13.09	This site qualifies for its habitat mosaic (site of more than 10 ha in extent which supports three or more semi-natural habitat features).
Eyebury Road Pits	TF2301	25.08	The site contains standing water bodies with 15 submerged, floating and emergent species and is a site of more than 10 ha in size which supports three or more habitat features in close association.

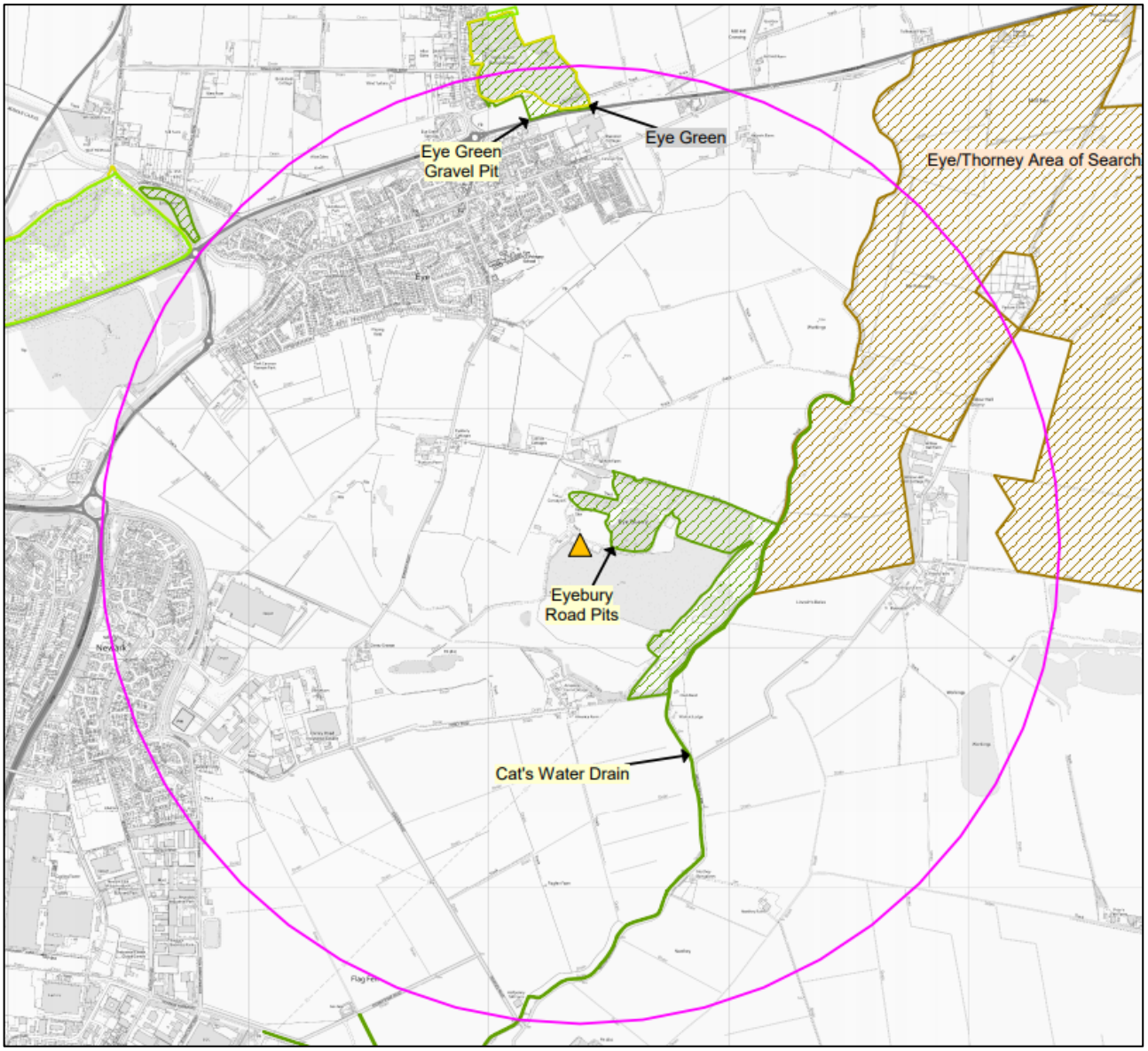

Figure PEA-1: County Wildlife Sites within 2 km of the Site

Eyebury Road Pits CWS occupies areas silt lagoons to the north and northeast of the application boundary, the lakes further to the northeast, and overlaps the Wildlife Corridor on the eastern side. It is important to note that the CWS is designated for the presence of aquatic, emergent and marginal aquatic vegetation. As such, there are no habitat synergies between the CWS and the footprint of the OWC Facility and the areas between them which is dominated by operational landfill and hard bare ground as shown on **Figure PEA2**, **Figure PEA3** and **Figure PEA4**, below.

Figure PEA-2: Typical Site Characteristics (Recycling Area and Shed)

Figure PEA-3: Typical Site Characteristics (Area 1, East of Site Reception)

Figure PEA-4: Typical Site Characteristics (Looking North towards the CWS (flanked by Willow Scrub) in the Distance).

4.1.3 Desk Study Species and Habitats

A total of 1,178 species records were supplied by the local biological records centre. Many of these records were submitted by Golder and AB Ecology Ltd, testament to the level of baseline monitoring and habitat creation that has occurred at Biffa's broader landfill site over the years. Notable records include the presence of great crested newt, water vole, four bat species, two reptile species, 60 species of bird, 35 species of invertebrate and 33 species of flowering plant. Full desk study results are provided in **Appendix PEA2**.

4.2 Habitats

4.2.1 General

Habitat composition within the planning application area is dominated by bare ground and hard standing with ephemeral short perennial habitat also fairly abundant. Discrete areas of ruderal, scrub and grassland made up the habitat composition of this operational Site.

The habitats are described and evaluated below:

4.2.2 Bare Ground and Hard Standing

Bare ground dominates the planning application area. This is testament to the long operational history of the Site and the anthropogenic influence of Site operations are evident (**Figure PEA5**). This habitat type is ubiquitous at the Site level and does not provide elevated biodiversity value.

Figure PEA-5: Bare Ground Dominates the Development Footprint

4.2.3 Ephemeral Short Perennial

Ephemeral short perennial habitat is characterised by short, patchy plants associated with urban or brownfield sites. Habitats on Site included a mixture of low-growing plants, often less than 10 cm high, such as *Plantago major*, Creeping buttercup *Ranunculus repens*, White clover *Trifolium repens* and carpets of bryophytes. Again, this habitat type is ubiquitous at the Site level and does not provide elevated biodiversity value (**Figure PEA6**).

Figure PEA-6: Ephemeral Short Perennial Habitat is Evident Colonising Bare Ground.

4.2.4 Tall Ruderal

This habitat type comprises stands of perennial or biennial dicotyledons often more than 25 cm high, of species such as Common nettle *Urtica dioica* and Reynoutria japonica. Tall ruderal vegetation was noted within the Site. Species included broad-leaved dock *Rumex obtusifolia*, creeping thistle *Cirsium arvense*, *Scrophularia nodosa*, rib-wort plantain *Plantago lanceolata*, black medick *Medicago lupulina*, creeping bent *Agrostis stolonifera*, Yorkshire fog and occasional hard rush *Juncus inflexus*. Again, this habitat type is ubiquitous at the Site level and does not provide elevated biodiversity value.

4.2.5 Scattered Scrub

Scattered scrub is rarely noted within the Site. Species composition included bramble Rubus fruticosus agg., Dog rose Rosa canina and Common nettle Urtica dioica. In some areas woody species such as Goat willow Salix caprea was evident within the scrub. The scattered nature of the scrub combined with the relative low density would not afford optimal bird nesting habitat. The scrub on Site does not represent a significant biodiversity resource (**Figure PEA7**).

Figure PEA-7: Scattered Scrub within the Site

4.2.6 Rank Semi Improved Grassland

Semi-improved grassland is a transition category made up of grasslands which have been modified by artificial fertilisers, slurry, intensive grazing, herbicides or drainage, and consequently have a range of species which is less diverse and natural than unimproved grasslands. **Drawing 1** shows areas that have been colonised by grassland. The sward was represented by Perennial rye-grass *Lolium perenne* grasslands. Other species included creeping bent *Agrostis stolonifera*, creeping buttercup *Ranunculus repens*, rib-wort plantain *Plantago lanceolata*, Yorkshire fog *Holcus lanatus*, rough-stalked meadow grass *Poa trivialis* and creeping thistle *Cirsium arvense* (**Figure PEA8***).* This rank grassland does not provide the scale or diversity to contribute any notable biodiversity resource within the Site.

Figure PEA-8: Rank Semi-improved Grassland in the Southwest of the Site

4.3 Protected Species and Habitat Evaluation

4.3.1 General

Eye Landfill is being actively managed to enhance ecological value where it is created and planned in its restoration and is also being effectively managed to minimise ecological impacts in operational areas. The Site has a long operational history since 1982 and has been an area of quarrying and infilling since the 1960s.

The Southern Extension Landfill has previously been part of a great crested newt translocation (reference: 2014-4536-EPS-MIT-1). This process was undertaken after an exclusion fence had been erected around the Site footprint, which remains to this day, to ensure that great crested newt and other species of conservation concern could not re-colonise the Site having been moved to the receptor site within the nearby Wildlife Corridor. As such, the likelihood of great crested newt and other amphibians and reptiles re-using the landfill footprint is considered to be highly unlikely.

4.3.2 Bats

The silt lagoons to the north and northeast, the Clear Water Lagoon between the Central Area and the Southern Extension and the Wildlife Corridor to the east may afford bat species foraging and commuting potential. Bat species were presented as part of the desk study exercise and the mosaic of aquatic and terrestrial habitat to the north of the Southern Extension provide suitable habitat for bat species. It is also possible that tree roosts exist in woodland near these features. However, this habitat is situated some distance from the Site footprint. No lighting is proposed as part of the development and all composting will take place during daylight hours.

4.3.3 Water Vole

Numerous records of water vole are presented in the desk study results (**Appendix PEA2**). Many of these results were submitted by Golder and AB Ecology Ltd as part of the extensive monitoring and licenced translocation of water vole at the broader site. The Wildlife Corridor has been used as a water vole habitat creation area to receive the water vole and viable populations of this species continue to reside in this area. The Southern Extension Area does not contain aquatic habitats suitable for water vole and this species is certain not to be adversely affected by the OWC Composting Facility. As such, water vole is not considered further within this report.

4.3.4 Herpetofauna

Site conditions are not suitable for reptiles and GCN fencing would prevent Site incursion where there is potential for habitat connectivity toward GCN ponds e.g. the Wildlife Corridor. Residual effects to common reptiles are not expected to occur as part of the Site development and reptiles are not considered further within this report.

4.3.5 Breeding Birds

In total, 60 species of bird have been recorded within the desk study area up to 2 km from the Site. This included several species of conservation concern that are likely to be associated with the neighbouring Wildlife Corridor and other CWS nearby. Bird surveys are undertaken near the operational landfill and broader areas, such as the Wildlife Corridor, as part of annual monitoring undertaken by AB Ecology[8]. According to AB Ecology '*habitats within the Site (Southern Extension Area) are not really suitable for ground nesting birds such as skylark as the habitat is undulating with ruderal growth*'[9].

Skylark prefer undisturbed flat areas of habitat without significant ruderal growth as this can provide cover for potential predators such as fox. The presence of gulls and corvids within the Site and broader landfill also detract from the suitability for ground nesting birds. Areas of ruderal and discrete scrub do not have the structural complexity or age to support non-ground nesting birds. As such, the potential for residual effects to breeding birds is considered to be negligible.

5.0 SCREENING RISK CRITERIA FOR PERMIT WITH STANDARD RULES SR2021 NO 1

Standard Rules SR2021 No1: composting in open systems – installations, when referred to in an Environmental Permit, allow an operator to operate a Part A installation involving the storage, physical treatment and composting of specified biodegradable wastes. The total quantity of waste that can be accepted at a site under these rules must be less than 75,000 tonnes a year. Biffa considers that the standard rules apply as the following screening risk criteria are satisfied (**Table PEA2**)

[8] AB Ecology Ltd, *Eye Landfill Ecolocgical Monitoring Report 2020*, 2020/001/01, Version V.1, November 2020

[9] Adele Antcliffe (AB Ecology), email exchanges with Freddy Brookes (Golder) 20th July 2021.

Table PEA2: Screening Risk Criteria for Standard Rules SR2021 No1.

	Screening Criteria	Pass/ Fail	Commentary
The activities shall not be carried out within:			
a	500 m European Site or SSSI	Pass	The nearest European Sites are Nene Washes (SPA, SAC and Ramsar) 2,830 m to south and southeast. The nearest SSSI is Dogsthorpe Star Pit 1,980 m to northwest
b	Groundwater Source Protection Zone 2, or where an SPZ has not been defined then within 250 m of any well, spring or borehole used for the supply of water for human consumption. This includes private water supplies	Pass	The proposed development is not within a SPZ This is considered in the Supporting statement.
c	250 m of the nearest sensitive receptor	Pass	The nearest sensitive receptor is Tanholt Farm (house) 260 m to north and Tanholt Farm (outbuildings) 260 m to north. This is considered in the Supporting statement.
d	10 m of any watercourse	Pass	The nearest watercourse is Cat's Water Drain 600 m to east.
e	250 m of the presence of great crested newts, where it is linked to the breeding ponds of the newts by good habitat	Pass	GCN have been translocated from, and remain excluded from, the Southern Extension Area by GCN fencing and ongoing ecological management. Good breeding habitat is provided in the Wildlife Corridor to southeast. There are no known GCN or good habitats to the northeast, northwest and southwest that link to breeding ponds.
f	50 m of a site that has relevant species or habitats protected under the Biodiversity Action Plan that the Environment Agency considers at risk to this activity	Pass	The Project footprint has been designed to be >50 m of all BAP habitat. There is no habitat connectivity between the Site and habitats that could support BAP species such as water vole.
g	50 m of a Local Wildlife Site (LWS), Ancient woodland or Scheduled Ancient Monument	Pass	The nearest non-statutory site is the Eyebury Road Pits CWS. The Project has been designed to be >50 m from this feature and the intervening habitat constitutes poor terrestrial habitat (industrial/bare ground). The nearest ancient woodland is Grimeshaw Wood >5 km west. The nearest Grade II Listed Buildings or Scheduled Ancient Monument are at Eyebury Cottages and Eyebury Farmhouse >500 m to northwest.

6.0 COMMITTED MITIGATION

6.1 General

On the basis of the above assessment, mitigation is committed as follows. Given the fact that the habitat loss is relatively small scale as the Site is dominated by bare ground and hard standing the mitigation focuses on retention and monitoring of the GCN fence to maintain Site ecological sterility.

6.2 Protected Species

The existing GCN fence will be maintained in accordance with EPS licence requirements and the development will not detract from the fences functional purpose of excluding GCN from the operational landfill Site. The GCN fence will be maintained around the southern side of the Composting Pad and be continuous with that already installed and maintained at the Site.

7.0 CONCLUSION

The baseline attributes of the proposed development and wider site setting are well understood following on from over a decade of monitoring, site-based habitat creation, species translocation and obligations for post translocation annual monitoring pursuant to commitments in derogation licences issued by Natural England.

7.1 Protected Sites

A number of statutory and non-statutory sites for nature conservation were identified within the desk study process. However, the Site itself is not covered by any level of statutory or non-statutory protection. The Site is designed to be >50 m from a CWS, and the Site characteristics are not commensurate with the CWS citation. Given the relative distance between the Site and protected sites identified during the desk study, and the nature of development proposals, residual effects to these sites are considered highly unlikely.

7.2 Habitats

Habitats within the Site afford no elevated biodiversity value. Habitat that would be primarily affected by development proposals (i.e. bare ground, ruderal and semi-improved grasslands on landfill) are ubiquitous at the Site, local and regional scale.

7.3 Protected Species

Proposals at the Site do not have the potential to adversely affect protected species.

The GCN fence will be maintained around the southern side of the Composting Pad and be continuous with that already installed and maintained at the Site.

7.4 Standard Rules SR2021 No 1 Screening Criteria

The Site location passes the screening criteria for SR2021 No1: composting in open systems – installations.

8.0 REFERENCES

1) CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd edition. Chartered Institute of Ecology and Environmental Management, Winchester.

2) Joint Nature Conservation Committee (JNCC). 2010. Handbook for Phase 1 habitat survey - A technique for environmental audit.

Signature Page

Golder, member of WSP

Freddy Brookes
Senior Ecologist

Nicola White
Project Manager

Date: 8 March 2022

FB/CM/NW/ab

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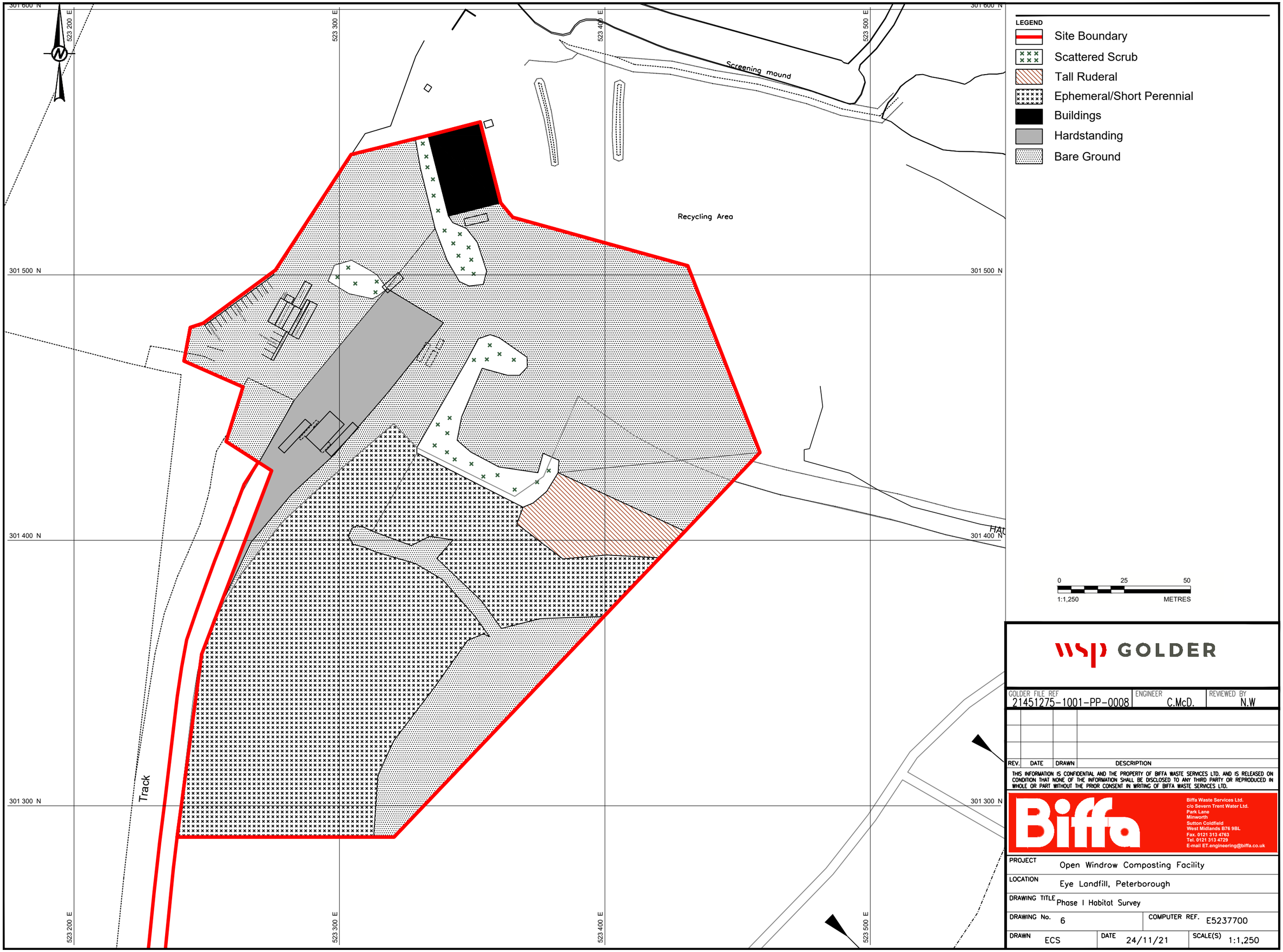
VAT No. 905054942

Drawings



WSP GOLDER

GOLDER FILE REF	ENGINEER	REVIEWED BY
21451275-1001-PP-0008	C.McD.	N.W

REV.	DATE	DRAWN	DESCRIPTION

Biffa

Biffa Waste Services Ltd.
c/o Severn Trent Water Ltd.
Park Lane
Minworth
Sutton Coldfield
West Midlands B76 9BL
Fax. 0121 313 4763
Tel. 0121 313 4729
E-mail ET.engineering@biffa.co.uk

PROJECT	Open Windrow Composting Facility
LOCATION	Eye Landfill, Peterborough
DRAWING TITLE	Phase I Habitat Survey
DRAWING No.	6
COMPUTER REF.	E5237700
DRAWN	ECS
DATE	24/11/21
SCALE(S)	1:1,250

APPENDIX PEA1

Nature and Heritage Conservation Screening Report

Nature and Heritage Conservation

Screening Report: SR2012 No 8

Reference	**EPR/AP3094ES/V002**
NGR	**TF 23380 01470**
Buffer (m)	**50**
Date report produced	**27 April 2021**
Number of maps enclosed	**2**

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

As you have not met the criteria for a standard rules permit, you will need to contact us for further advice on the type of permit you should apply for. Please submit a request through this link: https://www.gov.uk/government/publications/environmental-permit-pre-application-advice-form

Protected Habitats	Screening distance (m)	Further Information
Fens	50	Natural England

Protected Species	Screening distance (m)	Further Information
Water Vole	250	Local Record Centre (LRC)

Protected Species - Code 2

Unfortunately we cannot provide you with the details of all protected species. This is because we either have not been given permission by the owner of the species data, or they have asked us not to identify the species as they are vulnerable. In these instances you must contact the relevant organisation listed above. A small administration charge may be incurred for this service.

Where protected species are present, a licence may be required from Natural England to handle the species or undertake the proposed works.

You are advised to obtain the necessary licences, or agree mitigation with the relevant bodies, for example Natural England or wildlife trusts before submitting your application.

Please note we have screened this application for protected and priority sites, habitats and species for which we have information. It is however your responsibility to comply with all environmental and

planning legislation, this information does not imply that no other checks or permissions will be required.

