

# **Environmental Permit Variation Application Application Forms and Supporting Information**

Eales Farm Landfill Eales Farm, Saltash
Permit Reference: EPR/FB3403XR

Document Ref: GCE00692/EPv3/4/21

**April 2021** 



#### GCE00692/EPv3/4/21

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# 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.

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

The form can be:

About you

1

- 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 tick the box in section 5 of F1, F2 or F3 and 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
- 2 Applications from an individual
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- 4 Applications from public bodies
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- 8 How to contact us

Are you applying as an individual, an oli Liability Partnerships) or a public body		ample, a partnership), a company (this includes Lim	ited
An individual		Now go to section 2	
An organisation of individuals (for exa	mple, a partnership)	Now go to section 3	
A public body		Now go to section 4	
A registered company or other corpora	ite body	Now go to section 5	
2 Applications from an indiv	ridual		
<b>2a</b> Please give us the following Name	details		
Title (Mr, Mrs, Miss and so on)	1	ı	
First name			
Last name			
Date of birth (DD/MM/YYYY)			
Now go to section 6			
3 Applications from an orga	nisation of individuals		
3a Type of organisation	•		
For example, a charity, a partnership, individuals or a club	a group of		
3b Details of the organisation			
If you are an organisation of individua of the main representative below. If re other members (please include their tion a separate sheet and tell us the do you have given this sheet.	levant, provide details of tle Mr, Mrs and so on)		

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3	Applications from an organisation of individuals, c	ontinued
Con	tact name	
Title	(Mr, Mrs, Miss and so on)	
First	name	
Last	name	
Date	e of birth (DD/MM/YYYY)	
Now	go to section 6	
4	Applications from public bodies	
<b>4a</b> For e	Type of public body example, NHS trust, local authority, English county council	
4b	Name of the public body	L
<b>4c</b> An o	Please give us the following details of the executive fficer of the public body authorised to sign on your behalf	
Nam	ne	
Title	(Mr, Mrs, Miss and so on)	
First	name	
Last	name	L
Posi	tion	L
Now	go to section 6	
5	Applications from companies or corporate bodies	
5a	Name of the company	
5b	Company registration number	
Date	of registration (DD/MM/YYYY)	
	u are applying as a corporate organisation that is not a limited coreference you have given the document containing this evidence.	mpany, please provide evidence of your status and tell us below
	ument reference	
Now	go to section 6	
6	Your address	
Ford	Your main (registered office) address companies this is the address on record at Companies House. tact name	
Title	(Mr, Mrs, Miss and so on)	
First	name	
Last name		
Add	ress	
Post	code	
Con	tact numbers, including the area code	
Pho	ne	
Fax		L

7 Contact details, continued	
Email	
7b Who can we contact about your operation (if different fr	rom 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	
Linux	
7. Who can use contact about your billing or invoice?	
7c Who can we contact about your billing or invoice? 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	

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#### 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/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.

#### **Feedback**

reedback				
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 gui	lance notes, and to tell the Government how regulat	tions 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)	Payment received?
	No 🗆
Our reference number	Yes ☐ Amount received
	£

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# Application for an environmental permit Part C2 – General – varying a bespoke permit



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

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

Waste operation changing to installation or vice versa?

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

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

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

The form can be:

- 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.
- printed off and filled in by hand. Please write clearly in the answer spaces.

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

#### Contents

- 1 About the permit
- 2 About your proposed changes
- 3 Your ability as an operator
- 4 Consultation
- 5 Supporting information
- 6 Environmental risk assessment
- 7 How to contact us

Appendix 1 – Low impact installation checklist Appendix 2 – Date of birth information for Relevant offences and/or Technical ability questions only

#### 1 About the permit

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

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

#### 1a Discussions before your application

the reference you have given this extra sheet.	
Permit or document reference	
1b Permit number	
What is the permit number that this application relates to?	
1c Site details	
What is the name, address and postcode of the site?	
Site name	[
Address	

## 2 About your proposed changes

#### 2a Type of variation

Postcode

Substantial

What type of variation are you applying for?	
Minor technical	
Normal variation	

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# 2 About your proposed changes, continued