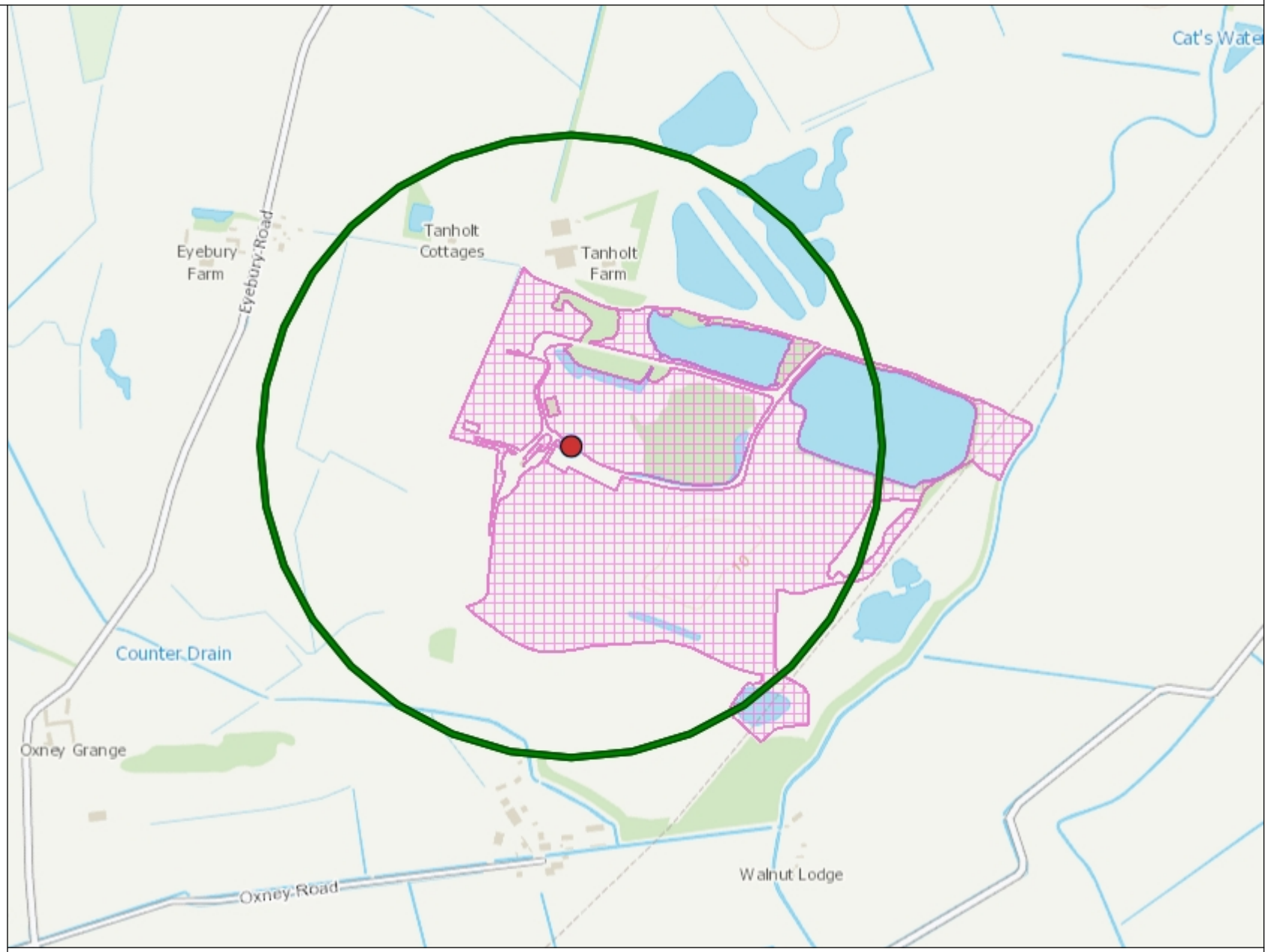
Please note the nature and heritage screening we have conducted as part of this report is subject to change as it is based on data we hold at the time it is generated. We cannot guarantee there will be no changes to our screening data between the date of this report and the submission of the permit application,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

Protected Habitats

Environment Agency

Legend

Protected Habitats screened for Env Permits



1: 10,000

0 250

Metres

N W E S

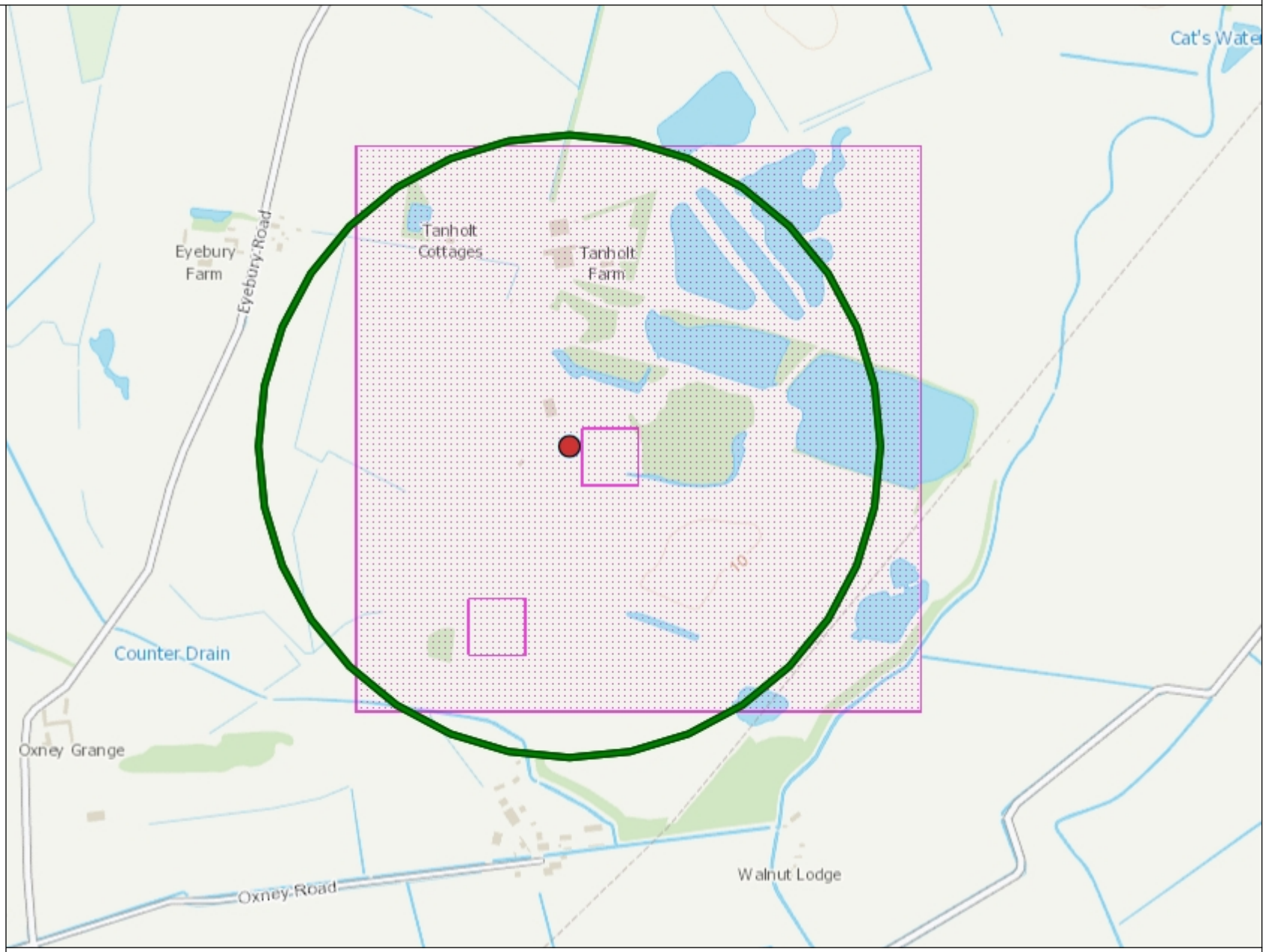
Protected Species

Environment Agency

Legend

Protected species screened for Env Permits - complete set

- Protected species, non fish
- Protected fish
- Protected fish migratory route



1: 10,000

0 250

Metres

N W E S

APPENDIX PEA2

Ecology Desk Study Raw Data

Designated Sites Map

for Golder

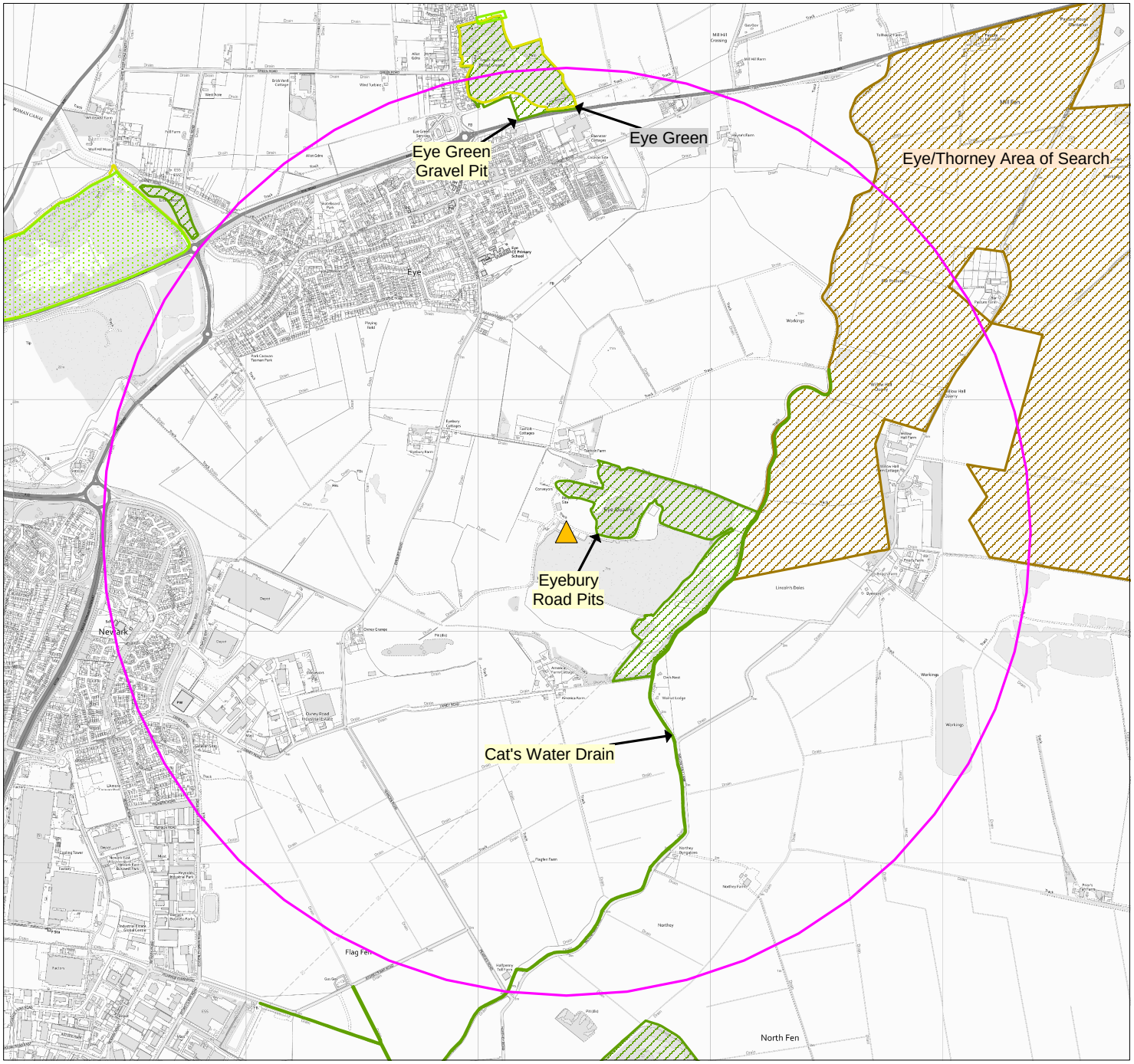
Eye

1:25000

22nd July 2021

CPERC
The Manor House
Broad Street
Cambourne
Cambridgeshire
CB23 6DH

CPERC
CAMBRIDGESHIRE & PETERBOROUGH
ENVIRONMENTAL RECORDS CENTRE



Search Area

Supplied Grid Reference

County Boundary

SSSI

LNR

County Wildlife Site

Local Geological Site

N
W
E
S

Designated Sites within 2km of TF 23379 01429

Date: 22/07/2021
Site Reference: Golder_Eye

LNRs

Site Name	Grid Ref	Area (ha)
Eye Green	TF231034	11.9498

County Wildlife Sites

Site Name	Grid Ref	Area (ha)	Reasons for Designation
Cat's Water Drain	TL227989 - TF245021	1.46	This site qualifies because it supports at least five species of submerged, floating and emergent vascular plant per 20 metre section.
Eye Green Gravel Pit	TF231034	13.09	This site qualifies for its habitat mosaic (site of more than 10ha in extent which supports three or more semi-natural habitat features).
Eyebury Road Pits	TF2301	25.08	The site contains Type 10A standing water bodies with 15 submerged, floating and emergent species (4b) and is a site of more than 10ha in size which supports three or more habitat features in close association (5a).

Local Geological Sites

Site Name	Grid Ref	Area (ha)
Eye/Thorney Area of Search	TF2502	369.74

Taxon_group	Common_Name	Latin_Name	Location	Grid_Reference	Precision	Date	Abundance	Record_Type	Comments	Selected_Designations
amphibian	Common Frog	*Rana temporaria*	Eye	TF228026	100m	01/06/2012	8 Count	None	Living in garden pond	HSD5
amphibian	Common Frog	*Rana temporaria*	Eye	TF228026	100m	01/06/2012	8 Count	None	Living in garden pond. Marshall from Green Festival event left recording without giving name at	HSD5
amphibian	Common Frog	*Rana temporaria*	Eyebury Road Pits	TF237009	100m	Aug-15	1 Count	None	1 recorded on destructive searches.	HSD5
amphibian	Common Frog	*Rana temporaria*	Eyebury Road Pits	TF238010	100m	18/05/2016	1 Count	None		HSD5
amphibian	Common Frog	*Rana temporaria*	Eyebury Road Pits	TF240014	100m	27/05/2019	1 Count	None		HSD5
amphibian	Common Frog	*Rana temporaria*	Pode Hole, Thorney	TF2402	1km	29/09/2016	1 Count	None		HSD5
amphibian	Common Frog	*Rana temporaria*	Pode Hole, Thorney	TF2402	1km	30/09/2016	1 Count	None		HSD5
amphibian	Common Toad	*Bufo bufo*	Eyebury Road Pits	TF237009	100m	2015	5 Count	None	5 recorded on GCN translocation pitfall/bottle trapping March-May 2015.	Sect.41, UKBAP
amphibian	Common Toad	*Bufo bufo*	Eyebury Road Pits	TF237009	100m	Aug-15	2 Count	None	2 recorded on destructive searches.	Sect.41, UKBAP
amphibian	Common Toad	*Bufo bufo*	Eyebury Road Pits	TF238010	100m	15/06/2016	2 Count	None		Sect.41, UKBAP
amphibian	Common Toad	*Bufo bufo*	Eyebury Road Pits	TF240014	100m	16/04/2019	1 Count	None		Sect.41, UKBAP
amphibian	Great Crested Newt	*Triturus cristatus*	Eye	TF22330158	10m	15/04/2019		None	positive eDNA result	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF2301	1km	24/03/2009	12 Count	None	torching, bottle trapping, netting, egg search	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF2301	1km	18/05/2009	4 Count	None	torching, bottle trapping, netting, egg search	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF2301	1km	19/05/2009	18 Count	None	torching, bottle trapping, netting, egg search	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF2301	1km	15/06/2009	2 Count	None	torching, bottle trapping, netting, egg search	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF237009	100m	2015	389 Count	None	389 recorded on GCN translocation pitfall/bottle trapping March-May 2015.	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF237009	100m	Aug-15	36 Count	None	36 recorded on destructive searches.	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF237010	100m	20/06/2013		None	3 adults under carpet tile	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238010	100m	20/04/2016	43 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238010	100m	11/05/2016	79 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238010	100m	18/05/2016	35 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238010	100m	15/06/2016	36 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238010	100m	26/03/2019	281 Count	None	peak count from torching	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238010	100m	16/04/2019	186 Count	None	peak count from torching	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238010	100m	29/04/2019	120 Count	None	peak count from torching	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238010	100m	27/05/2019	23 Count	None	peak count from torching	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238011	100m	30/03/2017	193 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238011	100m	26/04/2017	74 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238011	100m	17/05/2017	47 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238011	100m	08/06/2017	20 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF238011	100m	14/03/2018	1 Count	None	under carpet tile	HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF239012	100m	13/04/2010	30 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF239012	100m	23/04/2010	31 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF239012	100m	20/05/2010	32 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
amphibian	Great Crested Newt	*Triturus cristatus*	Eyebury Road Pits	TF239012	100m	21/06/2010	5 Count	None		HabRegs2, HSD2p, HSD4, Sect.41, UKBAP, WCA5
bird	Arctic Tern	*Sterna paradisaea*	Eyebury Road Pits	TF2301	1km	18/04/2013	3 Count	None	over	BD1
bird	Barn Owl	*Tyto alba*	Eye	TF2102	1km	05/05/2012	1 Count	None		CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Eye	TF2202	1km	30/01/2005	1 Count	None	nearby at dawn	CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Fengate, Peterborough	TL2199	1km	10/04/2000	1 Count	None	Eastern industry	CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Flag Fen	TF2200	1km	15/02/2005	1 Count	None	Pearces Rd.	CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Flag Fen	TF2200	1km	16/02/2005	1 Count	None	Pearces Rd	CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Flag Fen	TL2299	1km	06/01/2003	1 Count	None	hunting	CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Flag Fen	TL2299	1km	31/01/2003	1 Count	None		CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Flag Fen	TL2299	1km	07/03/2003	1 Count	None	hunting ditches	CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Flag Fen	TL2299	1km	01/05/2003	1 Count	None		CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Flag Fen	TL2299	1km	19/03/2005	1 Count	None		CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Flag Fen	TL2299	1km	19/04/2005	1 Count	None		CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Flag Fen	TL2299	1km	15/05/2005	1 Count	None		CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Flag Fen	TL2299	1km	28/02/2009	2 Count	field record	along Storeys Bar Road early	CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Pode Hole, Thorney	TF2402	1km	05/08/2011		None	1 Perched on fencepost	CPASI, WCA1i
bird	Barn Owl	*Tyto alba*	Pode Hole, Thorney	TF246026	100m	30/09/2016	1 Count	None	dead barn owl found on the ground	CPASI, WCA1i
bird	Bearded Tit	*Panurus biarmicus*	Eye	TF2102	1km	28/03/2013	1 Count	None		WCA1i
bird	Bewick's Swan	*Cygnus columbianus*	Northey	TL2399	1km	22/01/2004	100 Count	None		BD1, Sect.41, UKBAP, WCA1i
bird	Bewick's Swan	*Cygnus columbianus*	Prior's Fen Gravel Pits	TF2501	1km	03/02/2004	163 Count	None	at Willow Hall Lane end	BD1, Sect.41, UKBAP, WCA1i
bird	Bewick's Swan	*Cygnus columbianus*	Prior's Fen, Thorney	TF2401	1km	03/02/2004	180 Count	None	on fields along Willow Hall Lane	BD1, Sect.41, UKBAP, WCA1i
bird	Bewick's Swan	*Cygnus columbianus*	Willow Hall, Thorney	TF2401	1km	16/01/2005	86 Count	None	Willow Hall Lane	BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eye	TF2102	1km	14/04/2012	1 Count	None		BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eye	TF2102	1km	02/05/2012	1 Count	None	single boom. no sighting	BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eye	TF2102	1km	16/05/2012	1 Count	None	about 10 booms heard	BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eye	TF2102	1km	22/05/2012	1 Count	None	2 booms in 2 hours	BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eye	TF2102	1km	02/06/2012	1 Count	None	three booms	BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eye	TF2102	1km	05/06/2012	1 Count	None	4 booms heard	BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eye	TF2102	1km	10/06/2012	1 Count	None		BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eye	TF2102	1km	19/06/2012	1 Count	None		BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eye	TF2102	1km	02/06/2013	1 Count	None	Singing male 1	BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eye	TF2102	1km	08/06/2013	1 Count	None		BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eye Green LNR	TF2303	1km	31/08/2012	1 Count	None	Max boom=1, Probably same boomer as Dogsthorpe?	BD1, Sect.41, UKBAP, WCA1i
bird	Bittern	*Botaurus stellaris*	Eyebury Road Pits	TF2301	1km	20/01/2007	1 Count	None		BD1, Sect.41, UKBAP, WCA1i
bird	Black-tailed Godwit	*Limosa limosa*	Eyebury Road Pits	TF2301	1km	28/04/2012	10 Count	None	flying towards Nene Washes - 100 metres up.	WCA1i
bird	Black-tailed Godwit	*Limosa limosa*	Willow Hall, Thorney	TF2401	1km	30/03/2013	1200 Count	None		WCA1i
bird	Brambling	*Fringilla montifringil*	Dogsthorpe Landfill Site	TF2102	1km	05/11/2005	1 Count	None		WCA1i
bird	Brambling	*Fringilla montifringil*	Eyebury Road Pits	TF2301	1km	03/12/2003	1 Count	None		WCA1i
bird	Brambling	*Fringilla montifringil*	Eyebury Road Pits	TF2301	1km	09/12/2003	1 Count	None		WCA1i
bird	Brambling	*Fringilla montifringil*	Eyebury Road Pits	TF2301	1km	10/01/2004	1 Count	None	male at Tanholt Farm	WCA1i
bird	Brambling	*Fringilla montifringil*	Eyebury Road Pits	TF2301	1km	13/01/2004	1 Count	None	male	WCA1i
bird	Brambling	*Fringilla montifringil*	Eyebury Road Pits	TF2301	1km	17/01/2004	1 Count	None		WCA1i
bird	Brambling	*Fringilla montifringil*	Eyebury Road Pits	TF2301	1km	07/10/2005	1 Count	None	fem/imm near Tanholt Farm end of footpath	WCA1i
bird	Brambling	*Fringilla montifringil*	Eyebury Road Pits	TF2301	1km	07/10/2005	1 Count	None		WCA1i
bird	Brambling	*Fringilla montifringil*	Eyebury Road Pits	TF2301	1km	17/10/2006	1 Count	None		WCA1i
bird	Brambling	*Fringilla montifringil*	Eyebury Road Pits	TF2301	1km	10/11/2007		None	over calling	WCA1i
bird	Brent Goose	*Branta bernicla*	Willow Hall, Thorney	TF2401	1km	08/01/2011	1 Count	None	Between Willow Hall Farm and the Pit	Sect.41, UKBAP
bird	Bullfinch	*Pyrrhula pyrrhula*	Eyebury Road Pits	TF2301	1km	25/10/2003	2 Count	None		Sect.41, UKBAP
bird	Bullfinch	*Pyrrhula pyrrhula*	Eyebury Road Pits	TF2301	1km	22/12/2004	1 Count	None		Sect.41, UKBAP
bird	Bullfinch	*Pyrrhula pyrrhula*	Eyebury Road Pits	TF2301	1km	05/01/2006	1 Count	None	fem/imm	Sect.41, UKBAP
bird	Bullfinch	*Pyrrhula pyrrhula*	Eyebury Road Pits	TF2301	1km	16/12/2006	3 Count	None		Sect.41, UKBAP
bird	Bullfinch	*Pyrrhula pyrrhula*	Eyebury Road Pits	TF2301	1km	12/12/2009	2 Count	field record		Sect.41, UKBAP
bird	Bullfinch	*Pyrrhula pyrrhula*	Eyebury Road Pits	TF2301	1km	07/01/2012	5 Count	None		Sect.41, UKBAP
bird	Bullfinch	*Pyrrhula pyrrhula*	Eyebury Road Pits	TF2301	1km	26/12/2012	3 Count	None	included bird giving unfamiliar disyllabic call - "chu-it" - like Spotted Redshank!	Sect.41, UKBAP
bird	Bullfinch	*Pyrrhula pyrrhula*	Northey	TL2399	1km	08/11/2003	1 Count	None		Sect.41, UKBAP
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	24/02/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	06/04/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	14/04/2012	1 Count	None	seen in the open very briefly.	WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	21/04/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	30/04/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	02/05/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	05/05/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	06/05/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	13/05/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	16/05/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	22/05/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	02/06/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	05/06/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	09/06/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	10/06/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye	TF2102	1km	06/10/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green	TF2303	1km	24/02/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green	TF2303	1km	28/03/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green	TF2303	1km	06/04/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green	TF2303	1km	08/04/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green	TF2303	1km	14/04/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green	TF2303	1km	21/04/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green	TF2303	1km	30/04/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green	TF2303	1km	04/05/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green	TF2303	1km	05/05/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green	TF2303	1km	25/05/2012	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green	TF2303	1km	04/08/2013	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green LNR	TF2303	1km	28/04/2013	1 Count	None		WCA1i
bird	Cetti's Warbler	*Cettia cetti*	Eye Green LNR	TF2303	1km	07/10/2016		None		WCA1i
bird	Common Tern	*Sterna hirundo*	Eyebury Road Pits	TF2301	1km	2009	1 Count	None	breeding. Survey April - June.	BD1
bird	Common Tern	*Sterna hirundo*	Eyebury Road Pits	TF2301	1km	23/06/2008		None		BD1
bird	Corn Bunting	*Emberiza calandra*	Eye	TF2102	1km	02/06/2012	1 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Eye	TF2102	1km	05/06/2012	3 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Eye	TF2102	1km	09/06/2012	1 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Eye	TF2102	1km	10/06/2012	1 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Eye	TF2102	1km	16/06/2012	1 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Eye	TF2102	1km	19/06/2012	1 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Eye	TF2102	1km	23/06/2012	1 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Eye Green	TF2303	1km	24/02/2012	2 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Eye Green	TF2303	1km	22/03/2012	30 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Eye Green	TF2303	1km	21/04/2012	2 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Eye Green LNR	TF2303	1km	27/03/2012	20 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Flag Fen	TL2299	1km	19/11/2000	30 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Flag Fen	TL2299	1km	12/07/2002	2 Count	None		Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Northey	TL2399	1km	11/07/2003	1 Count	None	singing	Sect.41, UKBAP
bird	Corn Bunting	*Emberiza calandra*	Willow Hall, Thorney	TF2400	1km	19/06/2012	2 Count	None		Sect.41, UKBAP
bird	Crane	*Grus grus*	Dogsthorpe Landfill Site	TF2102	1km	31/12/2012	7 Count	None		BD1, CPASI
bird	Crane	*Grus grus*	Flag Fen	TL2299	1km	12/02/2010	4 Count	None	2 pairs	BD1, CPASI
bird	Crane	*Grus grus*	Willow Hall, Thorney	TF2400	1km	27/12/2012	7 Count	None	seen distantly over towards the North Bank	BD1, CPASI
bird	Crane	*Grus grus*	Willow Hall, Thorney	TF2401	1km	08/03/2008	1 Count	None		BD1, CPASI
bird	Cuckoo	*Cuculus canorus*	Eyebury Road Pits	TF2301	1km	2009	1 Count	None	breeding. Survey April - June.	Sect.41, UKBAP
bird	Cuckoo	*Cuculus canorus*	Eyebury Road Pits	TF2301	1km	04/05/2003	1 Count	None	at 16:24	Sect.41, UKBAP
bird	Cuckoo	*Cuculus canorus*	Eyebury Road Pits	TF2301	1km	23/06/2008	1 Count	None	heard	Sect.41, UKBAP
bird	Cuckoo	*Cuculus canorus*	Eyebury Road Pits	TF237009	100m	May-15	1 Count	None		Sect.41, UKBAP

bird	Cuckoo	*Cuculus canorus*	Eyebury Road Pits	TF238011	100m	2017		None		Sect.41, UKBAP
bird	Cuckoo	*Cuculus canorus*	Eyebury Road Pits	TF240012	100m	2013		None		Sect.41, UKBAP
bird	Cuckoo	*Cuculus canorus*	Fengate, Peterborough	TL2199	1km	07/04/2004	1 Count	None	probable (95%) near Perkins Engines	Sect.41, UKBAP
bird	Cuckoo	*Cuculus canorus*	Northey	TL2399	1km	09/05/2003	1 Count	None		Sect.41, UKBAP
bird	Cuckoo	*Cuculus canorus*	Oxney Gravel Pits	TF2200	1km	29/04/1954		None	Gravel Pit	Sect.41, UKBAP
bird	Curlew	*Numenius arquata*	Eyebury Road Pits	TF2301	1km	30/08/2008	1 Count	None		Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Eye Green	TF2303	1km	22/03/2012	5 Count	None		Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Eye Green	TF2303	1km	21/04/2012	6 Count	None		Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Eye Green LNR	TF231034	100m	10/03/2003	3 Count	None		Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Eye Green LNR	TF231034	100m	1990 - 1994		None		Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Eyebury Road Pits	TF2301	1km	2009	13 Count	None	breeding. Survey April - June.	Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Eyebury Road Pits	TF2301	1km	11/03/2012	5 Count	None		Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Eyebury Road Pits	TF238011	100m	2017		None		Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Eyebury Road Pits	TF240013	100m	2013		None		Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Newark, Peterborough	TF2100	1km	22/05/2006	1 Count	None	fledged young	Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Pode Hole, Thorney	TF2402	1km	19/07/2016		None		Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Pode Hole, Thorney	TF2502	1km	20/04/2016		None		Sect.41, UKBAP
bird	Dunnock	*Prunella modularis*	Pode Hole, Thorney	TF2502	1km	21/06/2016		None		Sect.41, UKBAP
bird	Fieldfare	*Turdus pilaris*	Eye	TF2102	1km	08/12/2012	200 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Eye	TF2102	1km	01/11/2013	60 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Eyebury Road Pits	TF2301	1km	25/10/2003	2 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Eyebury Road Pits	TF2301	1km	26/10/2003	35 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Eyebury Road Pits	TF2301	1km	06/12/2003	50 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Eyebury Road Pits	TF2301	1km	08/10/2004	4 Count	None	west	WCA1i
bird	Fieldfare	*Turdus pilaris*	Eyebury Road Pits	TF2301	1km	08/10/2004	4 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Eyebury Road Pits	TF2301	1km	01/11/2008	2 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Eyebury Road Pits	TF2301	1km	12/11/2008	20 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Eyebury Road Pits	TF2301	1km	12/12/2009	70 Count	field record		WCA1i
bird	Fieldfare	*Turdus pilaris*	Eyebury Road Pits	TF2301	1km	07/01/2012	50 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Flag Fen	TL2299	1km	10/01/2003	50 Count	None	est	WCA1i
bird	Fieldfare	*Turdus pilaris*	Flag Fen	TL2299	1km	14/03/2006	150 Count	None	to 200	WCA1i
bird	Fieldfare	*Turdus pilaris*	Flag Fen	TL2299	1km	23/11/2007	50 Count	None	approx	WCA1i
bird	Fieldfare	*Turdus pilaris*	Newark, Peterborough	TF2100	1km	04/01/1953		None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Northey	TL2399	1km	10/02/2003	60 Count	None	minimum	WCA1i
bird	Fieldfare	*Turdus pilaris*	Northey	TL2399	1km	24/10/2003	30 Count	None	over	WCA1i
bird	Fieldfare	*Turdus pilaris*	Northey	TL2399	1km	25/10/2003	420 Count	None	plus	WCA1i
bird	Fieldfare	*Turdus pilaris*	Northey	TL2399	1km	06/11/2003	90 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Northey	TL2399	1km	08/11/2003	160 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Northey	TL2399	1km	18/11/2004	100 Count	None	approx	WCA1i
bird	Fieldfare	*Turdus pilaris*	Northey Fen	TL2399	1km	17/12/2006	50 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Oxney Grange	TF2201	1km	07/01/2012	50 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Oxney Grange	TF2201	1km	15/01/2012	50 Count	None		WCA1i
bird	Fieldfare	*Turdus pilaris*	Prior's Fen, Thorney	TF2401	1km	03/01/2004	30 Count	None	Prior's Farm	WCA1i
bird	Fieldfare	*Turdus pilaris*	Willow Hall, Thorney	TF2401	1km	13/12/2005	72 Count	None	Willow Hall Lane	WCA1i
bird	Fieldfare	*Turdus pilaris*	Willow Hall, Thorney	TF245008	100m	05/03/2008	200 Count	None	south of Prior's Farm	WCA1i
bird	Firecrest	*Regulus ignicapilla*	Eyebury Road Pits	TF2301	1km	25/10/2003	1 Count	None	until 11:45am along sycamore belt	WCA1i
bird	Golden Plover	*Pluvialis apricaria*	Flag Fen	TL2299	1km	31/08/2005	1 Count	None	flying over	BD1
bird	Golden Plover	*Pluvialis apricaria*	Flag Fen	TL2299	1km	02/05/2009	1 Count	field record	over	BD1
bird	Golden Plover	*Pluvialis apricaria*	Northey	TL2399	1km	25/02/2005	150 Count	None	approx	BD1
bird	Golden Plover	*Pluvialis apricaria*	Peterborough	TL2199	1km	25/09/2004	20 Count	None	Drain Road	BD1
bird	Golden Plover	*Pluvialis apricaria*	Prior's Fen, Thorney	TF2401	1km	04/02/2004	11 Count	None	Willow Hall Lane	BD1
bird	Golden Plover	*Pluvialis apricaria*	Willow Hall, Thorney	TF245008	100m	05/03/2008	400 Count	None	south of Prior's Farm	BD1
bird	Goldeneye	*Bucephala clangula*	Eyebury Road Pits	TF2301	1km	07/12/2003	1 Count	None	fem	WCA1ii
bird	Grasshopper Warbler	*Locustella naevia*	Eye	TF2102	1km	21/04/2012	2 Count	None		Sect.41, UKBAP
bird	Grasshopper Warbler	*Locustella naevia*	Eye	TF2102	1km	30/04/2012	1 Count	None		Sect.41, UKBAP
bird	Grasshopper Warbler	*Locustella naevia*	Eye	TF2102	1km	02/05/2012	2 Count	None		Sect.41, UKBAP
bird	Grasshopper Warbler	*Locustella naevia*	Eye	TF2102	1km	05/05/2012	2 Count	None		Sect.41, UKBAP
bird	Grasshopper Warbler	*Locustella naevia*	Eye	TF2102	1km	06/05/2012	1 Count	None		Sect.41, UKBAP
bird	Grasshopper Warbler	*Locustella naevia*	Eye	TF2102	1km	22/05/2012	2 Count	None		Sect.41, UKBAP
bird	Grasshopper Warbler	*Locustella naevia*	Eye	TF2102	1km	25/05/2012	1 Count	None		Sect.41, UKBAP
bird	Grasshopper Warbler	*Locustella naevia*	Eye	TF2102	1km	02/06/2012	1 Count	None		Sect.41, UKBAP
bird	Grasshopper Warbler	*Locustella naevia*	Eye	TF2102	1km	24/04/2013	3 Count	None		Sect.41, UKBAP
bird	Grasshopper Warbler	*Locustella naevia*	Eye	TF2102	1km	23/06/2013	1 Count	None		Sect.41, UKBAP
bird	Grasshopper Warbler	*Locustella naevia*	Flag Fen	TL2299	1km	05/07/2009	1 Count	field record	singing from set aside near industrial estate	Sect.41, UKBAP
bird	Green Sandpiper	*Tringa ochropus*	Dogsthorpe Landfill Site	TF2102	1km	23/01/2004	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eye	TF2202	1km	03/08/2002	5 Count	None	Private Land	WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	2009		None	foraging. Survey April - June.	WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	2009		None	foraging/migrating. Survey April - June.	WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	02/04/2003	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	30/12/2003	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	01/01/2004	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	29/08/2004	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	29/06/2008	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	30/06/2008	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	13/07/2008	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	20/07/2008	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	23/08/2008	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	30/08/2008	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	31/08/2008	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	04/09/2008	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	13/09/2008	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	27/09/2008	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	03/10/2008	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	11/10/2008	2 Count	None	on new workings then flew off high calling	WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	14/10/2008	1 Count	None	flew off high south calling	WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	16/10/2008	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	17/10/2008	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	19/10/2008	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	25/10/2008	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	01/11/2008	3 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	08/11/2008	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	12/11/2008	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	16/11/2008	3 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	22/11/2008	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	30/03/2009	1 Count	field record		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	05/07/2009	2 Count	field record		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	12/07/2009	1 Count	field record		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	20/07/2009	4 Count	field record		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	26/07/2009	3 Count	field record		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	13/09/2009	1 Count	field record		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	27/09/2009	1 Count	field record		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	02/10/2009	1 Count	field record	catching flying insects	WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	09/10/2009	1 Count	field record		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	21/03/2010	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	19/06/2010	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	08/08/2010	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	15/08/2010	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	19/08/2010	3 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	22/08/2010	8 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	25/08/2010	6 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	28/08/2010	3 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	18/06/2011	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	02/08/2011	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	10/09/2011	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	04/02/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	24/03/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	02/04/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	06/04/2012	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	07/04/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	08/04/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	11/04/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	11/04/2012	1+ Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	14/04/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	16/04/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	21/04/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	22/04/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	23/06/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	20/08/2012	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	20/10/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	14/04/2013	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	20/04/2013	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	22/04/2013	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	06/07/2013	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	07/09/2013	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	08/09/2013	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF2301	1km	15/09/2013	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF238011	100m	2017		None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF240012	100m	Apr-15	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Eyebury Road Pits	TF241013	100m	2013		None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Flag Fen	TF2200	1km	12/12/2009	1 Count	field record	near Oxney Grange	WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Flag Fen	TL2299	1km	19/11/2000	9 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Flag Fen	TL2299	1km	31/12/2002	3 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Flag Fen	TL2299	1km	05/01/2003	2 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Flag Fen	TL2299	1km	03/01/2004	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Flag Fen	TL2299	1km	23/08/2004	1 Count	None		WCA1i