2b	Changes or additions to existing activities se give us brief details in the box below. More detailed inform	nation can be given in Table 1 below				
Pleas	se give us brief details in the box below. More detailed inform	lation can be given in Table 1 below.				
	n Table 1 with details of all the proposed changes to current a ence for the proposed changes and send them to us with you	ctivities. In the final column of the table, give us the document or filled in application form.				
	n a separate table for each activity you are applying to vary or application form. Tell us below the reference you have given	add. Use a separate sheet if you have a long list and send it to us with this document.				
Docu	iment reference	L				
You	only need to fill in one table for your mining waste operations	•				
<b>2c</b>	Consolidating (combining) or updating existing pe	rmits				
lf you	ur proposed change is to modernise (update) your permit, no	w answer 2c1; otherwise go to 2d.				
If you	ur proposed change is to consolidate (combine) a number of	permits, now answer 2c2; otherwise go to 2d.				
	: In both cases we may require additional information from yo ys advise you to talk to us before you submit any application	ou about, for example, your management system. Therefore we would to modernise or consolidate permits.				
2c1	Do you want to have a modern style permit?					
No						
Yes						
	Identify all the permits you want to consolidate (combine) b	y listing the permit numbers in Table 2 below				
ıap	le 2 – Permit numbers					
2d	Treating batteries					
2d1	Are you proposing to treat batteries?					
No		and a section and deliver below the section as a section of the se				
Yes	explanation	explanation and tell us below the reference you have given this				
	Document reference for the explanation	L				
2e	Ship recycling					
2e1	015? (See the guidance notes on part C2.)					
No						
Yes	Tell us how you will do this. Please send us a copy of your reference numbers you have given these documents	our explanation and your facility recycling plan, and tell us below the				
	Document reference for the explanation	L				
	Document reference for the facility recycling plan					
	Document reference for the facility recycling plan					
2e2	Is this a renewal of an existing authorisation covered by the					
2e2 No Yes						

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# 2 About your proposed changes, continued

# **Table 1 – Changes to existing activities**

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

Name	Installation schedule 1 references	Description of the installation activity	Description of waste operation	Description of the mining waste operations	Description of water discharge activity	Description of groundwater activity	Proposed changes document reference
i.e. name of installation, waste operation, mining waste operation, water discharge activity or groundwater activity							
Example – effluent unique name					Example – treated sewage effluent		
If you do not have enough room, go to the line below or send a separate document and give us the document reference here							

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## 2 About your proposed changes, continued 2f Low impact installations (installations only) Will any changes mean that any of the regulated facilities will become low impact installations? Now go to section 3 No If yes, tell us how you meet the conditions for a low impact installation (see the guidance notes on part C2 – Appendix 1) Yes Document reference Tick the box to confirm you have filled in the low impact installation checklist in appendix 1 for each regulated facility 3 Your ability as an operator If you are applying to add waste installations or waste operations to a permit that has not previously had them, you need to fill in all of section 3. If you are applying to consolidate (combine) two or more permits or have an updated permit you must fill in question 3d. This section does not apply for applications to surrender a permit. Relevant offences Installations and waste operations only (see the guidance notes on part C2). 3a1 Have you, or any other relevant person, been convicted of any relevant offence? Now go to question 3b No Please give details below Yes Name of the relevant person Title (Mr, Mrs, Miss and so on) First name Last name Position held at the time of the offence Name of the court where the case was dealt with Date of the conviction (DD/MM/YY) Offence and penalty set Date any appeal against the conviction will be heard (DD/MM/YYYY) If necessary, use a separate sheet to give us details of other relevant offences and tell us below the reference number you have given the extra sheet. Document reference Now go to question 3b Please also complete the details in Appendix 2. 3b Technical ability Specified waste management activities and waste operations only (see the guidance notes on part C1). Please indicate which of the two schemes you are using to demonstrate you are technically competent to operate your facility and the evidence you have enclosed to demonstrate this. **ESA/EU skills** I have enclosed a copy of the current Competence Management System certificate CIWM/WAMITAB scheme Please select one of the following: I have enclosed a copy of: the relevant qualification certificate/s or

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evidence of deemed competence

or

3 Y	our ability as	an operator, continued		
- or	Environment Age	ency assessment		
-		inated manager status under the isions for previously exempt activities		
	l, if deemed comp r two years old:	petent or Agency-assessed, or if there is	s evidence of a nominated manager, or if the original	qualification is
	ve enclosed a cop opetence certifica	py of the relevant current continuing te/s		
		oetent manager please give the followir the document reference you have given	ng information. If necessary, use a separate sheet to a the extra sheet.	give us these
Title (Mr	r, Mrs, Miss and s	o on)		
First nar	ne			
Last nar	me			
Date of	birth (DD/MM/YY	)		
Phone				
Mobile				
Email				
	ent manager prov		dress for <b>all</b> other waste activities that the proposed to permits held by other operators. Continue on a se	
Permit	number	Site address		Postcode
Docume	ent reference	1		
Now go	to question 3c			
Please a	also complete the	details in Appendix 2.		
3c Fi	nances			
		ations and mining waste enerations on	nly (see the guidance notes on part C2).	
Please r (for you 2016.	note that if you kn rself or anyone el	nowingly or carelessly make a statemer se), you may be committing an offence	nt that is false or misleading to help you get an envir e under the Environmental Permitting (England and V	Wales) Regulations
	lings against you?		, , , , , , , , , , , , , , , , , , , ,	·····,
Yes 🗌		tails below, including the required set- facility against which a credit check ma	up costs (including infrastructure), maintenance and y be assessed	d clean up costs for