bird	Green Sandpiper	*Tringa ochropus*	Flag Fen	TL2299	1km	10/09/2004	3 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Oxney Grange	TF2201	1km	15/01/2012	1 Count	None		WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Prior's Fen Gravel Pits	TF2501	1km	05/11/2005	1 Count	None	in ploughed field west of Middle Pit	WCA1i
bird	Green Sandpiper	*Tringa ochropus*	Willow Hall, Thorney	TF2300	1km	18/01/2008	1 Count	None	in drain north of Northey Bungalows	WCA1i
bird	Greenshank	*Tringa nebularia*	Eyebury Road Pits	TF2301	1km	15/08/2010	2 Count	None		WCA1i
bird	Greenshank	*Tringa nebularia*	Eyebury Road Pits	TF2301	1km	19/08/2010	3 Count	None		WCA1i
bird	Greenshank	*Tringa nebularia*	Eyebury Road Pits	TF2301	1km	22/08/2010	1 Count	None		WCA1i
bird	Greenshank	*Tringa nebularia*	Eyebury Road Pits	TF2301	1km	25/08/2010	2 Count	None		WCA1i
bird	Greenshank	*Tringa nebularia*	Eyebury Road Pits	TF2301	1km	28/08/2010	3 Count	None		WCA1i
bird	Greenshank	*Tringa nebularia*	Eyebury Road Pits	TF2301	1km	17/09/2011	1 Count	None		WCA1i
bird	Greenshank	*Tringa nebularia*	Eyebury Road Pits	TF2301	1km	24/09/2011	2 Count	None		WCA1i
bird	Greenshank	*Tringa nebularia*	Eyebury Road Pits	TF2301	1km	09/07/2012	1 Count	None		WCA1i
bird	Greenshank	*Tringa nebularia*	Eyebury Road Pits	TF2301	1km	07/09/2013	1 Count	None		WCA1i
bird	Greenshank	*Tringa nebularia*	Eyebury Road Pits	TF2301	1km	08/09/2013	1 Count	None		WCA1i
bird	Grey Partridge	*Perdix perdix*	Eye Green	TF2303	1km	18/03/2004	2 Count	None	In field next to LNR	Sect.41, UKBAP
bird	Grey Partridge	*Perdix perdix*	Eye Green	TF2303	1km	20/03/2004	2 Count	None	in set-aside field at E end	Sect.41, UKBAP
bird	Grey Partridge	*Perdix perdix*	Eyebury Road Pits	TF2301	1km	29/08/2004	9 Count	None	covey	Sect.41, UKBAP
bird	Grey Partridge	*Perdix perdix*	Eyebury Road Pits	TF2301	1km	13/01/2007	3 Count	None	along approach road	Sect.41, UKBAP
bird	Grey Partridge	*Perdix perdix*	Eyebury Road Pits	TF2301	1km	13/01/2007	3 Count	None		Sect.41, UKBAP
bird	Grey Partridge	*Perdix perdix*	Fengate, Peterborough	TL2199	1km	02/10/2004	2 Count	None	in field behind power station	Sect.41, UKBAP
bird	Grey Partridge	*Perdix perdix*	Flag Fen	TL2299	1km	05/04/2002	2 Count	None		Sect.41, UKBAP
bird	Grey Partridge	*Perdix perdix*	Willow Hall, Thorney	TF2401	1km	28/02/1954		None		Sect.41, UKBAP
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	22/03/2012	3 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	06/04/2012	4 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	14/04/2012	2 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	21/04/2012	3 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	30/04/2012	2 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	02/05/2012	4 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	05/05/2012	5 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	06/05/2012	4 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	13/05/2012	3 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	16/05/2012	5 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	22/05/2012	5 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	25/05/2012	1 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	02/06/2012	8 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	05/06/2012	6 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye	TF2102	1km	09/06/2012	4 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	15/01/2012	60 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	24/02/2012	30 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	29/02/2012	50 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	22/03/2012	30 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	21/04/2012	1 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	30/04/2012	2 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	04/05/2012	2 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	05/05/2012	4 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	25/05/2012	1 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	02/06/2012	4 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	19/06/2012	30 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	23/06/2012	40 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green	TF2303	1km	30/11/2013	40 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green LNR	TF2303	1km	27/03/2012	5 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green LNR	TF2303	1km	07/10/2016		None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eye Green LNR	TF231034	100m	10/03/2003	3 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eyebury Road Pits	TF2301	1km	2009		None	breeding. Survey April - June.	WCA1ii
bird	Greylag Goose	*Anser anser*	Eyebury Road Pits	TF2301	1km	29/12/2013	c70 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Eyebury Road Pits	TF238011	100m	2017		None		WCA1ii
bird	Greylag Goose	*Anser anser*	Newark, Peterborough	TF2100	1km	31/10/2004	400 Count	None	over	WCA1ii
bird	Greylag Goose	*Anser anser*	Northey Fen	TL2399	1km	13/04/2007	1 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Northey Fen	TL2399	1km	19/05/2007	2 Count	None		WCA1ii
bird	Greylag Goose	*Anser anser*	Oxney Grange	TF2201	1km	15/01/2012	10 Count	None		WCA1ii
bird	Hobby	*Falco subbuteo*	Eye	TF2102	1km	05/06/2012	1 Count	None		WCA1i
bird	Hobby	*Falco subbuteo*	Eye	TF2102	1km	19/06/2012	1 Count	None		WCA1i
bird	Hobby	*Falco subbuteo*	Eyebury Road Pits	TF2301	1km	2009		None	foraging/migrating. Survey April - June.	WCA1i
bird	Hobby	*Falco subbuteo*	Eyebury Road Pits	TF2301	1km	22/05/2008	1 Count	None	at least overhead	WCA1i
bird	Hobby	*Falco subbuteo*	Eyebury Road Pits	TF2301	1km	03/05/2009	1 Count	field record		WCA1i
bird	Hobby	*Falco subbuteo*	Eyebury Road Pits	TF2301	1km	22/08/2010	1 Count	None		WCA1i
bird	Hobby	*Falco subbuteo*	Eyebury Road Pits	TF2301	1km	01/07/2012	1 Count	None		WCA1i
bird	Hobby	*Falco subbuteo*	Eyebury Road Pits	TF233010	100m	2013		None		WCA1i
bird	Hobby	*Falco subbuteo*	Eyebury Road Pits	TF241014	100m	May-15	1 Count	None		WCA1i
bird	Hobby	*Falco subbuteo*	Eyebury Road Pits	TF243022	100m	13/09/2011		None	1 Observed over landfill	WCA1i
bird	Hobby	*Falco subbuteo*	Fengate, Peterborough	TL2199	1km	11/09/2003	1 Count	None	Hit by truck, nr. Power Station, Fengate, released on site 23.9.03	WCA1i
bird	Hobby	*Falco subbuteo*	Flag Fen	TL2299	1km	05/09/2002	1 Count	None		WCA1i
bird	Hobby	*Falco subbuteo*	Flag Fen	TL2299	1km	10/09/2002	1 Count	None		WCA1i
bird	Hobby	*Falco subbuteo*	Flag Fen	TL2299	1km	23/08/2005	1 Count	None		WCA1i
bird	Hobby	*Falco subbuteo*	Flag Fen	TL2299	1km	13/08/2006	1 Count	None		WCA1i
bird	Hobby	*Falco subbuteo*	Flag Fen	TL2299	1km	19/05/2008	1 Count	None		WCA1i
bird	Hobby	*Falco subbuteo*	Northey	TL2399	1km	11/07/2003	1 Count	None	hunting insects	WCA1i
bird	Hobby	*Falco subbuteo*	Northey	TL2399	1km	09/09/2003	1 Count	None	adult	WCA1i
bird	Hobby	*Falco subbuteo*	Northey	TL2399	1km	07/10/2005	1 Count	None	south across Nene	WCA1i
bird	Hobby	*Falco subbuteo*	Northey Fen	TL2399	1km	07/10/2005	1 Count	None		WCA1i
bird	Hobby	*Falco subbuteo*	Peterborough	TF2100	1km	20/05/2005	1 Count	None	over	WCA1i
bird	Hobby	*Falco subbuteo*	Prior's Fen, Thorney	TF2401	1km	31/08/2003	4 Count	None	Breeding: 1 nest found along will/hall lane	WCA1i
bird	Hobby	*Falco subbuteo*	Willow Hall, Thorney	TF2401	1km	08/05/2005	2 Count	None	two this morning at Willow Hall on Willow Hall Lane	WCA1i
bird	Honey-buzzard	*Pernis apivorus*	A47, Eye	TF2202	1km	14/09/2008	1 Count	None	over A47 at 18:00hrs	BD1, WCA1i
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	24/02/2012	3 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	22/03/2012	5 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	14/04/2012	3 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	30/04/2012	5 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	02/05/2012	5 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	05/05/2012	5 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	13/05/2012	3 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	16/05/2012	3 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	22/05/2012	2 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	02/06/2012	2 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	05/06/2012	2 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	09/06/2012	2 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	10/06/2012	2 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	19/06/2012	2 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye	TF2102	1km	15/07/2012	5 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye Green	TF2303	1km	07/01/2012	1+ Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye Green	TF2303	1km	02/06/2012	1 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye Green	TF2303	1km	19/06/2012	2 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye Green	TF2303	1km	23/06/2012	1 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye Green	TF2303	1km	12/08/2012	1 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye Green LNR	TF231034	100m	10/03/2003	2 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye Green LNR	TF231034	100m	07/05/2005	11 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eye Green LNR	TF231034	100m	1990 - 1994		None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eyebury Road Pits	TF2301	1km	07/05/2005	8 Count	None	Tan Holt Farm and Gravel Pits	Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Eyebury Road Pits	TF239012	100m	2013		None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Northey Fen	TL2399	1km	13/04/2007	6 Count	None		Sect.41, UKBAP
bird	House Sparrow	*Passer domesticus*	Prior's Fen, Thorney	TF2401	1km	03/01/2004	10 Count	None	Prior's Farm	Sect.41, UKBAP
bird	Kingfisher	*Alcedo atthis*	Eye Green LNR	TF2303	1km	07/10/2016		None		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eye Green LNR	TF231034	100m	02/07/2003		None		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	08/10/2004	1 Count	None		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	13/11/2004	1 Count	None		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	12/10/2005	1 Count	None		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	23/06/2008	2 Count	None	pair seen emerging from bank on eastern pit	BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	13/07/2008	1 Count	None		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	21/09/2008		None		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	26/07/2009	2 Count	field record		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	13/09/2009	1 Count	field record		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	19/09/2009	1 Count	field record		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	25/09/2009	2 Count	field record		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	18/10/2009	1 Count	field record		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF2301	1km	15/08/2010	1 Count	None		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Eyebury Road Pits	TF236016	100m	Apr-15	2 Count	None		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Flag Fen	TF2200	1km	27/12/2003	1 Count	None	hovered over car at crossroads before flying towards power station	BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Flag Fen	TL2299	1km	17/10/2005	1 Count	None		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Flag Fen	TL2299	1km	02/01/2008	1 Count	None		BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Flag Fen	TL2399	1km	08/11/2004	1 Count	None	at Halfpenny Toll	BD1, WCA1i
bird	Kingfisher	*Alcedo atthis*	Northey Fen	TL2399	1km	25/03/2003	1 Count	None		BD1, WCA1i
bird	Lapwing	*Vanellus vanellus*	America Farm, Oxney	TF2300	1km	26/11/2004	300 Count	None	approx on fields near America Farm Willow Hall Lane	Sect.41, UKBAP
bird	Lapwing	*Vanellus vanellus*	Eye	TF2102	1km	28/02/2013	50 Count	None		Sect.41, UKBAP
bird	Lapwing	*Vanellus vanellus*	Eye Green	TF2203	1km	17/10/2006	100 Count	None	approx north of Green Road	Sect.41, UKBAP
bird	Lapwing	*Vanellus vanellus*	Eyebury Road Pits	TF2301	1km	2009	1 Count	None	breeding. Survey April - June.	Sect.41, UKBAP
bird	Lapwing	*Vanellus vanellus*	Eyebury Road Pits	TF2301	1km	05/07/2008	4 Count	None		Sect.41, UKBAP
bird	Lapwing	*Vanellus vanellus*	Eyebury Road Pits	TF2301	1km	05/07/2009		field record		Sect.41, UKBAP
bird	Lapwing	*Vanellus vanellus*	Eyebury Road Pits	TF2301	1km	26/07/2009	1 Count	field record		Sect.41, UKBAP
bird	Lapwing	*Vanellus vanellus*	Flag Fen	TL2299	1km	04/02/2003	60 Count	None	minimum	Sect.41, UKBAP
bird	Lapwing	*Vanellus vanellus*	Flag Fen	TL2299	1km	28/12/2005	100 Count	None	approx. heading west	Sect.41, UKBAP
bird	Lapwing	*Vanellus vanellus*	Northey	TL2399	1km	07/02/2005	400 Count	None	approx	Sect.41, UKBAP
bird	Lapwing	*Vanellus vanellus*	Northey Fen	TL2399	1km	13/04/2007	10 Count	None		Sect.41, UKBAP
bird	Lapwing	*Vanellus vanellus*	Willow Hall, Thorney	TF245008	100m	05/03/2008	200 Count	None	south of Prior's Farm	Sect.41, UKBAP
bird	Lesser Redpoll	*Acanthis cabaret*	Prior's Fen, Thorney	TF2401	1km	14/12/2003	1 Count	None	over Prior's Farm	Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Dogsthorpe Landfill Site	TF2102	1km	01/02/2008	50 Count	None		Sect.41, UKBAP

bird	Linnet	*Linaria cannabina*	Eye	TF2202	1km	24/04/2004	* Count	None		Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Eyebury Road Pits	TF2301	1km	2009	2 Count	None	breeding. Survey April - June.	Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Eyebury Road Pits	TF2301	1km	09/09/2003	30 Count	None	flock	Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Eyebury Road Pits	TF2301	1km	25/10/2003	4 Count	None		Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Eyebury Road Pits	TF2301	1km	02/02/2013	70 Count	None		Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Eyebury Road Pits	TF2301	1km	06/02/2013	40 Count	None		Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Eyebury Road Pits	TF235014	100m	2015	4 Count	None		Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Eyebury Road Pits	TF238011	100m	2017		None		Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Flag Fen	TL2299	1km	18/04/2005	2 Count	None		Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Flag Fen	TL2299	1km	10/11/2009	150 Count	field record		Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Northey	TL2399	1km	11/07/2003	3 Count	None		Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Oxney Gravel Pits	TF2200	1km	04/03/1953		None	Gravel Pit	Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Pode Hole, Thorney	TF2402	1km	20/04/2016		None		Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Pode Hole, Thorney	TF2402	1km	21/06/2016		None		Sect.41, UKBAP
bird	Linnet	*Linaria cannabina*	Pode Hole, Thorney	TF2502	1km	20/04/2016		None		Sect.41, UKBAP
bird	Little Egret	*Egretta garzetta*	Eye	TF2102	1km	06/10/2012	2 Count	None		BD1
bird	Little Egret	*Egretta garzetta*	Eyebury Road Pits	TF2301	1km	08/12/2012	2 Count	None		BD1
bird	Little Egret	*Egretta garzetta*	Flag Fen	TL2299	1km	05/07/2009	1 Count	field record	over west at dusk	BD1
bird	Little Egret	*Egretta garzetta*	Flag Fen	TL235997	100m	23/02/2004	1 Count	None	TL235997	BD1
bird	Little Egret	*Egretta garzetta*	Flag Fen	TL2399	1km	23/02/2004	1 Count	None	in ditches alongside Willow Hall Lane	BD1
bird	Little Egret	*Egretta garzetta*	Willow Hall, Thorney	TF2401	1km	09/03/2006	1 Count	None	Willow Hall Lane	BD1
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	2009	1 Count	None	breeding. Survey April - June.	WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	23/04/2004	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	16/05/2007	1 Count	None	on new workings	WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	22/05/2008	3 Count	None	on newly extracted section incl one displaying	WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	23/06/2008	1 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	30/06/2008	1 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	05/07/2008	3 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	13/07/2008	1 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	24/03/2012	1 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	02/04/2012	1 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	06/04/2012	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	07/04/2012	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	08/04/2012	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	16/04/2012	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	21/04/2012	4 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	22/04/2012	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	23/04/2012	1+ Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	28/04/2012	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	30/04/2012	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	05/05/2012	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	06/05/2012	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	07/05/2012	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	12/05/2012	1 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	19/05/2012	1 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	22/04/2013	4 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	25/04/2013	4 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	28/04/2013	3 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	04/05/2013	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	11/05/2013	4 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	18/05/2013	3 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	23/06/2013	2 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	06/07/2013	1 Count	None		WCA1i
bird	Little Ringed Plover	*Charadrius dubius*	Eyebury Road Pits	TF2301	1km	07/09/2013	2 Count	None		WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	24/02/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	22/03/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	14/04/2012	2 Count	None	pair together = looked like juv and adult female.	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	21/04/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	30/04/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	13/05/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	16/05/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	22/05/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	02/06/2012	2 Count	None	usual two birds. One adult female one juv circling round	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	05/06/2012	2 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	09/06/2012	2 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	10/06/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	16/06/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	19/06/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye	TF2102	1km	15/07/2012	2 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye Green	TF2303	1km	25/08/2012	1+ Count	None	dark bird flying over	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eye Green LNR	TF231034	100m	1999		None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	2009	1 Count	None	breeding. Survey April - June.	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	22/05/2008	1 Count	None	female	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	23/06/2008	1 Count	None	female	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	29/06/2008		None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	05/07/2008	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	04/09/2008	1 Count	None	Female/Imm	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	13/09/2008	1 Count	None	fem/imm	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	03/10/2008	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	03/05/2009	1 Count	field record		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	20/06/2009	2 Count	field record	male and female	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	27/09/2009	1 Count	field record	male	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	08/08/2010	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	06/04/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	08/04/2012	1 Count	None	female with pale shoulders - mobbed by jackdaws and rooks just by rookery at the back of the pi	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	14/04/2012	1 Count	None	female	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	20/04/2012	1+ Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	21/04/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	28/04/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	17/06/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF2301	1km	02/02/2013	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF235012	100m	2013		None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF235015	100m	May-15	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Eyebury Road Pits	TF238011	100m	2017		None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Flag Fen	TL2299	1km	03/03/2000	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Flag Fen	TL2299	1km	09/09/2003	1 Count	None	juvenile over decoy	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Flag Fen	TL2299	1km	22/07/2004	* Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Flag Fen	TL2299	1km	05/07/2007	1 Count	None	female	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Northey	TL2399	1km	28/08/2006	2 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Willow Hall, Thorney	TF2400	1km	19/06/2012	1 Count	None		BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Willow Hall, Thorney	TF2401	1km	05/09/2005	1 Count	None	Willow Hall Lane female	BD1, WCA1i
bird	Marsh Harrier	*Circus aeruginosus*	Willow Hall, Thorney	TF2401	1km	02/01/2013	1 Count	None	female	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	20/01/2000	1 Count	None	adult & 28th	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	28/01/2000	1 Count	None	3 CY	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	10/01/2003	1 Count	None	2nd winter	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	20/01/2003	1 Count	None	sec win	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	26/02/2003	1 Count	None	nearly full-hooded adult; adult winter	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	20/01/2006	1 Count	None	2nd Year	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	20/01/2006	1 Count	None	sec cal year	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	27/01/2009	1 Count	field record	Adult	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	12/07/2011	1 Count	None	Adult	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	09/02/2012	1 Count	None	1st winter	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	17/02/2012	2 Count	None	1st winter	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Dogsthorpe Landfill Site	TF2102	1km	18/02/2012	2 Count	None		BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Eyebury Road Pits	TF2301	1km	25/10/2003	1 Count	None	adult flew towards Dogsthorpe Tip	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Eyebury Road Pits	TF2301	1km	26/10/2003	1 Count	None	first-winter towards landfill	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Eyebury Road Pits	TF2301	1km	14/11/2003	1 Count	None	adult	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Eyebury Road Pits	TF2301	1km	15/11/2003	1 Count	None	1 ad winter	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Eyebury Road Pits	TF2301	1km	21/07/2010	1 Count	None	Juvenile	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Eyebury Road Pits	TF2301	1km	18/03/2011	1 Count	None	Adult Summer	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Flag Fen	TL2299	1km	25/03/2002	1 Count	None	Adult in full summer plumage	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Willow Hall, Thorney	TF2401	1km	30/03/2013	1 Count	None	2nd summer	BD1, WCA1i
bird	Mediterranean Gull	*Larus melanocephalı*	Willow Hall, Thorney	TF2401	1km	30/03/2013	1 Count	None	second summer	BD1, WCA1i
bird	Merlin	*Falco columbarius*	Eyebury Road Pits	TF2301	1km	30/11/2003	1 Count	None	adult male	BD1, WCA1i
bird	Merlin	*Falco columbarius*	Flag Fen	TL2299	1km	03/01/2003	1 Count	None	fem	BD1, WCA1i
bird	Merlin	*Falco columbarius*	Flag Fen	TL2299	1km	17/10/2003	1 Count	None	reported to	BD1, WCA1i
bird	Merlin	*Falco columbarius*	Northey	TL2399	1km	30/03/2006	1 Count	None	male over fields at the Halfpenny Toll end	BD1, WCA1i
bird	Merlin	*Falco columbarius*	Prior's Fen, Thorney	TF2401	1km	10/02/2004	1 Count	None	female at Willow Hall Lane	BD1, WCA1i
bird	Merlin	*Falco columbarius*	Prior's Fen, Thorney	TF2401	1km	10/02/2004	1 Count	None	Willow Hall Lane	BD1, WCA1i
bird	Osprey	*Pandion haliaetus*	Prior's Fen Gravel Pits	TF2501	1km	22/04/2010	1 Count	None	Over	BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Dogsthorpe Landfill Site	TF2102	1km	05/06/2013	1 Count	None		BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Eyebury Road Pits	TF2301	1km	03/12/2003	1 Count	None	attacking Woodpigeons	BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Eyebury Road Pits	TF2301	1km	14/12/2003	1 Count	None		BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Eyebury Road Pits	TF2301	1km	10/02/2004	1 Count	None	flew over to Dogsthorpe tip	BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Fengate, Peterborough	TL2199	1km	18/06/2007	3 Count	None	Fengate 2 adults and one young seen	BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Fengate, Peterborough	TL2199	1km	12/07/2011		None	one of chicks taken to Raptor centre at Woodhurst after falling from nest, one still in nest	BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Fengate, Peterborough	TL2299	1km	07/05/2012	1 Count	None		BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Flag Fen	TL2299	1km	03/11/2003	1 Count	None		BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Flag Fen	TL2299	1km	04/11/2003	1 Count	None	sitting in field	BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Flag Fen	TL2299	1km	22/01/2004	1 Count	None		BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Flag Fen	TL2299	1km	23/08/2012	1 Count	None	storey's bar road	BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Pode Hole, Thorney	TF2402	1km	13/09/2011		None	1 Observed over farmland	BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Prior's Fen, Thorney	TF2401	1km	04/02/2004	1 Count	None	Willow Hall Lane	BD1, WCA1i
bird	Peregrine	*Falco peregrinus*	Willow Hall, Thorney	TF2400	1km	27/12/2012	1 Count	None		BD1, WCA1i
bird	Pintail	*Anas acuta*	Eyebury Road Pits	TF2301	1km	17/10/2006	1 Count	None	male	WCA1ii

bird	Red Kite	*Milvus milvus*	A47, Eye	TF232032	100m	Mar-13	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2101	1km	04/05/2013	1+ Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	04/03/2003	1 Count	None	seen off the premises NE by most of gulls and some Starlings	BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	05/06/2009	1 Count	field record	over mobbed by Carrion Crow	BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	13/06/2009	1 Count	field record	over mobbed by Carrion Crow	BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	13/06/2009	1 Count	field record		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	23/11/2009	1 Count	field record	over heading towards Peterborough	BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	13/01/2011	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	20/03/2012	1 Count	None	with gulls over tip, seen from main road	BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	29/03/2012	3 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	26/01/2013	4 Count	None	over landfill looking superb in the snow	BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	26/01/2013	5 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	24/02/2013	5 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	18/05/2013	1 Count	None	over landfill	BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	28/11/2013	2 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Landfill Site	TF2102	1km	29/12/2013	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Dogsthorpe Star Pit SSSI	TF216025	100m	2013	2 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	02/05/2012	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	13/05/2012	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	22/05/2012	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	25/05/2012	3 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	02/06/2012	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	05/06/2012	2 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	09/06/2012	3 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	10/06/2012	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	16/06/2012	3 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	19/06/2012	3 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	23/06/2012	3 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	15/07/2012	3 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	20/10/2012	3 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	08/12/2012	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	02/06/2013	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	23/06/2013	2 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	01/11/2013	2 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2102	1km	30/11/2013	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2202	1km	15/05/2005	1 Count	None	over high	BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye	TF2303	1km	28/12/2013	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eye Green LNR	TF2303	1km	07/10/2016		None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	04/03/2003	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	06/03/2010	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	24/02/2012	2 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	12/05/2012	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	04/06/2012	2 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	07/07/2012	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	15/07/2012	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	26/01/2013	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	11/05/2013	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	01/11/2013	1 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	29/12/2013	2+ Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF2301	1km	29/12/2013	3+ Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF236009	100m	Apr-15	2 Count	None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF238011	100m	2017		None		BD1, WCA1i
bird	Red Kite	*Milvus milvus*	Eyebury Road Pits	TF243022	100m	13/09/2011		None	2 Observed over landfill	BD1, WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	25/10/2003	32 Count	None	+	WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	08/10/2004	70 Count	None	west in 30 mins	WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	08/10/2004	70 Count	None		WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	17/10/2006	2 Count	None		WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	30/09/2007	2 Count	None		WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	15/10/2007		None		WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	17/10/2008	2 Count	None		WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	19/10/2008	10 Count	None		WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	25/10/2008	20 Count	None	west	WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	01/11/2008	100 Count	None		WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	08/11/2008	20 Count	None		WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	12/11/2008	20 Count	None		WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF2301	1km	12/12/2009	20 Count	field record		WCA1i
bird	Redwing	*Turdus iliacus*	Eyebury Road Pits	TF240011	100m	2013		None		WCA1i
bird	Redwing	*Turdus iliacus*	Fengate, Peterborough	TL2199	1km	26/10/2006	70 Count	None	plus to north	WCA1i
bird	Redwing	*Turdus iliacus*	Fengate, Peterborough	TL2199	1km	12/10/2007	6 Count	None		WCA1i
bird	Redwing	*Turdus iliacus*	Flag Fen	TL2299	1km	10/01/2003	50 Count	None	est	WCA1i
bird	Redwing	*Turdus iliacus*	Northey	TL2399	1km	10/02/2003	90 Count	None	minimum	WCA1i
bird	Redwing	*Turdus iliacus*	Northey	TL2399	1km	24/10/2003	1 Count	None	over	WCA1i
bird	Redwing	*Turdus iliacus*	Northey	TL2399	1km	08/11/2003	16 Count	None		WCA1i
bird	Redwing	*Turdus iliacus*	Prior's Fen, Thorney	TF2401	1km	03/01/2004	8 Count	None	Prior's Farm	WCA1i
bird	Redwing	*Turdus iliacus*	Willow Hall, Thorney	TF2401	1km	13/12/2005	2 Count	None	Willow Hall Lane	WCA1i
bird	Reed Bunting	*Emberiza schoeniclu*	Eye	TF2102	1km	15/07/2012	2 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eye	TF2102	1km	29/09/2012	1 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eye	TF2102	1km	06/10/2012	3 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eye	TF2102	1km	20/10/2012	2 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eye Green LNR	TF231034	100m	07/05/2005	2 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eyebury Road Pits	TF2301	1km	2009	8 Count	None	breeding. Survey April - June.	Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eyebury Road Pits	TF2301	1km	14/04/2005	1 Count	None	male	Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eyebury Road Pits	TF2301	1km	29/06/2008		None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eyebury Road Pits	TF2301	1km	01/07/2012	1 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eyebury Road Pits	TF2301	1km	09/07/2012	2 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eyebury Road Pits	TF2301	1km	18/08/2012	1 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eyebury Road Pits	TF235014	100m	2015	2 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eyebury Road Pits	TF237009	100m	2015	2 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eyebury Road Pits	TF237010	100m	2013		None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eyebury Road Pits	TF238011	100m	2017		None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Eyebury Road Pits	TF240014	100m	2015	2 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Flag Fen	TL2299	1km	11/02/2005	10 Count	None	approx	Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Jephson's Pit, Oxney	TF2300	1km	11/04/1954		None	Gravel Pit	Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Northey	TL2399	1km	11/07/2003	2 Count	None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Oxney	TF2200	1km	07/05/1955		None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Pode Hole, Thorney	TF2402	1km	20/04/2016		None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Pode Hole, Thorney	TF2402	1km	21/06/2016		None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Pode Hole, Thorney	TF2502	1km	20/04/2016		None		Sect.41, UKBAP
bird	Reed Bunting	*Emberiza schoeniclu*	Pode Hole, Thorney	TF2502	1km	21/06/2016		None		Sect.41, UKBAP
bird	Ruff	*Calidris pugnax*	Eyebury Road Pits	TF2301	1km	10/09/2011	1 Count	None		BD1, WCA1i
bird	Ruff	*Calidris pugnax*	Northey	TF2400	1km	22/09/2003	10 Count	None	with Lapwing/Starling flock next to Willow Hall Drove	BD1, WCA1i
bird	Ruff	*Calidris pugnax*	Northey Fen	TL2399	1km	22/09/2003	10 Count	None		BD1, WCA1i
bird	Scaup	*Aythya marila*	Eye Green	TF2303	1km	22/02/2012	1 Count	None	Male	Sect.41, UKBAP, WCA1i
bird	Scaup	*Aythya marila*	Eye Green	TF2303	1km	24/02/2012	1 Count	None	adult male. Not self found	Sect.41, UKBAP, WCA1i
bird	Scaup	*Aythya marila*	Eye Green LNR	TF2303	1km	19/02/2012	1 Count	None		Sect.41, UKBAP, WCA1i
bird	Scaup	*Aythya marila*	Eye Green LNR	TF2303	1km	20/02/2012	1 Count	None		Sect.41, UKBAP, WCA1i
bird	Scaup	*Aythya marila*	Eye Green LNR	TF2303	1km	20/02/2012	1+ Count	None		Sect.41, UKBAP, WCA1i
bird	Scaup	*Aythya marila*	Eye Green LNR	TF2303	1km	21/02/2012	1 Count	None	Male	Sect.41, UKBAP, WCA1i
bird	Scaup	*Aythya marila*	Eye Green LNR	TF2303	1km	21/02/2012	1+ Count	None		Sect.41, UKBAP, WCA1i
bird	Scaup	*Aythya marila*	Eye Green LNR	TF2303	1km	23/02/2012	1+ Count	None		Sect.41, UKBAP, WCA1i
bird	Scaup	*Aythya marila*	Eye Green LNR	TF2303	1km	24/02/2012	1+ Count	None		Sect.41, UKBAP, WCA1i
bird	Short-eared Owl	*Asio flammeus*	Flag Fen	TL2299	1km	30/01/2005	1 Count	None	Hunting along roadside at Pearces Rd. east of Power Station	BD1
bird	Skylark	*Alauda arvensis*	Eye Green	TF2303	1km	10/03/2003	2 Count	None	in field next to reserve	Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Eyebury Road Pits	TF2301	1km	2009	1 Count	None	breeding. Survey April - June.	Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Eyebury Road Pits	TF2301	1km	11/12/2003	15 Count	None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Eyebury Road Pits	TF2301	1km	08/10/2008		None	several over here and elsewhere	Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Eyebury Road Pits	TF2301	1km	14/10/2008		None	singing	Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Eyebury Road Pits	TF238011	100m	2017		None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Flag Fen	TL2299	1km	19/11/2000	35 Count	None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Flag Fen	TL2299	1km	02/01/2003	8 Count	None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Flag Fen	TL2299	1km	10/01/2003	8 Count	None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Flag Fen	TL2299	1km	31/01/2003	130 Count	None	apparently finding feeding on a rather snowy field	Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Flag Fen	TL2299	1km	06/03/2003	10 Count	None	at least, active above stubble and fallow land	Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Flag Fen	TL2299	1km	29/01/2004	50 Count	None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Flag Fen	TL2299	1km	26/11/2004	6 Count	None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Flag Fen	TL2299	1km	23/01/2005	5 Count	None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Flag Fen	TL2299	1km	11/02/2005	6 Count	None	approx	Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Flag Fen	TL2299	1km	05/12/2006	40 Count	None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Flag Fen	TL2299	1km	11/02/2009	50-100 Count	field record		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Northey	TL2399	1km	11/07/2003		None	masses, many singing	Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Northey	TL2399	1km	06/04/2005	* Count	None	seemingly good numbers on Northey and Flag Fen fields	Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Northey Fen	TL2399	1km	19/05/2007	4 Count	None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Pode Hole, Thorney	TF2402	1km	20/04/2016		None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Pode Hole, Thorney	TF2402	1km	21/06/2016		None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Pode Hole, Thorney	TF2502	1km	20/04/2016		None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Pode Hole, Thorney	TF2502	1km	21/06/2016		None		Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Prior's Fen, Thorney	TF2401	1km	05/02/2004	6 Count	None	Willow Hall Lane	Sect.41, UKBAP
bird	Skylark	*Alauda arvensis*	Prior's Fen, Thorney	TF2401	1km	10/02/2004	14 Count	None	Willow Hall Lane	Sect.41, UKBAP
bird	Smew	*Mergellus albellus*	Eyebury Road Pits	TF2301	1km	31/01/2013	1 Count	None	Readhead	BD1
bird	Smew	*Mergellus albellus*	Northey Fen	TL2399	1km	06/04/2013	1+ Count	None		BD1
bird	Song Thrush	*Turdus philomelos*	Eyebury Road Pits	TF2301	1km	2009	3 Count	None	breeding. Survey April - June.	Sect.41, UKBAP
bird	Song Thrush	*Turdus philomelos*	Eyebury Road Pits	TF2301	1km	25/10/2003	7 Count	None		Sect.41, UKBAP
bird	Song Thrush	*Turdus philomelos*	Eyebury Road Pits	TF2301	1km	08/10/2004	2 Count	None	through	Sect.41, UKBAP
bird	Song Thrush	*Turdus philomelos*	Eyebury Road Pits	TF2301	1km	20/09/2005	6 Count	None		Sect.41, UKBAP
bird	Song Thrush	*Turdus philomelos*	Eyebury Road Pits	TF2301	1km	07/10/2005	2 Count	None		Sect.41, UKBAP

bird	Song Thrush	*Turdus philomelos*	Eyebury Road Pits	TF2301	1km	12/10/2005	5 Count	None	at least	Sect.41, UKBAP
bird	Song Thrush	*Turdus philomelos*	Eyebury Road Pits	TF234008	100m	2015	1 Count	None		Sect.41, UKBAP
bird	Song Thrush	*Turdus philomelos*	Eyebury Road Pits	TF238011	100m	2017		None		Sect.41, UKBAP
bird	Song Thrush	*Turdus philomelos*	Eyebury Road Pits	TF239012	100m	2013		None		Sect.41, UKBAP
bird	Song Thrush	*Turdus philomelos*	Eyebury Road Pits	TF240014	100m	2015	1 Count	None		Sect.41, UKBAP
bird	Song Thrush	*Turdus philomelos*	Northey Fen	TL2399	1km	13/04/2007	2 Count	None		Sect.41, UKBAP
bird	Song Thrush	*Turdus philomelos*	Northey Fen	TL2399	1km	28/12/2007	1 Count	None		Sect.41, UKBAP
bird	Song Thrush	*Turdus philomelos*	Prior's Fen, Thorney	TF2401	1km	03/01/2004	1 Count	None	Prior's Farm	Sect.41, UKBAP
bird	Spotted Flycatcher	*Muscicapa striata*	Eyebury Road Pits	TF2301	1km	30/08/2008	1 Count	None		Sect.41, UKBAP
bird	Spotted Flycatcher	*Muscicapa striata*	Eyebury Road Pits	TF2301	1km	05/09/2009	2 Count	field record		Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	America Farm, Oxney	TF2300	1km	23/11/2004	200 Count	None	est. near America Farm	Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Dogsthorpe Landfill Site	TF2102	1km	21/02/2003	1200 Count	None	+	Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Dogsthorpe Landfill Site	TF2102	1km	09/11/2007	400 Count	None	approx	Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Dogsthorpe Landfill Site	TF2102	1km	25/01/2013	300 Count	None	feeding on landfill	Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Eye	TF2102	1km	20/10/2012	100 Count	None		Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Eye	TF2102	1km	28/02/2013	50 Count	None		Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Eye Green LNR	TF231034	100m	1990 - 1994		None		Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Eyebury Road Pits	TF2301	1km	2009	1 Count	None	breeding. Survey April - June.	Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Eyebury Road Pits	TF2301	1km	02/02/2013	350 Count	None		Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Eyebury Road Pits	TF2301	1km	21/12/2013	500 Count	None		Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Eyebury Road Pits	TF237010	100m	May-15	10 Count	None		Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Eyebury Road Pits	TF238011	100m	2017		None		Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Eyebury Road Pits	TF240013	100m	2013		None		Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Newark, Peterborough	TF2100	1km	04/01/1953		None		Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Northey Fen	TL2399	1km	13/04/2007	4 Count	None		Sect.41, UKBAP
bird	Starling	*Sturnus vulgaris*	Prior's Fen, Thorney	TF2401	1km	03/01/2004	20 Count	None	Prior's Farm	Sect.41, UKBAP
bird	Swift	*Apus apus*	Eyebury Road Pits	TF2301	1km	2009		None	foraging. Survey April - June.	CPASI
bird	Swift	*Apus apus*	Eyebury Road Pits	TF2301	1km	15/08/2008	1 Count	None	south	CPASI
bird	Swift	*Apus apus*	Eyebury Road Pits	TF2301	1km	28/04/2013	1 Count	None		CPASI
bird	Swift	*Apus apus*	Eyebury Road Pits	TF238011	100m	2017		None		CPASI
bird	Swift	*Apus apus*	Fengate, Peterborough	TL2199	1km	30/06/2006	32 Count	None	+	CPASI
bird	Swift	*Apus apus*	Fengate, Peterborough	TL2199	1km	28/07/2006	40 Count	None	+	CPASI
bird	Swift	*Apus apus*	Fengate, Peterborough	TL2199	1km	02/08/2006	25 Count	None	+	CPASI
bird	Swift	*Apus apus*	Fengate, Peterborough	TL2199	1km	10/08/2006	1 Count	None		CPASI
bird	Swift	*Apus apus*	Flag Fen	TL2299	1km	13/08/2006	150 Count	None	approx moving eastwards from 1730-1900	CPASI
bird	Swift	*Apus apus*	Northey	TL2399	1km	11/08/2006		None	small numbers over	CPASI
bird	Swift	*Apus apus*	Northey	TL2399	1km	04/09/2008	1 Count	None		CPASI
bird	Temminck's Stint	*Calidris temminckii*	Prior's Fen Gravel Pits	TF2500	1km	07/09/2005	1 Count	None	juv on private pits	WCA1i
bird	Tree Sparrow	*Passer montanus*	Eye	TF228018	100m	26/02/2012	2 Count	None	visiting feeders at Eyebury Cottages. A first for me at this site	Sect.41, UKBAP
bird	Tree Sparrow	*Passer montanus*	Eye Green LNR	TF231034	100m	1999		None		Sect.41, UKBAP
bird	Tree Sparrow	*Passer montanus*	Eyebury Road Pits	TF2301	1km	03/03/2012	3 Count	None		Sect.41, UKBAP
bird	Tree Sparrow	*Passer montanus*	Eyebury Road Pits	TF2301	1km	11/03/2012	12 Count	None		Sect.41, UKBAP
bird	Tree Sparrow	*Passer montanus*	Eyebury Road Pits	TF2301	1km	22/03/2012	1 Count	None		Sect.41, UKBAP
bird	Tree Sparrow	*Passer montanus*	Eyebury Road Pits	TF2301	1km	24/03/2012	3 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eye Green	TF2303	1km	12/08/2012	1 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eye Green	TF2303	1km	18/05/2013	2 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eye Green	TF2303	1km	02/06/2013	2 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eye Green	TF2303	1km	08/06/2013	2 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eye Green	TF2303	1km	23/06/2013	1 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eye Green	TF2303	1km	06/07/2013	2 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eye Green	TF2303	1km	06/07/2013	2 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eye Green LNR	TF2303	1km	13/06/2013	1 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eyebury Road Pits	TF2301	1km	2009	1 Count	None	breeding. Survey April - June.	Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eyebury Road Pits	TF2301	1km	26/08/2004	6 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eyebury Road Pits	TF2301	1km	29/08/2004	3 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eyebury Road Pits	TF2301	1km	23/06/2008		None	birds seen and heard on recent visits	Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eyebury Road Pits	TF2301	1km	29/06/2008		None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Eyebury Road Pits	TF2301	1km	14/06/2009	2 Count	field record	by Tanholt Farm	Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Northey	TL2399	1km	26/06/2003	1 Count	None		Sect.41, UKBAP
bird	Turtle Dove	*Streptopelia turtur*	Northey	TL2399	1km	18/05/2004	2 Count	None	1 singing	Sect.41, UKBAP
bird	Whimbrel	*Numenius phaeopus*	Dogsthorpe Landfill Site	TF2102	1km	28/07/2004	19 Count	None	over south	WCA1i
bird	Whooper Swan	*Cygnus cygnus*	Eye Green	TF2303	1km	30/09/2009	6 Count	field record	arrived at 16:00	BD1, WCA1i
bird	Whooper Swan	*Cygnus cygnus*	Eye Green	TF2303	1km	01/10/2009	6 Count	field record	north of reserve at 11:30	BD1, WCA1i
bird	Whooper Swan	*Cygnus cygnus*	Eyebury Road Pits	TF2301	1km	26/10/2003	1 Count	None	over to W	BD1, WCA1i
bird	Whooper Swan	*Cygnus cygnus*	Eyebury Road Pits	TF2301	1km	12/12/2009	1 Count	field record	over calling	BD1, WCA1i
bird	Whooper Swan	*Cygnus cygnus*	Northey	TL2399	1km	22/01/2004	6 Count	None		BD1, WCA1i
bird	Whooper Swan	*Cygnus cygnus*	Prior's Fen Gravel Pits	TF2501	1km	03/02/2004	10 Count	None	at Willow Hall Lane end	BD1, WCA1i
bird	Whooper Swan	*Cygnus cygnus*	Willow Hall, Thorney	TF2401	1km	07/12/2013	1+ Count	None		BD1, WCA1i
bird	Wood Sandpiper	*Tringa glareola*	Eye	TF2202	1km	03/08/2002	1 Count	None	Private Land	BD1, WCA1i
bird	Yellow Wagtail	*Motacilla flava*	Eye	TF2102	1km	05/06/2012	2 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eye	TF2102	1km	24/04/2013	3 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eye	TF2202	1km	23/08/2004	10 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eyebury Road Pits	TF2301	1km	20/04/2004	1 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eyebury Road Pits	TF2301	1km	26/08/2004	1 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava subs*	Eyebury Road Pits	TF2301	1km	16/05/2007	1 Count	None	over twice	Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eyebury Road Pits	TF2301	1km	15/08/2010	2 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eyebury Road Pits	TF2301	1km	21/04/2012	3 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eyebury Road Pits	TF2301	1km	22/04/2012	2 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eyebury Road Pits	TF2301	1km	07/05/2012	2 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eyebury Road Pits	TF2301	1km	12/08/2012	2 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eyebury Road Pits	TF2301	1km	25/08/2012	1 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eyebury Road Pits	TF2301	1km	01/09/2012	1 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Eyebury Road Pits	TF2301	1km	09/09/2012	2 Count	None	two juvs. One was attacking sand martins visiting nest holes.	Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava subs*	Flag Fen	TF2200	1km	14/05/2007	2 Count	None	along Pearces Road	Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Flag Fen	TL2299	1km	05/09/2002	1 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Northey	TL2399	1km	09/05/2003	2 Count	None	m, f	Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Northey	TL2399	1km	11/07/2003	2 Count	None		Sect.41, UKBAP
bird	Yellow Wagtail	*Motacilla flava*	Pode Hole, Thorney	TF2502	1km	21/06/2016		None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eye	TF2102	1km	15/07/2012	2 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eye	TF2102	1km	29/09/2012	1 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eye	TF2102	1km	20/10/2012	2 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eye Green	TF2303	1km	01/10/2009		field record	good numbers	Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eye Green	TF2303	1km	24/02/2012	20 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eye Green	TF2303	1km	22/03/2012	20 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eye Green	TF2303	1km	13/01/2013	10 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eye Green LNR	TF2303	1km	27/03/2012	15 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF2301	1km	2009	1 Count	None	breeding. Survey April - June.	Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF2301	1km	17/01/2004	10 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF2301	1km	03/02/2004	1 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF2301	1km	16/05/2007	1 Count	None	singing	Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF2301	1km	29/06/2008		None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF2301	1km	29/08/2008	5 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF2301	1km	01/07/2012	1 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF2301	1km	07/07/2012	1 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF2301	1km	09/07/2012	2 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF2301	1km	21/07/2012	1 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF238011	100m	2017		None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF239013	100m	2015	1 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Eyebury Road Pits	TF240011	100m	2013		None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Flag Fen	TL2299	1km	19/11/2000	15 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Flag Fen	TL2299	1km	10/01/2003	1 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Flag Fen	TL2299	1km	12/02/2004	10 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Flag Fen	TL2299	1km	10/11/2009	3 Count	field record		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Northey	TL2399	1km	09/05/2003	1 Count	None	singing	Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Northey	TL2399	1km	21/05/2003	1 Count	None	singing	Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Northey	TL2399	1km	21/05/2003	1 Count	None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Northey	TL2399	1km	11/07/2003		None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Pode Hole, Thorney	TF2402	1km	21/06/2016		None		Sect.41, UKBAP
bird	Yellowhammer	*Emberiza citrinella*	Pode Hole, Thorney	TF2502	1km	20/04/2016		None		Sect.41, UKBAP
flowering plant	Betony	*Stachys officinalis*	Dogsthorpe, Peterborough	TF20	10km	1970		None		CPASI
flowering plant	Bulbous Rush	*Juncus bulbosus*	Cat's Water Drain CWS	TF24180147	10m	24/09/2009		Native	dense stand over 50 square cm of channel, clear flowing water	CPASI
flowering plant	Bulbous Rush	*Juncus bulbosus*	Cat's Water Drain CWS	TF24180147	10m	24/09/2009		Native	dense stand over 50 square cm of channel, clear flowing water, population spans the VC bounda	CPASI
flowering plant	Chicory	*Cichorium intybus*	Eye	TF2200	1km	14/08/2011		None		RLENG.VU
flowering plant	Chicory	*Cichorium intybus*	Eye	TF2302	1km	14/08/2011		None		RLENG.VU
flowering plant	Common Cudweed	*Filago vulgaris*	Eye	TF20G	2km	28/06/2007		Native		RLENG.Lr(NT), RLGB.Lr(NT)
flowering plant	Corn Mint	*Mentha arvensis*	Dogsthorpe, Peterborough	TF20	10km	1970		None		RLENG.Lr(NT)
flowering plant	Corn Mint	*Mentha arvensis*	Eye	TF2202	1km	1998		None		RLENG.Lr(NT)
flowering plant	Corn Spurrey	*Spergula arvensis*	Oxney	TF228008	100m	28/08/1974		None		RLENG.VU, RLGB.VU
flowering plant	Dwarf Spurge	*Euphorbia exigua*	Prior's Fen, Thorney	TF2400	1km	30/06/2006		None	edge of a sugar beet field by Willow Hall lane and in vicinity of Poplar Farm	CPASI, RLENG.VU, RLGB.Lr(NT)
flowering plant	Dwarf Spurge	*Euphorbia exigua*	Prior's Fen, Thorney	TF248022	100m	24/09/2009		None		CPASI, RLENG.VU, RLGB.Lr(NT)
flowering plant	Dwarf Spurge	*Euphorbia exigua*	Thorney	TF2401	1km	28/05/2017		None	two plants at edge of rape field	CPASI, RLENG.VU, RLGB.Lr(NT)
flowering plant	Dwarf Spurge	*Euphorbia exigua*	Willow Hall, Thorney	TF20K	2km	01/08/1992		None		CPASI, RLENG.VU, RLGB.Lr(NT)
flowering plant	Fen Pondweed	*Potamogeton colora*	Dogsthorpe Star Brick Works	TF2102	1km	1991		None	with SJL	CPASI, NS
flowering plant	Field Pepperwort	*Lepidium campestre*	Oxney	TF232012	100m	22/08/1974		None		RLENG.Lr(NT)
flowering plant	Field Pepperwort	*Lepidium campestre*	Willow Hall, Thorney	TF2401	1km	23/05/1954		None		RLENG.Lr(NT)
flowering plant	Field Woundwort	*Stachys arvensis*	Eye	TF2202	1km	1998		None		RLENG.Lr(NT), RLGB.Lr(NT)
flowering plant	Field Woundwort	*Stachys arvensis*	Oxney	TF232010	100m	28/08/1974		None		RLENG.Lr(NT), RLGB.Lr(NT)
flowering plant	Good-King-Henry	*Chenopodium bonus*	Flag Fen	TL2299	1km	01/09/1956		None		RLENG.VU, RLGB.VU
flowering plant	Greater Burnet-saxifra	*Pimpinella major*	Dogsthorpe Star Brick Works	TF2102	1km	1992		None		CPASI
flowering plant	Greater Burnet-saxifra	*Pimpinella major*	Dogsthorpe, Peterborough	TF20	10km	1970		None		CPASI
flowering plant	Greater Burnet-saxifra	*Pimpinella major*	Eye	TF2202	1km	1998		None		CPASI
flowering plant	Heath Speedwell	*Veronica officinalis*	Cat's Water Drain, Flag Fen	TL2299	1km	20/08/2010		None		RLENG.Lr(NT)
flowering plant	Heath Speedwell	*Veronica officinalis*	Eyebury Road Pits	TF2301	1km	Aug-09		None	grassland survey	RLENG.Lr(NT)
flowering plant	Heath Speedwell	*Veronica officinalis*	Eyebury Road Pits	TF240013	100m	Aug-10		None		RLENG.Lr(NT)
flowering plant	Heath Speedwell	*Veronica officinalis*	Oxney Gravel Pits	TF2200	1km	15/04/1954		None		RLENG.Lr(NT)

flowering plant	Hoary Plantain	*Plantago media*	Dogsthorpe, Peterborough	TF20	10km	1970		None		RLENG.Lr(NT)
flowering plant	Hoary Plantain	*Plantago media*	Eye	TF2202	1km	1998		None		RLENG.Lr(NT)
flowering plant	Hoary Plantain	*Plantago media*	Eyebury Road Pits	TF2301	1km	Aug-09		None	grassland survey	RLENG.Lr(NT)
flowering plant	Hoary Plantain	*Plantago media*	Eyebury Road Pits	TF240013	100m	Aug-10		None		RLENG.Lr(NT)
flowering plant	Large-flowered Hemp-n	*Galeopsis speciosa*	Dogsthorpe, Peterborough	TF20	10km	1970		None		RLENG.VU, RLGB.VU
flowering plant	Large-flowered Hemp-n	*Galeopsis speciosa*	Eye	TF2202	1km	1998		None		RLENG.VU, RLGB.VU
flowering plant	Lesser Water-plantain	*Baldellia ranunculoid*	Dogsthorpe Star Brick Works	TF2102	1km	1991		None	with SJL	CPASI, RLENG.VU, RLGB.Lr(NT)
flowering plant	Lesser Water-plantain	*Baldellia ranunculoid*	Dogsthorpe Star Brick Works	TF2102	1km	1983 - 1984		None		CPASI, RLENG.VU, RLGB.Lr(NT)
flowering plant	Lesser Water-plantain	*Baldellia ranunculoid*	Eye	TF2202	1km	1998		None		CPASI, RLENG.VU, RLGB.Lr(NT)
flowering plant	Marsh Ragwort	*Senecio aquaticus*	Dogsthorpe, Peterborough	TF20	10km	1970		None		CPASI, RLENG.Lr(NT)
flowering plant	Narrow-leaved Water-p	*Alisma lanceolatum*	Cat's Water Drain CWS	TF2401	1km	24/09/2009		Native		CPASI
flowering plant	Narrow-leaved Water-p	*Alisma lanceolatum*	Cat's Water Drain CWS	TF2401	1km	24/09/2009		Native		CPASI
flowering plant	Narrow-leaved Water-p	*Alisma lanceolatum*	Cat's Water Drain CWS	TF2401	1km	22/07/2010		None		CPASI
flowering plant	Narrow-leaved Water-p	*Alisma lanceolatum*	Dogsthorpe, Peterborough	TF20	10km	1970		None		CPASI
flowering plant	Narrow-leaved Water-p	*Alisma lanceolatum*	Eye	TF2202	1km	1998		None		CPASI
flowering plant	Narrow-leaved Water-p	*Alisma lanceolatum*	Eye	TF2402	1km	24/09/2009		Native		CPASI
flowering plant	Needle Spike-rush	*Eleocharis acicularis*	Dogsthorpe, Peterborough	TF20	10km	1970		None		CPASI, RLENG.Lr(NT)
flowering plant	Night-flowering Catchf	*Silene noctiflora*	Dogsthorpe, Peterborough	TF20	10km	1970		None		RLENG.VU, RLGB.VU
flowering plant	Night-flowering Catchf	*Silene noctiflora*	Eye	TF2202	1km	1998		None		RLENG.VU, RLGB.VU
flowering plant	Night-flowering Catchf	*Silene noctiflora*	Oxney	TF232010	100m	28/08/1974		None		RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Cat's Water Drain CWS	TF2300	1km	01/08/1993		None		CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Cat's Water Drain CWS	TF23840048	10m	15/09/2007		None	Cat's Water Drain, and further north along drain	CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Cat's Water Drain CWS	TF24180147	10m	24/09/2009		Native	locally frequent	CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Cat's Water Drain CWS	TF24180147	10m	24/09/2009		Native	locally frequent along Drain, population spans the VC boundary	CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Cat's Water Drain CWS	TF24240165	10m	24/09/2009		Native	sparse with Ranunculus agg.	CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Cat's Water Drain CWS	TF24240165	10m	24/09/2009		Native		CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Cat's Water Drain CWS	TL23429964	10m	26/04/2014		None		CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Cat's Water Drain CWS	TL2399	1km	22/07/2010		None		CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Dogsthorpe, Peterborough	TF20	10km	1970		None		CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Eye	TF2202	1km	1998		None		CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Eyebury Road Pits	TF2301	1km	Aug-09		None	pond survey	CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Eyebury Road Pits	TF237016	100m	28/08/1974		None	edge of old gravel workings	CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Thorney	TF2502	1km	2002		None		CPASI, RLENG.VU, RLGB.VU
flowering plant	Opposite-leaved Pondv	*Groenlandia densa*	Thorney	TF2502	1km	2002		None		CPASI, RLENG.VU, RLGB.VU
flowering plant	Pansy	*Viola tricolor subsp.*	Eye Green LNR	TF231034	100m	18/07/2007	1 Count	None		RLENG.Lr(NT), RLGB.Lr(NT)
flowering plant	Pepper-saxifrage	*Silaum silaus*	Dogsthorpe, Peterborough	TF20	10km	1970		None		CPASI
flowering plant	Pyramidal Orchid	*Anacamptis pyramid*	Dogsthorpe Star Brick Works	TF2102	1km	1983 - 1984		None		CPASI
flowering plant	Sea Barley	*Hordeum marinum*	Oxney	TF2100	1km	07/07/1992		None		NS, RLENG.VU, RLGB.VU, Sect.41, UKBAP
flowering plant	Small Scabious	*Scabiosa columbaria*	Dogsthorpe, Peterborough	TF20	10km	1970		None		CPASI
flowering plant	Small Scabious	*Scabiosa columbaria*	Eye	TF2202	1km	1998		None		CPASI
flowering plant	Small Scabious	*Scabiosa columbaria*	Eye	TF232032	100m	16/07/1975		None		CPASI
flowering plant	Smooth Cat's-ear	*Hypochaeris glabra*	Eye Green LNR	TF231034	100m	02/07/2003		None		RLENG.VU, RLGB.VU
flowering plant	Stinking Chamomile	*Anthemis cotula*	Dogsthorpe, Peterborough	TF20	10km	1970		None		RLENG.VU, RLGB.VU
flowering plant	Tormentil	*Potentilla erecta*	Eye	TF2202	1km	1998		None		RLENG.Lr(NT)
flowering plant	Tormentil	*Potentilla erecta*	Eye Green LNR	TF231034	100m	02/07/2003		None		RLENG.Lr(NT)
flowering plant	Tormentil	*Potentilla erecta*	Eye Green LNR	TF231034	100m	18/07/2007	1 Count	None		RLENG.Lr(NT)
flowering plant	Treacle-mustard	*Erysimum cheiranth*	Dogsthorpe, Peterborough	TF20	10km	1970		None		RLENG.Lr(NT)
flowering plant	Treacle-mustard	*Erysimum cheiranth*	Eye	TF2202	1km	1998		None		RLENG.Lr(NT)
flowering plant	Water-violet	*Hottonia palustris*	America Farm, Oxney	TF2300	1km	17/06/1955		None		CPASI, RLENG.VU
flowering plant	Wild Liquorice	*Astragalus glycyphyl*	Dogsthorpe, Peterborough	TF20	10km	1970		None		CPASI
flowering plant	Yellow Vetchling	*Lathyrus aphaca*	Oxney Gravel Pits	TF2200	1km	07/05/1955		None		NS, RLENG.VU, RLGB.VU
insect - beetle (Coleo	Adonis' Ladybird	*Hippodamia variega*	Eye Green LNR	TF231034	100m	1990 - 1994		None		Nb
insect - beetle (Coleo	Agabus undulatus	*Agabus undulatus*	Eye Green LNR	TF231034	100m	2001		None		CPASI, RLGB.Lr(NT)
insect - beetle (Coleo	Agabus undulatus	*Agabus undulatus*	Eye Green LNR	TF231034	100m	Sep-99	1 Count	None		CPASI, RLGB.Lr(NT)
insect - beetle (Coleo	Aulacobaris picicornis	*Aulacobaris picicorn*	Eye Green LNR	TF231032	100m	12/10/1999	1 Count	None		Nb
insect - beetle (Coleo	Berosus luridus	*Berosus luridus*	Cat's Water Drain CWS	TL23429964	10m	26/04/2014		None		Nb, RLGB.Lr(NT)
insect - beetle (Coleo	Black Oil-beetle	*Meloe proscarabaeu*	Eyebury Road Pits CWS	TF23890162	10m	25/03/2016	1 Count	None	1 male on sparsely vegetated sandy slopes north of Green Wheel path adjacent to quarry, where	Sect.41, UKBAP
insect - beetle (Coleo	Chaetarthria seminulu	*Chaetarthria seminu*	Eye Green LNR	TF231034	100m	Sep-99	1 Count	None		NS
insect - beetle (Coleo	Donacia clavipes	*Donacia clavipes*	Eye Green LNR	TF230034	100m	03/07/1996	1 Count	None		Nb
insect - beetle (Coleo	Gyrinus distinctus	*Gyrinus distinctus*	Eye Green LNR	TF2203	1km	30/09/2000		None	A pair from a group swimming among reed stems at margin of pit.	NS
insect - beetle (Coleo	Gyrinus distinctus	*Gyrinus distinctus*	Eye Green LNR	TF229033	100m	12/04/1990	1 Count	None		NS
insect - beetle (Coleo	Gyrinus distinctus	*Gyrinus distinctus*	Eye Green LNR	TF231032	100m	12/10/1999	1 Count	None		NS
insect - beetle (Coleo	Gyrinus distinctus	*Gyrinus distinctus*	Eye Green LNR	TF231034	100m	2001		None		NS
insect - beetle (Coleo	Gyrinus distinctus	*Gyrinus distinctus*	Eye Green LNR	TF231034	100m	30/09/2000		None	A pair were collected from a group of these whirligig beetles swimming among reed stems near t	NS
insect - beetle (Coleo	Gyrinus distinctus	*Gyrinus distinctus*	Eye Green LNR	TF231034	100m	1990 - 1994		None		NS
insect - beetle (Coleo	Gyrinus distinctus	*Gyrinus distinctus*	Eye Green LNR	TF232033	100m	19/05/1996	1 Count	None		NS
insect - beetle (Coleo	Gyrinus paykulli	*Gyrinus paykulli*	Eye Green LNR	TF231032	100m	12/10/1999	1 Count	None		NS
insect - beetle (Coleo	Gyrinus paykulli	*Gyrinus paykulli*	Eye Green LNR	TF231034	100m	2001		None		NS
insect - beetle (Coleo	Gyrinus paykulli	*Gyrinus paykulli*	Eye Green LNR	TF232033	100m	08/04/1996	1 Count	None		NS
insect - beetle (Coleo	Gyrinus paykulli	*Gyrinus paykulli*	Eye Green LNR	TF232033	100m	19/05/1996	1 Count	None		NS
insect - beetle (Coleo	Haliplus mucronatus	*Haliplus mucronatus*	Car Dyke, Peterborough	TF213016	100m	16/08/2006		None		Na, NS
insect - beetle (Coleo	Haliplus mucronatus	*Haliplus mucronatus*	Eyebury Road Pits	TF237009	100m	21/06/2013		None		Na, NS
insect - beetle (Coleo	Haliplus mucronatus	*Haliplus mucronatus*	Eyebury Road Pits	TF238010	100m	21/06/2013		None		Na, NS
insect - beetle (Coleo	Helophorus granularis	*Helophorus granular*	Eyebury Road Pits	TF236008	100m	21/06/2013		None		NS
insect - beetle (Coleo	Hydaticus transversalis	*Hydaticus transversc*	Cat's Water Drain CWS	TL23429964	10m	26/04/2014		None		NS
insect - beetle (Coleo	Hydrochus ignicollis	*Hydrochus ignicollis*	Eyebury Road Pits	TF238010	100m	Jul-15	1 Count	None		RLGB.Lr(NT)
insect - beetle (Coleo	Hydroporus marginatu	*Hydroporus margina*	Eye Green LNR	TF231034	100m	Sep-99	1 Count	None		NS
insect - beetle (Coleo	Ilybius subaeneus	*Ilybius subaeneus*	Eyebury Road Pits	TF237009	100m	Jul-15	2 Count	None		NS
insect - beetle (Coleo	Longitarsus dorsalis	*Longitarsus dorsalis*	Eye Green LNR	TF229033	100m	30/09/2000		None	sweeping	Nb
insect - beetle (Coleo	Longitarsus dorsalis	*Longitarsus dorsalis*	Eye Green LNR	TF229033	100m	30/09/2000		None	sweeping Senecio on waste ground near western margin	Nb
insect - beetle (Coleo	Longitarsus dorsalis	*Longitarsus dorsalis*	Eye Green LNR	TF231032	100m	12/10/1999	1 Count	None		Nb
insect - beetle (Coleo	Longitarsus ganglbaue	*Longitarsus ganglba*	Eye Green LNR	TF231032	100m	12/10/1999	1 Count	None		Na
insect - beetle (Coleo	Orchesia micans	*Orchesia micans*	Willow Hall Drove	TF250020	100m	1994	1 Count	None		Nb
insect - beetle (Coleo	Oulimnius major	*Oulimnius major*	Eye Green LNR	TF229033	100m	12/04/1990	1 Count	None		NS
insect - beetle (Coleo	Oulimnius major	*Oulimnius major*	Eye Green LNR	TF230034	100m	03/07/1996	1 Count	None		NS
insect - beetle (Coleo	Oulimnius major	*Oulimnius major*	Eye Green LNR	TF231034	100m	1990 - 1994		None		NS
insect - beetle (Coleo	Oulimnius major	*Oulimnius major*	Eye Green LNR	TF232033	100m	08/04/1996	1 Count	None		NS
insect - beetle (Coleo	Protapion filirostre	*Protapion filirostre*	Eye Green LNR	TF231032	100m	12/10/1999	1 Count	None		Nb
insect - beetle (Coleo	Scarodytes halensis	*Scarodytes halensis*	Car Dyke, Eye	TF218027	100m	2008		None		NS
insect - beetle (Coleo	Scarodytes halensis	*Scarodytes halensis*	Eyebury Road Pits	TF236016	100m	Jul-15	1 Count	None		NS
insect - beetle (Coleo	Wheat Mud Beetle	*Helophorus nubilus*	Eye Green LNR	TF231032	100m	12/10/1999	1 Count	None		NS
insect - butterfly	Dingy Skipper	*Erynnis tages*	Oxney Gravel Pits	TF2200	1km	1950		None		RLGB.VU, Sect.41, UKBAP
insect - butterfly	Dingy Skipper	*Erynnis tages*	Oxney Gravel Pits	TF2200	1km	02/05/1953		None		RLGB.VU, Sect.41, UKBAP
insect - butterfly	Green Hairstreak	*Callophrys rubi*	Oxney Gravel Pits	TF2200	1km	19/05/1954		None		CPASI
insect - butterfly	Grizzled Skipper	*Pyrgus malvae*	Oxney Gravel Pits	TF2200	1km	1950		None		RLGB.VU, Sect.41, UKBAP
insect - butterfly	Grizzled Skipper	*Pyrgus malvae*	Oxney Gravel Pits	TF2200	1km	02/05/1953		None		RLGB.VU, Sect.41, UKBAP
insect - butterfly	Small Heath	*Coenonympha pamp*	Eye	TF2102	1km	1973		None		RLGB.Lr(NT), Sect.41, UKBAP
insect - butterfly	Small Heath	*Coenonympha pamp*	Eye Green LNR	TF231034	100m	1990 - 1994		None		RLGB.Lr(NT), Sect.41, UKBAP
insect - butterfly	Small Heath	*Coenonympha pamp*	Oxney Gravel Pits	TF2200	1km	1950		None		RLGB.Lr(NT), Sect.41, UKBAP
insect - butterfly	Small Heath	*Coenonympha pamp*	Pode Hole, Thorney	TF2402	1km	19/07/2016		None		RLGB.Lr(NT), Sect.41, UKBAP
insect - butterfly	Wall	*Lasiommata megera*	America Farm, Oxney	TF2300	1km	16/08/1955		None		RLGB.Lr(NT), Sect.41, UKBAP
insect - butterfly	Wall	*Lasiommata megera*	Dogsthorpe Knot Hole	TF2102	1km	1968		None		RLGB.Lr(NT), Sect.41, UKBAP
insect - butterfly	Wall	*Lasiommata megera*	Eye Green LNR	TF231034	100m	1990 - 1994		None		RLGB.Lr(NT), Sect.41, UKBAP
insect - butterfly	Wall	*Lasiommata megera*	Oxney Gravel Pits	TF2200	1km	1950		None		RLGB.Lr(NT), Sect.41, UKBAP
insect - butterfly	Wall	*Lasiommata megera*	Oxney Gravel Pits	TF2200	1km	19/05/1954		None		RLGB.Lr(NT), Sect.41, UKBAP
insect - moth	Cinnabar	*Tyria jacobaeae*	Eye Green LNR	TF231034	100m	1999		None		Sect.41, UKBAP
insect - moth	Cinnabar	*Tyria jacobaeae*	Eye Green LNR	TF231034	100m	02/07/2003		None		Sect.41, UKBAP
insect - moth	Cinnabar	*Tyria jacobaeae*	Oxney Gravel Pits	TF2200	1km	1950		None		Sect.41, UKBAP
insect - moth	Dark-barred Twin-spot	*Xanthorhoe ferrugat*	Dogsthorpe Knot Hole	TF2102	1km	1968		None		Sect.41, UKBAP
insect - moth	Garden Tiger	*Arctia caja*	Dogsthorpe Knot Hole	TF2102	1km	1968		None		Sect.41, UKBAP
insect - moth	Garden Tiger	*Arctia caja*	Flag Fen	TL2299	1km	18/04/1954		None		Sect.41, UKBAP
insect - moth	Knot Grass	*Acronicta rumicis*	Oxney Gravel Pits	TF2200	1km	1951		None		Sect.41, UKBAP
insect - moth	Knot Grass	*Acronicta rumicis*	Oxney Gravel Pits	TF2200	1km	30/08/1955		None		Sect.41, UKBAP
insect - moth	Latticed Heath	*Chiasmia clathrata*	Dogsthorpe Knot Hole	TF2102	1km	1968		None		Sect.41, UKBAP
insect - moth	Latticed Heath	*Chiasmia clathrata*	Oxney Gravel Pits	TF2200	1km	1950		None		Sect.41, UKBAP
insect - moth	September Thorn	*Ennomos erosaria*	Dogsthorpe Knot Hole	TF2102	1km	1968		None		Sect.41, UKBAP
insect - moth	Spinach	*Eulithis mellinata*	Dogsthorpe Knot Hole	TF2102	1km	1968		None		Sect.41, UKBAP
insect - orthopteran	Great Green Bush Cricl	*Tettigonia viridissim*	Eye Green LNR	TF231034	100m	1999		None		CPASI
insect - true bug (Hen	Agnocoris reclairei	*Agnocoris reclairei*	Eyebury Road Pits CWS	TF235015	100m	13/08/1992		None		Nb
insect - true bug (Hen	Anoscopus albifrons	*Anoscopus albifrons*	Eye Green LNR	TF231034	100m	1990 - 1994		None		Nb
insect - true bug (Hen	Paralimnus phragmitis	*Paralimnus phragmi*	Eyebury Road Pits CWS	TF235015	100m	13/08/1992		None		Nb
reptile	Common Lizard	*Zootoca vivipara*	Eyebury Road Pits	TF23650079	10m	16/04/2019	1 Count	None		Sect.41, UKBAP, WCA5
reptile	Grass Snake	*Natrix helvetica*	Eyebury Road Pits	TF23660099	10m	28/06/2019	1 Count	None		Sect.41, UKBAP, WCA5
reptile	Grass Snake	*Natrix helvetica*	Eyebury Road Pits	TF238011	100m	May-15	1 Count	None	1 under tin	Sect.41, UKBAP, WCA5
reptile	Grass Snake	*Natrix helvetica*	Pode Hole, Thorney	TF2402	1km	19/05/2016	3 Count	None	two female adults, 1 juvenile	Sect.41, UKBAP, WCA5
stonewort	Clustered Stonewort	*Tolypella glomerata*	Eyebury Road Pits	TF2301	1km	Aug-09		None	pond survey	CPASI, NS
terrestrial mammal	Bats	*Chiroptera*	*Contact Bat Group*	TF2202	100m	17/08/1987		None		WCA5
terrestrial mammal	Bats	*Chiroptera*	*Contact Bat Group*	TF2300	100m	1999		None		WCA5
terrestrial mammal	Bats	*Chiroptera*	*Contact Bat Group*	TF2303	100m	2001		None		WCA5
terrestrial mammal	Bats	*Chiroptera*	Pode Hole, Thorney	TF2402	1km	14/07/2011		None		WCA5
terrestrial mammal	Bats	*Chiroptera*	Pode Hole, Thorney	TF2402	1km	07/09/2011		None	Commuting	WCA5
terrestrial mammal	Bats	*Chiroptera*	Pode Hole, Thorney	TF2402	1km	15/09/2011		None	Commuting	WCA5
terrestrial mammal	Bats	*Chiroptera*	Pode Hole, Thorney	TF2402	1km	16/09/2011		None	Commuting	WCA5
terrestrial mammal	Brown Hare	*Lepus europaeus*	Oxney Gravel Pits	TF2200	1km	1955		None	Gravel pits	Sect.41, UKBAP
terrestrial mammal	Brown Hare	*Lepus europaeus*	Pode Hole, Thorney	TF2402	1km	30/09/2016	1 Count	None	recorded during bat activity survey	Sect.41, UKBAP
terrestrial mammal	Brown Hare	*Lepus europaeus*	Willow Hall, Thorney	TF246017	100m	12/04/2015	2 Count	None	live sighting	Sect.41, UKBAP
terrestrial mammal	Brown Hare	*Lepus europaeus*	Willow Hall, Thorney	TF249016	100m	11/03/2015	1 Count	None	live sighting	Sect.41, UKBAP
terrestrial mammal	Brown Hare	*Lepus europaeus*	Willow Hall, Thorney	TF249016	100m	28/04/2016	3 Count	None	live sighting	Sect.41, UKBAP
terrestrial mammal	Brown Hare	*Lepus europaeus*	Willow Hall, Thorney	TF250016	100m	01/03/2015	1 Count	None	live sighting	Sect.41, UKBAP
terrestrial mammal	Brown Hare	*Lepus europaeus*	Willow Hall, Thorney	TF252022	100m	28/02/2015	1 Count	None	live sighting	Sect.41, UKBAP
terrestrial mammal	Brown Long-eared Bat	*Plecotus auritus*	Pode Hole, Thorney	TF2402	1km	25/06/2011		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Brown Long-eared Bat	*Plecotus auritus*	Pode Hole, Thorney	TF2402	1km	10/08/2011		None	Recorded on remote detector	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Brown Long-eared Bat	*Plecotus auritus*	Willow Hall, Thorney	TF246013	100m	10/06/2014		None	Roost, 1 adult sighted	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Eye	TF222026	100m	14/04/2016	1 Count	None	male, live sighting - grounded bat	HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	21/04/2011		None		HabRegs2, HSD4, WCA5

terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	17/05/2011		None		HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	23/06/2011		None		HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	Jul-11		None	Recorded on remote detector	HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	04/08/2011		None	Commuting bats	HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	05/08/2011		None	Commuting bats	HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	08/08/2011		None	Feeding beat (several bats)	HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	09/08/2011		None	Commuting	HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	10/08/2011		None	Commuting	HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	12/09/2011		None	Feeding beat (several bats)	HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	13/09/2011		None	Commuting	HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	15/09/2011		None	Commuting	HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF2402	1km	16/09/2011		None	Commuting	HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF245023	100m	19/05/2016		None		HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF245023	100m	19/07/2016		None		HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF245026	100m	19/05/2016		None		HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF245026	100m	19/07/2016		None		HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF246028	100m	19/05/2016		None		HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF249023	100m	19/05/2016		None		HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Pode Hole, Thorney	TF250024	100m	19/07/2016		None		HabRegs2, HSD4, WCA5
terrestrial mammal	Common Pipistrelle	*Pipistrellus pipistrell*	Willow Hall, Thorney	TF248016	100m	20/04/2016	1 Count	None	live sighting, bat detector calls confirmed with software analysis	HabRegs2, HSD4, WCA5
terrestrial mammal	Daubenton's Bat	*Myotis daubentonii*	*Contact Bat Group*	TF2303	100m	03/06/2006		None		HabRegs2, HSD4, WCA5
terrestrial mammal	Eurasian Badger	*Meles meles*	Eyebury Road Pits	TF237009	100m	Jul-15		None	Latrines	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Eyebury Road Pits	TF238010	100m	Jul-15		None	Latrines	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Eyebury Road Pits	TF23960112	10m	14/03/2018		None	latrine	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Eyebury Road Pits	TF240014	100m	27/03/2019		None	latrines	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Flag Fen	TL226995	100m	08/08/2016	1 Count	None	road casualty	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Pode Hole, Thorney	TF2402	1km	04/08/2011		None	1 Foraging	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Pode Hole, Thorney	TF245026	100m	29/09/2016		None	Sett. Active main sett with 7 active holes and 5 partially used holes	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Pode Hole, Thorney	TF245027	100m	29/09/2016		None	Sett. Partially used outlier sett with 1 hole	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Pode Hole, Thorney	TF246027	100m	29/09/2016		None	Sett. Partially used outlier sett with 3 holes	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Pode Hole, Thorney	TF246028	100m	29/09/2016		None	Sett. Disused outlier sett with 1 hole	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Pode Hole, Thorney	TF246028	100m	29/09/2016		None	Sett. Partially used annex sett with 3 holes	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Pode Hole, Thorney	TF247029	100m	29/09/2016		None	Sett. Active outlier sett with 2 holes	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Willow Hall, Thorney	TF246010	100m	14/01/2015		None	badger signs	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Willow Hall, Thorney	TF246011	100m	15/02/2016	1 Count	None	live sighting	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Willow Hall, Thorney	TF247015	100m	14/01/2015		None	badger signs	PBA
terrestrial mammal	Eurasian Badger	*Meles meles*	Willow Hall, Thorney	TL235998	100m	20/09/2016	1 Count	None	road casualty	PBA
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Car Dyke, Eye	TF2102	1km	21/09/1999		None	Latrines, burrows, feeding stations, runways in vegetation	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Car Dyke, Eye	TF214018	100m	15/11/2004		None	Latrines, feeding signs, holes. Numerous, easy to find.	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Car Dyke, Eye	TF219023	100m	15/11/2004		None	Latrines, feeding signs	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Car Dyke, Eye	TF219026	100m	15/11/2004		None	Latrines, feeding signs	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF2300	1km	01/10/1999		None	Latrines, burrows, feeding stations, runways in vegetation	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF237008	100m	1999		None	Present	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF237008	100m	16/04/2019		None	Cat's Water Drain: 6 latrines, 1 feeding station, 4 burrows	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF23750081	10m	04/05/2016		None	latrine and feeding pile	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF23770001	10m	21/05/2011		None	feeding sign	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF23770002	10m	21/05/2011		None	tunnel	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF23780002	10m	21/05/2011		None	tunnel	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF23790091	10m	04/05/2016		None	latrine	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF238002	100m	21/01/2004		None	Runs, latrines	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF238003	100m	18/08/2016		None		RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF23810006	10m	21/05/2011		None	tunnel	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF23870033	10m	18/08/2016		None	sighting	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF23880021	10m	04/05/2016		None	feeding pile	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF23880022	10m	04/05/2016		None	feeding pile	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF240011	100m	21/01/2004		None	Numerous latrines, feeding signs	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF2401	1km	30/09/1999		None	Latrines, burrows, feeding stations, runways in vegetation	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF241012	100m	18/08/2016		None		RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF24110126	10m	18/08/2016		None	feeding pile	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF24350202	10m	04/05/2016		None	feeding signs, droppings, holes	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TF24350203	10m	04/05/2016		None	latrine and feeding pile	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23209954	10m	08/05/2011		None	latrine	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23219954	10m	21/05/2011		None	tunnel	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23259957	10m	08/05/2011		None	dropping	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23279958	10m	21/05/2011		None	tunnel	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL232995	100m	05/11/2004		None	Latrine, runs, holes	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23309961	10m	08/05/2011		None	feeding sign	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23389961	10m	21/05/2011		None	dropping	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23389962	10m	08/05/2011		None	feeding sign	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23419963	10m	08/05/2011		None	tunnel	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23449965	10m	08/05/2011		None	tunnel	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23449965	10m	21/05/2011		None	latrine	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23449966	10m	08/05/2011		None	feeding sign	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23529976	10m	18/08/2016		None	several feeding piles	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23549981	10m	08/05/2011		None	latrine	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23579984	10m	04/05/2016		None	feeding pile	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23589985	10m	04/05/2016		None	feeding pile	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL235997	100m	18/08/2016		None		RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23609985	10m	08/05/2011		None	latrine	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23649988	10m	04/05/2016		None	2 feeding piles	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23659987	10m	08/05/2011		None	dropping	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23689988	10m	21/05/2011		None	latrine	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23689988	10m	04/05/2016		None	feeding pile	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23729997	10m	21/05/2011		None	dropping	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL23749999	10m	21/05/2011		None	feeding sign	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL237999	100m	1999		None	Present	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain CWS	TL2399	1km	01/10/1999		None	Latrines, burrows, feeding stations, runways in vegetation	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Cat's Water Drain, Eye	TF2402	1km	30/09/1999		None	Latrines, burrows, feeding stations, runways in vegetation	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eye Green LNR	TF232034	100m	14/06/1997		None	Presence recorded	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF2301	1km	Jun-09		None	41 feeding stations, 11 latrines, 9 burrows	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF236007	100m	Sep-15		None	14 Latrines, 10 burrows and 28 feeding stations	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF236007	100m	15/06/2016		None	10 burrows found during water vole survey	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF236007	100m	01/09/2016		None	1 latrine, 2 feeding stations and three burrows found during survey	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF236007	100m	26/04/2017		None		RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF236007	100m	21/09/2017		None		RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF236007	100m	16/04/2019		None	Counter Drain: 2 latrines, 1 feeding station and 2 burrows	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF236007	100m	17/10/2019		None	Counter Drain: 2 latrines, 3 feeding station and 17 burrows	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF236008	100m	12/10/2016	1 Count	None		RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF237009	100m	Sep-15		None	8 feeding stations	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF237009	100m	21/09/2017		None		RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF237009	100m	17/10/2019		None	P12: 2 latrines	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF237010	100m	Sep-15		None	1 Latrine and 3 feeding stations	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF237010	100m	15/06/2016		None	1 feeding station during water vole survey	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF237010	100m	26/04/2017		None		RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF23720100	10m	14/03/2018		None	droppings on mink raft	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF239011	100m	01/09/2016		None	27 latrines, 49 feeding stations and 22 burrows found during survey	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF239011	100m	16/04/2019		None	P1-5: 30 Latrines, 63 feeding stations and 10 burrows	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF239011	100m	17/10/2019		None	P1-5: 5 Latrines, 7 feeding stations and 3 burrows	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF239012	100m	26/04/2017		None		RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF239012	100m	21/09/2017		None		RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Eyebury Road Pits	TF240012	100m	Sep-15		None	3 Latrine and 11 feeding stations	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Fengate, Peterborough	TL2199	1km	2014		None	Black water vole was found one morning by the staff as they started work, it appears to have fall	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Peterborough	TF233008	100m	23/09/2013		None	13 latrines on a 200m stretch of drain	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	European Water Vole	*Arvicola amphibius*	Peterborough	TF235007	100m	23/09/2013		None	27 latrines and 12 feeding staions on a 300m stretch of drain	RLGB.EN, Sect.41, UKBAP, WCA5
terrestrial mammal	Harvest Mouse	*Micromys minutus*	Eye Green LNR	TF231034	100m	1999		None		RLGB.Lr(NT), Sect.41, UKBAP
terrestrial mammal	Harvest Mouse	*Micromys minutus*	Willow Hall, Thorney	TF244015	100m	28/10/2014	1 Count	None	1 dead	RLGB.Lr(NT), Sect.41, UKBAP
terrestrial mammal	Noctule Bat	*Nyctalus noctula*	Pode Hole, Thorney	TF2402	1km	May-11		None	Recorded on remote detector	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Noctule Bat	*Nyctalus noctula*	Pode Hole, Thorney	TF2402	1km	23/06/2011		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Noctule Bat	*Nyctalus noctula*	Pode Hole, Thorney	TF2402	1km	Jul-11		None	Recorded on remote detector	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Noctule Bat	*Nyctalus noctula*	Pode Hole, Thorney	TF2402	1km	08/08/2011		None	Commuting	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Noctule Bat	*Nyctalus noctula*	Pode Hole, Thorney	TF2402	1km	Sep-11		None	Recorded on remote detector	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Noctule Bat	*Nyctalus noctula*	Pode Hole, Thorney	TF2402	1km	07/09/2011		None	Commuting	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Noctule Bat	*Nyctalus noctula*	Pode Hole, Thorney	TF2402	1km	Oct-11		None	Recorded on remote detector	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Pipistrelle Bat species	*Pipistrellus*	*Contact Bat Group*	TF2401	100m	01/09/2005		None		HabRegs2, WCA5
terrestrial mammal	Pipistrelle Bat species	*Pipistrellus*	Pode Hole, Thorney	TF2402	1km	13/09/2011		None	Commuting	HabRegs2, WCA5
terrestrial mammal	Pipistrelle Bat species	*Pipistrellus*	Pode Hole, Thorney	TF2402	1km	06/10/2011		None	Commuting	HabRegs2, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	*Contact Bat Group*	TF2303	100m	03/06/2006		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	*Contact Bat Group*	TF2401	100m	2010		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	*Contact Bat Group*	TF2401	10m	05/08/2017		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF2402	1km	21/04/2011		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF2402	1km	May-11		None	Recorded on remote detector	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF2402	1km	Jul-11		None	Recorded on remote detector	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF2402	1km	04/08/2011		None	Commuting bats	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF2402	1km	08/08/2011		None	Feeding beat (several bats)	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF2402	1km	09/08/2011		None	Commuting	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF2402	1km	12/09/2011		None	Feeding beat (several bats)	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF2402	1km	13/09/2011		None	Commuting	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF2402	1km	15/09/2011		None	Commuting	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF2402	1km	06/10/2011		None	Commuting	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF245022	100m	19/05/2016		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF245024	100m	19/05/2016		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF245026	100m	19/07/2016		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF245026	100m	30/09/2016		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF246028	100m	19/07/2016		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF246028	100m	30/09/2016		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5

terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Pode Hole, Thorney	TF250024	100m	19/05/2016		None		HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Willow Hall, Thorney	TF246013	100m	26/06/2014		None	Roost (maternity), 199 bats emerged	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Willow Hall, Thorney	TF246013	100m	11/08/2016		None	Roost (maternity), 151 bats emerged	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Soprano Pipistrelle	*Pipistrellus pygmaeu*	Willow Hall, Thorney	TF248016	100m	20/04/2016	2 Count	None	live sightings, bat detector calls confirmed with software analysis	HabRegs2, HSD4, Sect.41, UKBAP, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF2402	1km	21/04/2011		None		HabRegs2, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF2402	1km	May-11		None	Recorded on remote detector	HabRegs2, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF2402	1km	23/06/2011		None		HabRegs2, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF2402	1km	Jul-11		None	Recorded on remote detector	HabRegs2, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF2402	1km	04/08/2011		None	Commuting bats	HabRegs2, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF2402	1km	05/08/2011		None	Commuting bats	HabRegs2, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF2402	1km	08/08/2011		None	Feeding beat (several bats)	HabRegs2, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF2402	1km	09/08/2011		None	Commuting	HabRegs2, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF2402	1km	12/09/2011		None	Feeding beat (several bats)	HabRegs2, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF2402	1km	13/09/2011		None	Commuting	HabRegs2, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF2402	1km	Oct-11		None	Recorded on remote detector	HabRegs2, WCA5
terrestrial mammal	Unidentified Bat	*Myotis*	Pode Hole, Thorney	TF245025	100m	19/05/2016		None		HabRegs2, WCA5
terrestrial mammal	West European Hedgel	*Erinaceus europaeus*	Eye	TF232028	100m	2011		None		RLGB.VU, Sect.41, UKBAP
terrestrial mammal	West European Hedgel	*Erinaceus europaeus*	Eye Green LNR	TF231034	100m	1999		None		RLGB.VU, Sect.41, UKBAP

Status Abbreviation	Status Short Name	Status Long Name	Kind	Status Description
BD1	BirdsDir:A1	Birds Directive Annex 1	International	Birds which are the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. As appropriate, Special Protection Areas to be established to assist conservation measures. Note that the contents of this annex have been updated in April 2003 following the Treaty of Accession.
HSD2np	HabDir-A2	Habitats Directive Annex 2 - priority speci	International	Species which are endangered, the conservation of which the Community has a particular responsibility in view of the proportion of their natural range which falls within the territory of the Community. They require the designation of special areas of conservation.
HSD2p	HabDir-A2*	Habitats Directive Annex 2 - non-priority s	International	Animal and plant species of Community interest (i.e. endangered, vulnerable, rare or endemic in the European Community) whose conservation requires the designation of special areas of conservation. Note that the contents of this annex have been updated in in April 2003 following the Treaty of Accession.
HSD4	HabDir-A4	Habitats Directive Annex 4	International	Animal and plant species of Community interest (i.e. endangered, vulnerable, rare or endemic in the European Community) in need of strict protection. They are protected from killing, disturbance or the destruction of them or their habitat. Note that the contents of this annex have been updated in April 2003 following the Treaty of Accession.
HSD5	HabDir-A5	Habitats Directive Annex 5	International	Animal and plant species of Community interest whose taking in the wild and exploitation may be subject to management measures.
HabRegs2	HabReg-Sch2	The Conservation (Natural Habitats, &c.) I	Nat Legislation	Schedule 2- European protected species of animals.
HabRegs4	HabReg-Sch4	The Conservation (Natural Habitats, &c.) I	Nat Legislation	Schedule 4- Animals which may not be taken or killed in certain ways
HabRegs5	HabReg-Sch5	The Conservation (Natural Habitats, &c.) I	Nat Legislation	Schedule 5- European protected species of plants.
WCA1I	WACA:Sch1_part1	Wildlife and Countryside Act 1981 (Sched	Nat Legislation	Birds and their young, for which it is an offence to intentionally or recklessly disturb at, on or near an active nest. They are protected by special penalties at all times.
WCA5	WACA:Sch5	Wildlife and Countryside Act 1981 (Sched	Nat Legislation	Section 9.1. Animals which are protected from intentional killing or injuring. Animals which are protected from taking. Section 9.2 Animals which are protected from being possessed or controlled (live or dead). Animals which are protected from intentional damage or destruction to any structure or place used for shelter or protection. Section 9.4 Animals which are protected from intentional damage or destruction to any structure or place used for shelter or protection. Animals which are protected from intentional disturbance while occupying a structure or place used for shelter or protection. Animals which are protected from their access to any structure or place which they use for shelter or protection beir
WCA8	WACA:Sch8	Wildlife and Countryside Act 1981 (Sched	Nat Legislation	Plants which are protected from intentional picking, uprooting or destruction (Section 13 1a); selling, offering for sale, possessing or transporting for the purpose of sale (live or dead, part or derivative) (Section 13 2a); advertising (any of these) for buying or selling (Section 13 2b).
WCA9I	WACA:Sch9 part1	Wildlife and Countryside Act 1981 (Sched	Nat Legislation	Animals which may not be released or allowed to escape into the wild.
WCA9II	WACA:Sch9 part2	Wildlife and Countryside Act 1981 (Sched	Nat Legislation	Plants which may not be planted or caused to grow in the wild.
PBA	Protection of Badgers Act (199	Protection of Badgers Act (1992)	Nat Legislation	The Protection of Badgers Act 1992 protects badgers from taking, injuring, killing, cruel treatment, selling, possessing, marking and having their setts interfered with, subject to exceptions.
Sect.41	England NERC S.41	Natural Environment & Rural Communitie	Nat Legislation	Species of principal importance for the purpose of conserving biodiversity covered under section 41 (England) of the NERC Act (2006) and therefore need to be taken into consideration by a public body when performing any of its functions with a view to conserving biodiversity.
UKBAP	BAP:2007	UK Biodiversity Action Plan priority specie	UKBAP	The UK List of Priority Species and Habitats contains 1150 species and 65 habitats that have been listed as priorities for conservation action under the UK Biodiversity Action Plan (UK BAP).
CPASI	CPASI	Cambridgeshire and Peterborough Additi	CPASI	Species not on the UKBAP Priority species list but considered to be species of interest in Cambridgeshire and Peterborough (as defined by the Cambridgeshire and Peterborough Biodiversity Partnership in 2016 - see http://www.cpbiodiversity.org.uk/biodiversity-action-plans/priority-species)
RLGB.EX	RedList GB post2001-EX	IUCN (2001) - Extinct	Red Data List	A taxon is Extinct in Great Britain when there is no reasonable doubt that the last individual in Great Britain has died. A taxon is presumed extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historical range have failed to record an individual. Surveys should be over a time scale appropriate to the taxon's life cycle and life form.
RLGB.EW	RedList GB post2001-EW	IUCN (2001) - Extinct in the wild	Red Data List	A taxon is Extinct in the wild in Great Britain when it is known to survive only in cultivation, in captivity or as a naturalised population (or populations) well outside the past range. A taxon is presumed extinct in the wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual) throughout its range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.
RLGB.RE	RedList GB post2001-RE	IUCN (2001) - Regionally Extinct	Red Data List	Category for a taxon when there is no reasonable doubt that the last individual potentially capble of reproduction within the region has died or has disappeared from the wild in the region, or when, if it is a former visiting taxon, the last individual has died or disappeared in the wild from the region. The setting of any time limit for listing under RE is left to the discretion of the regional Red List authority, but should not normally pre-date 1500 AD.
RLGB.CR	RedList GB post2001-CR	IUCN (2001) - Critically endangered	Red Data List	A taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild in the immediate future, as defined by any of the criteria A to E.
RLGB.EN	RedList GB post2001-EN	IUCN (2001) - Endangered	Red Data List	A taxon is Endangered when it is not Critically endangered but is facing a very high risk of extinction in the wild in the near future.
RLGB.VU	RedList GB post2001-VU	IUCN (2001) - Vulnerable	Red Data List	A taxon is Vulnerable when it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium term future.
RLGB.Lr(NT)	RedList GB post2001-NT	IUCN (2001) - Lower risk - near threatene	Red Data List	Taxa which do not qualify for Lower Risk (conservation dependent), but which are close to qualifying for Vulnerable. In Britain, this category includes species which occur in 15 or fewer hectads but do not qualify as Critically Endangered, Endangered or Vulnerable.
RLENG.CR	RedList ENG post2001-CR	IUCN (2001) - Critically endangered	Red Data List	A taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild in the immediate future, as defined by any of the criteria A to E. See 'A Vascular Plant Red List for England', BSBI (2014).
RLENG.EN	RedList_ENG_post2001-EN	IUCN (2001) - Endangered	Red Data List	A taxon is Endangered when it is not Critically endangered but is facing a very high risk of extinction in the wild in the near future. See 'A Vascular Plant Red List for England', BSBI (2014).
RLENG.VU	RedList_ENG_post2001-VU	IUCN (2001) - Vulnerable	Red Data List	A taxon is Vulnerable when it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium term future. See 'A Vascular Plant Red List for England', BSBI (2014).
RLENG.Lr(NT)	RedList ENG post2001-NT	IUCN (2001) - Lower risk - near threatene	Red Data List	Taxa which do not qualify for Lower Risk (conservation dependent), but which are close to qualifying for Vulnerable. In Britain, this category includes species which occur in 15 or fewer hectads but do not qualify as Critically Endangered, Endangered or Vulnerable. See 'A Vascular Plant Red List for England', BSBI (2014).
BRed	Bird-Red	Bird Population Status: red	Red Data List	Red list species are those that are Globally Threatened according to IUCN criteria; those whose population or range has declined rapidly in recent years; and those that have declined historically and not shown a substantial recent recovery.
BAmb	Bird-Amber	Bird Population Status: amber	Red Data List	Amber list species are those with an unfavourable conservation status in Europe; those whose population or range has declined moderately in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations.
NR	NR-excludes	Nationally Rare	Other rare/scarce	Nationally Rare - Occurring in 15 or fewer hectads in Great Britain. Excludes rare species qualifying under the main IUCN criteria.
NS	NS-excludes	Nationally Scarce	Other rare/scarce	Nationally Scarce - Occurring in 16-100 hectads in Great Britain. Excludes rare species qualifying under the main IUCN criteria
N	Notable	Nationally Notable	Other rare/scarce	Species which are estimated to occur within the range of 16 to 100 10km squares. (subdivision into Notable A and Notable B is not always possible because there may be insufficient information available). Superseded by Nationally Scarce, and therefore no longer in use.
Na	Notable:A	Nationally Notable A	Other rare/scarce	Taxa which do not fall within RDB categories but which are none-the-less uncommon in Great Britain and thought to occur in 30 or fewer 10km squares of the National Grid or, for less well-recorded groups, within seven or fewer vice-counties. Superseded by Nationally Scarce, and therefore no longer in use.
Nb	Notable:B	Nationally Notable B	Other rare/scarce	Taxa which do not fall within RDB categories but which are none-the-less uncommon in Great Britain and thought to occur in between 31 and 100 10km squares of the National Grid or, for less-well recorded groups between eight and twenty vice-counties. Superseded by Nationally Scarce, and therefore no longer in use.

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APPENDIX H

EA Risk Assessment

(https://www.gov.uk/government/organisations/environment-agency)

Statutory guidance

SR2021 No 1: generic risk assessment for composting in open systems – installations

Published 20 December 2021

Contents

This publication is available at https://www.gov.uk/government/publications/sr2021-no-1-composting-in-open-systems-installations/sr2021-no-1-generic-risk-assessment-for-composting-in-open-systems-installations

SR2021 No 1 generic risk assessment for Part A installation: composting in open systems, with a treatment capacity of:

- more than 75 tonnes each day
- less than 75,000 tonnes each year

The Environment Agency produces the generic risk assessments for all standard rules permits. These list the potential risks and specify the measures (but they are not limited to) required, to manage them.

Check this generic risk assessment to understand:

- the potential risks of open composting, including storage
- if your proposed activity has the same risks and can you apply for the standard rules permit
- how to manage the risks effectively

Each risk comprises:

- information about the source, pathway and receptor – and the potential harm to that receptor
- a judgement of the level of risk and justification of that judgement
- actions for managing the risk (through permitting) and a residual risk rating after managing it

Risk management involves breaking or limiting the source-pathway-receptor linkage to reduce the risk. If we set minimum distances we explain the basis of the distance, for example by modelling.

We will control the residual risk (after risk management) when we assess compliance.

If you need to check the meaning of any terms we have used (in the context of this risk assessment), see the explanation of terms.

This generic risk assessment is based on the following parameters.

Parameter 1

These permitted activities:

- acceptance and storage of waste before composting (R13)
- composting including screening and shredding (R3)
- recycling and reclamation of organic substances which are not used as solvents (R12) – excludes temporary storage, pending collection, on the site where it is produced

Parameter 2

These permitted waste types:

- non-hazardous biodegradable waste, including non-treated wood, vegetable matter and animal manure (excluding catering waste and other wastes covered by the Animal By-Products Regulations 2011) and are restricted to those wastes listed in the permit

Parameter 3

Quantity of waste accepted at the facility is:

- less than 75,000 tonnes each year
- limited to the design capacity of the site

Parameter 4

All waste shall be stored and treated on an impermeable surface with sealed drainage system which meets a design standard.

Parameter 5

The only point source discharges to controlled waters are clean surface water from the roofs of buildings and from areas of the facility not used for the storage or treatment of wastes. No other direct or indirect discharges are permitted.

Parameters 6 to 13

The activities shall not be carried out within:

- 250 metres of the nearest sensitive receptor
- 500 metres of a European site (within the meaning of Regulation 8 of the Conservation of Habitats and Species Regulations 2017) or a Site of Special Scientific Interest, including candidate or proposed sites or Maritime Conservation Zone
- 250 metres of the presence of great crested newts, where it is linked to the breeding ponds of the newts by good habitat
- within 10m of a water course
- within a groundwater source protection zone (SPZ) 1 and 2 or if a groundwater source protection zone has not been defined then within 250 metres of any well, spring or borehole used for the supply of water for human consumption (including private water supplies)
- 50 metres of a Local Nature Reserves, Local Wildlife Site, Ancient Woodland or Scheduled Monument
- 50 metres of a site that has species or of principle importance (as listed in Section 41 of the Natural Environment and Rural Communities Act 2006) that the Environment Agency considers at risk to this activity
- an Air Quality Management Area

Parameter 14

The only point source emissions into surface or groundwater are surface water from the roofs of buildings and from areas of the facility not used for the storage or treatment of wastes.

Parameter 15

The only point source emission to air is from air abatement systems such as a bio filter.

Parameter 16

Secondary containment is risk assessed and follows the recommendations of CIRIA 736 report.

1. Risk to local human population

1.1 Release of particulate matter (dust) and micro-organisms (bioaerosols)

Dust and bioaerosols travel through the air and can be:

- inhaled, ingested or inoculated
- deposited on garden fruit and vegetables and then ingested

There is a risk of dust and bioaerosols causing:

- respiratory irritation and illness
- gastro-intestinal illness

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as medium
- overall severity of potential consequences as medium
- overall risk rating as medium

The reasons for giving the activity this rating is because:

- composting activities produce and release bioaersosols, such as micro-organisms
- there is potential for exposure to anyone living or working close to the site (excluding operator and employees)

Managing the risk

Composting produces dust, powders and loose fibres, therefore activities shall not be carried out:

- within 250 metres of the nearest sensitive receptor
- in an Air Quality Management Area

Most dust will be washed off by rain or during food preparation.

The permit requires emissions of substances not controlled by emission limits (excluding odour) shall not cause pollution.

The following actions also need taking:

- all appropriate measures shall be followed as documented in the management system, and if required an emissions management plan submitted and a risk assessment review done
- the emissions management plan and risk assessment review are implemented as needed
- all relevant Best Available Techniques Reference Document (BREF) Best Available Techniques BAT and BAT Associated Emissions Limits (AELs) shall be complied with where there are channelled emissions from a bio filter
- weather conditions are monitored continuously and activities do not take place when the wind direction is towards the sensitive receptor
- materials treated and stored in the open shall be monitored to prevent high temperatures and dry conditions developing
- controlling the temperature and moisture of the material on site

Permitted waste types do not include dusts, powders or loose fibres. However composting activities can cause dust therefore continuous dust monitoring shall be deployed if required, including:

- windrows and piles shall be positioned to prevent wind stripping
- surfaces shall be kept free of debris and damped down using clean water during dry weather
- housekeeping shall take place to prevent build-up of dry dusty materials and rotting waste
- screened material shall be covered as necessary
- all relevant BAT conclusions and BAT AELs (as set out in the BREF) shall be complied with and relevant appropriate measures shall be employed

Taking these actions will control the risk and rate it as ‘low’.

1.2 Waste, litter and mud on local roads

Vehicles entering and leaving the site risk causing:

- nuisance

- loss of amenity
- road traffic accidents

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as medium
- overall severity of potential consequences as medium
- overall risk rating as medium

The reasons for giving the activity this rating is because:

- there is a risk of creating unsafe road surfaces in wet weather
- local residents are often sensitive to mud on roads

Managing the risk

Risk management is the same as risk 1.1 along with:

- all incoming and outgoing waste or material will be sheeted
- appropriate measures could include clearing waste, litter and mud arising from the activities from affected areas outside the site
- roads to be swept and damped down as necessary
- wheel wash facilities are made available

Taking these actions will control the risk and rate it as ‘low’.

1.3 Odour

Odour travels through the air and can be inhaled. There is a risk of causing:

- nuisance
- loss of amenity

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as high
- overall severity of potential consequences as high
- overall risk rating as high

The reasons for giving the activity this rating is because:

- composting produces and is likely to release unpleasant odour and emissions if allowed to become anaerobic
- of the potential for exposure to anyone living or working close to the site (excluding operator and employees)
- local residents are sensitive to odour

Managing the risk

To manage the risk the standard rules permit requires:

- waste acceptance only where there is capacity to treat the wastes – the maximum waste limits are set by these rules
- storage, physical treatment and composting of wastes under anaerobic conditions shall be prevented by adopting BAT and other appropriate measures – includes meeting AELs for channelled emissions where appropriate
- operational conditions will be optimised and maintained from waste acceptance and throughout the whole process
- emissions shall be free from odour at levels likely to cause pollution
- an odour management plan including use of appropriate measures to reduce odour problems such as minimising storage times before processing and contingency arrangements for smelly wastes delivered from site to a permitted facility
- process controls shall be in line with a fully implemented management system which ensures operational conditions are optimised and maintained from waste acceptance and throughout the whole process, including an odour management plan review as necessary
- leachate storage lagoons and tanks are covered as specified in the permit

Taking these actions will control the risk and rate it as ‘medium’.

1.4 Noise and vibration

Noise travels through the air and vibration through the ground. There is a risk of causing:

- nuisance
- loss of amenity for local residents and workplaces
- loss of sleep

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as medium
- overall severity of potential consequences as medium
- overall risk rating as medium

The reasons for giving the activity this rating is because local residents often sensitive to noise and vibration.

Managing the risk

To manage the risk the standard rules permit requires:

- emissions shall be free from noise and vibration at levels likely to cause pollution
- a noise and vibration management plan, revised as required

Taking these actions will control the risk and rate it as ‘low’.

1.5 Scavenging animals and birds

Animals and birds travel over land and through the air. There is a risk of causing:

- nuisance
- loss of amenity
- harm to human health from waste carried off-site and from faeces

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as low
- overall severity of potential consequences as low
- overall risk rating as low

The reason for giving the activity this rating is because the permitted wastes may attract scavenging animals and birds.

Managing the risk

To manage the risk the standard rules permit requires:

- waste can only be accepted when there is capacity to treat it
- waste shall be inspected on arrival for signs of infestation and rejected where necessary, pest infested waste is not permitted
- each composting batch to undergo sanitisation
- pest control procedures shall be clearly documented in the management system
- all appropriate measures shall be adopted and associated guidance followed
- compliance with the ‘emissions of substances not controlled by emission limits’ rule

Taking these actions will control the risk and rate it as ‘low’.

1.6 Pests such as flies

Pests, such as flies can travel through the air or over land. There is a risk of causing:

- nuisance
- loss of amenity
- harm to human health

We have judged the:

- likelihood of the hazard affecting the receptor as medium
- overall severity of potential consequences as medium
- overall risk rating as medium

The reasons for giving the activity this rating is because the permitted waste types attract pests, such as flies. They can multiply, particularly in the summer months when the waste is more odorous and attracts flies.

Managing the risk

To manage the risk the requirements are the same as risk 1.5 along with:

- avoidance of anaerobic conditions
- feedstocks to be mixed and processed within 5 days of receiving
- infested material is rejected and removed
- temperatures are increased to minimise pupa formation
- use of pesticides and insecticides are approved

Taking these actions will control the risk and rate it as ‘low’.

1.7 Contaminated water used for recreational purposes

The human population is at risk of direct contact with or ingestion of contaminated waters.

There is a risk of contaminated water used for recreational purposes causing skin damage or gastro-intestinal illness.

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as low
- overall severity of potential consequences as low
- overall risk rating as low

We think this risk is unlikely to occur, but might restrict recreational use.

Managing the risk

To manage the risk the operator shall:

- comply with the sensitive location restrictions in the permit
- keep to the permit requirement of 'no direct or indirect discharges are permitted from the site' and therefore no AELs are applied
- comply with the rules on emissions of substances not controlled by emission limits
- reach sanitisation temperatures to allow pasteurization of material
- maintain adequate storage of leachates and liquors

Managing the risk in this way will control the risk and rate it as 'low'.

2. Risk to local human population and local environment

2.1 Flooding of the site

Flood waters can flood the site.

There is a risk of waste washed off-site contaminating buildings, gardens and natural habitats downstream.

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as low
- overall severity of potential consequences as low
- overall risk rating as low

The reasons for giving the activity this rating is because:

- the permitted waste types are non-hazardous and therefore the risk of contamination is not high
- leachate may have a high biological oxygen demand (BOD), ammonia and suspended solids

Managing the risk

Standard rules permits are not usually issued in flood risk areas.

To manage the risk the standard rules permit requires:

- compliance with the sensitive location exclusions
- a written management system that identifies and documents the process controls to minimise the risk of pollution – includes those arising from operations, maintenance, accidents, incidents and non-conformances.

Flood risk management covers:

- activation of flood risk contingency plan for diversion of waste, if required
- lagoons must have freeboard
- monitoring of local weather conditions and forecast required
- drainage plans being available on site
- emergency procedures being clearly communicated to all site operatives

Taking these actions will control the risk and rate it as 'low'.

2.2 Fire risk

There is a risk of fire on-site:

- from arson and, or vandalism
- of spontaneous combustion from uncontrolled decomposition

Fire can cause:

- polluting materials (smoke or fumes) to travel through the air, water or over land
- spillages and contaminated firewater by direct run-off from the site and through surface water drains and ditches

We have assessed the potential harm as:

- respiratory irritation, illness and nuisance to the local population
- injury to staff, firefighters or arsonists and vandals
- air, water or land pollution

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as medium
- overall severity of potential consequences as medium
- overall risk rating as medium

The reasons for giving the activity this rating is because:

- rapidly decomposing material gives rise to self-heating
- material can become dry and increase combustibility

Managing the risk

To manage the risk the standard rules permit requires:

- a written management system that identifies and minimises risks of pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances - therefore includes measures to avoid fire outbreak and to control fires, including containment of fire waste
- fire prevention plan must be submitted if required
- permitted waste types are organic and non-hazardous therefore the stockpiled material will be stabilised and monitored for increased temperatures
- a robust waste acceptance procedure
- no burning of wastes
- compliance with the limits to composting and the stockpiles to the design capacity of the site
- monitoring and controls of composting moisture and temperature (preventing excessive temperatures), and the need to act swiftly if temperatures increase (includes stored finished material and oversize material)
- all monitoring is undertaken to demonstrate a representative core temperature
- finished compost is monitored and stable
- oversize material is monitored
- adequate fire breaks around material
- site security
- water supplies to be available for fire fighting, including storage of fire-fighting water
- site drainage, including clean water drainage to be identified and documented within the management system

Taking these actions will control the risk and rate it as ‘low’.

3. Risk to local human population, livestock and wildlife

3.1 Litter on surrounding land and in final material

Litter can travel through the air and then be deposited on land. There is a risk of causing:

- nuisance
- loss of amenity
- harm to animal health
- reduction in land bank values due to contamination

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as low
- overall severity of potential consequences as low
- overall risk rating as low

The reasons for giving the activity this rating is because:

- local residents are sensitive to litter
- plastic contamination in compost reduces land values and economic market certainty
- plastic contamination can harm grazing animals and soil quality

Managing the risk

To manage the risk the standard rules permit requires:

- keeping to the permitted waste types in the permit and the controls on contamination of non-compostable plastic
- a management system with waste pre-acceptance and acceptance procedures that reduce the risk of accepting waste heavily contaminated with waste plastic
- compliance with the 'emissions of substances not controlled by emission limits' rule, submitting an emissions management plan if necessary
- operators to follow appropriate measures guidance, including pre-acceptance procedures and validation of waste on arrival
- waste rejection of heavily contaminated feedstock
- removing non-compostable plastic and litter to as low as reasonably practicable as the waste arrives before processing
- picking litter in windrows and affected areas
- safe storage of waste to prevent cross-contamination from non-conforming waste
- covering skips containing non-conforming waste
- assessing the effectiveness of plastic removal and the quality of the finished material

Taking this action will control the risk and rate it as 'very low'.

3.2 Gaining unauthorised access to site

There is a risk of direct physical contact with all on-site hazards such as wastes, machinery and vehicles.

There is a risk of causing injury to humans or livestock.

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as low
- overall severity of potential consequences as low
- overall risk rating as low

The reasons for giving the activity this rating is because the:

- permitted wastes are non-hazardous
- standard rules permit does not allow unpermitted entry
- management system includes procedures for worker and visitor safety

Managing the risk

To manage the risk the standard rules permit requires:

- activities shall be managed and operated in accordance with all appropriate measures and a documented and implemented management system that stipulates all preventative measures and emergency responses should accidents occur (including site security measures to prevent unauthorised access)
- roles and responsibilities are clearly laid out and staff training is provided (will include site security measures to prevent unauthorised access)
- emergency contact details shall be displayed at the site entrance
- pedestrian walkways shall be clearly marked
- visitors should receive a health and safety induction when visiting and must follow the site operator's instructions

Taking this action will control the risk and rate it as 'very low'.

4. Risk to surface waters close to and downstream of site

4.1 Risk of pollution causing acute effects

There is a risk of pollution from spillage of liquids, leachate from waste, contaminated rainwater run-off from waste with high organic and ammonia content and suspended solids.

Contamination can travel through direct run-off from site over the land, surface water drains and ditches.

We have assessed the acute effects as follows:

- oxygen depletion
- fish kill
- algal blooms

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as medium
- overall severity of potential consequences as medium

- overall risk rating as medium

The reason for giving the activity this rating is because:

- there is potential for contaminated rainwater run-off from waste operations, especially during heavy rain
- leachate may have a high BOD, ammonia and suspended solids
- the permitted waste types are non-hazardous, sludges or liquids

Managing the risk

To manage the risk the standard rules permit requires:

- all operations shall be more than 10 metres from a watercourse and excluded from SPZ 1 and 2
- a written management system that identifies and documents the process controls to minimise the risk of pollution – includes those arising from operations, maintenance, accidents, incidents and non-conformances
- all liquids must be in containers with secondary containment
- all secondary containment where required, based on a site-specific risk assessment meeting CIRIA 736
- storage and treatment of wastes to take place on an impermeable surface with sealed drainage
- run-off is restricted by the 'emissions of substances not controlled by emissions limits' rule, (excludes odour)
- appropriate measures to be followed, such as controls to prevent over-filling of storage systems to maintain lagoon freeboard
- flood risk contingency plan for diversion of waste can be activated
- drainage plans will be available on site
- local weather conditions and forecast must be monitored
- emergency procedures will be clearly communicated to all site operatives

Taking these actions will control the risk and rate it as 'low'.

4.2 Risk of pollution causing chronic effects

There is a risk of pollution from:

- liquid spills
- leachate from waste
- contaminated rainwater run-off from waste with a high organic and ammonia content and suspended solids content
- loss of containment from on-site storage

Contamination can travel by:

- direct run-off from site over the land, through surface water drains and ditches
- indirect run-off through soil

We have assessed the chronic effect as deterioration to water quality.

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as low
- overall severity of potential consequences as low
- overall risk rating as low

The reason for giving the activity this rating is because pollution is likely to be detected quickly and the effects are temporary and reversible.

Managing the risk

To manage the risk, take the actions for risk 4.1 along with:

- all liquids must be in containers with secondary containment
- run-off is restricted by the 'emissions of substances not controlled by emission limits' rule (excluding odour)
- using drainage plans to separate clean and dirty water
- considering this risk in an accident management plan
- keeping to the periodic monitoring requirements

Taking these actions will control the risk and rate it as 'very low'.

5. Risk to water abstracted from a watercourse

These risks relate to watercourses downstream of a facility and to water for agricultural or potable use.

This receptor is at risk from:

- liquid spills
- leachate from waste
- contaminated rainwater run-off from waste with high organic content

There is a risk of contaminants travelling through direct run-off from the site across ground surface, via surface water drains and ditches and finally through abstraction. This could have acute effects and cause the closure of abstraction intakes.

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as low
- overall severity of potential consequences as low
- overall risk rating as low

The reason for giving this rating is due to the potential for contaminated rainwater run-off from outside waste operations, especially during heavy rain.

Managing the risk

To manage this risk, take the actions set out in risks 4.1 and 4.2.

Taking these actions will control the risk and rate it as ‘very low’.

6. Risk to groundwater

Groundwater is at risk from:

- liquid spills
- leachate from waste
- contaminated rainwater run-off from waste with high organic and ammonia content

There is a risk of contaminants travelling through soil and groundwater which can then be abstracted from a borehole. This could have a chronic effect resulting in the groundwater requiring treatment or causing closure of a borehole.

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as low
- overall severity of potential consequences as low
- overall risk rating as low

We have given this rating because of the potential for contaminated rainwater run-off or leachate from waste operations, especially during heavy rain. The consequence is based on the possibility of pollution not being detected for a long time.

Managing the risk

To manage the risk the following actions must be taken:

- the activities shall not be carried out within a groundwater SPZ 1 and 2, or if a SPZ has not been defined then within 250 metres of any well, spring or borehole used for the supply of water for human consumption (including private water supplies)
- maintaining freeboard
- where secondary containment is required it’s based on a site specific risk assessment and meets CIRIA 736 standards
- any storage lagoons must meet CIRIA 736 or an equivalent standard
- keeping to periodic monitoring requirements

Taking these actions will control the risk and rate it as ‘very low’.

7. Risk to protected sites

Protected sites include:

- National Parks and Areas of Outstanding Natural Beauty
- Marine Conservation Zones
- Sites of Special Scientific Interest
- Special Areas of Conservation
- Special Protection Areas
- Ramsar wetland sites

Protected sites can be at risk from any source and by any pathway.

The risk of harm to protected sites include (but are not limited to) the following:

- nutrient enrichment
- leachate
- contaminated surface water run off
- smothering
- disturbance
- predation

Judgement of risk

We have judged the:

- likelihood of the hazard affecting the receptor as low
- overall severity of potential consequences as low
- overall risk rating as low

The reasons for giving the activity this rating is because waste composting operations may cause harm to and deterioration of nature conservation sites.

Managing the risk

To manage the risk we require compliance with the standard rules permit, including:

- applying exclusion distances

Taking this action will control the risk and rate it as ‘low’.

Explanation of terms

Receptor

The things at risk and that need protecting.

Receptors considered include atmosphere, land, surface waters, groundwater, humans, wildlife and their habitats.

A single receptor may be at risk from several different sources and all must be addressed.

Source

The agent or process that has the potential to cause harm.

A contaminant or pollutant (a hazard) that has the potential to cause harm. For example, the activity or operation taking place for which a particular hazard may arise.

Harm

The harmful consequence to the receptor if the hazard is realised.

Pathways

The route or means by which a defined hazard may affect a receptor.

Source-pathway-receptor linkage

There has to be a link between the source, pathway and receptor for there to be a risk.

Likelihood of exposure

This is the likelihood of the receptors being exposed to the hazard. The meaning of the definitions are:

- high – exposure is probable – direct exposure is likely with no or few barriers between the hazard source and the receptor
- medium – exposure is fairly probable - feasible exposure is possible as the barriers to exposure are less controllable
- low – exposure is unlikely – several barriers exist between the hazard source and receptor to reduce exposure
- very low – exposure is very unlikely – effective, multiple barriers are in place to reduce exposure

Overall magnitude of potential consequence

This is the severity of the consequence if the hazard is realised and may cause actual or potential harm.

This will have a high, medium, low or very low rating using attributes and scaling to consider ‘harm’.

Risk rating

We work out the risk rating by combining the likelihood of exposure with the magnitude of the potential consequences.

We assign these ratings:

- high risk – requires additional assessment and active management
- medium risk – requires additional assessment and may need active management and, or monitoring (or both)
- low and very low risks will require a periodic review

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