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

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# 3 Your ability as an operator, continued

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

	v do you plan to make financial provision (to able of meeting the obligations of closure an	operate a landfill or a mining waste facility you need to show us that you are financially additionally and aftercare)?
Bon	ds	
Escr	row account	
Trus	st fund	
Lum	np sum	
Othe	er	
Prov	vide a plan of your estimated expenditure on	each phase of the landfill or mining waste facility.
Docı	ument plan reference	
Now	v go to question 3d	
3d	Management systems	
	must have an effective, written managemen ng a certified scheme or your own system.	t system in place that identifies and reduces the risk of pollution. You may show this by
	r permit requires you (as the operator) to ens nagement system.	sure that you manage and operate your activities in accordance with a written
som		each site and which parts of the overall management system apply. For example, at ng out additional measures to prevent pollution because they are nearer to sensitive
You	can find guidance on management systems	on our website at www.gov.uk/government/organisations/environment-agency.
Tick that	this box to confirm that you have read the s your management system will meet our rec	guidance and quirements
Wha	at management system will you provide for yo	our regulated facility?
EC E	Eco-Management and Audit Scheme (EMAS)	
EMA	AS Easy	
ISO	14001	
BS 8	8555 (Phases 1–5)	
Acor	rn	
Gree	en dragon	
Own	n management system	
Plea	ase make sure you send us a summary of you	r management system with your application.
Docı	ument reference/s	
4	Consultation	
	in 4a to 4c for installations and waste operat	tions and 4d for installations only.
	•	e releasing any substance into any of the following?
4a	A sewer managed by a sewerage un	
No		acitation.
Yes	☐ Please name the sewerage undertake	er I
4b	A harbour managed by a harbour au	thority?
No		•
Yes	☐ Please name the harbour authority	
4c com	Directly into relevant territorial waten	ers or coastal waters within the sea fisheries district of a local fisheries
No		
Yes	<ul><li>Please name the fisheries committee</li></ul>	

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## Consultation, continued 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 П **Supporting information** 5 Provide a plan or plans for the site See the guidance notes on part C2 for what needs to be marked on the plan. Clearly mark the site boundary or discharge point, or both. Also include site drainage plans, site layout plans, and plant design drawings/process flow diagrams (as required). (See the guidance notes on part C2.) Document reference/s of the plans Do any of the variations you plan to make need extra land to be included in the permit? 5b No Please provide a site report for the extra land Yes Document report reference/s Provide a non-technical summary of your application Document reference of the summary 5d Risk of fire from sites storing combustible waste Are you applying for an activity that includes the storage of combustible wastes? (This applies to all activities excluding standalone water and groundwater discharges.) Go to question 5f Go to question 5e Will your variation increase the risk of a fire occurring or increase the environmental risk if a fire occurs? See the guidance notes on part C2. No Provide a fire prevention plan. You need to highlight any changes you have made since your pre-application discussions Yes Document reference of the plan 5f Adding an installation If you are applying to add an installation, tick the box to confirm that you have sent in a baseline report and provide a reference Document reference of the report 6 **Environmental risk assessment** If you need one, see the guidance notes on part C2. Provide an assessment of any additional risks the proposed changes or additions to your regulated facilities poses to the environment as part of your application to vary this permit. The risk assessment must follow the methodology set out in 'Risk assessments for your environmental permit' at https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit or an equivalent method. Document reference for the assessment

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#### 7 How to contact us

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

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

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

Email: enquiries@environment-agency.gov.uk

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

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

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

#### **Feedback**

(You don't have to answer this part of the form, but it w	ill 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 gu simpler.	idance notes, and to tell the Governmen	nt how regulations could be made			
Would you like a reply to your feedback?					
Yes please					
No thank you					

Crystal Mark
19110
Clarity approved by
Plain English Campaign

For Environment Agency use only	
Date received (DD/MM/YYYY)	Payment received?
	No 🗆
Our reference number	Yes Amount received
	£

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# Plain English Campaign's Crystal Mark does not apply to appendix 1.

# Appendix 1 – Low impact installation checklist

Installation reference				
Condition	Response	Do you meet this?		
A – Management techniques	Provide references to show how your application meets A			Yes 🗌
	References			No 🗌
B – Aqueous waste	Effluent created		m³/day	Yes 🗌
				No 🗌
C – Abatement systems	Provide references to show how	your application meets C		Yes
	References			No 📙
				· -
D – Groundwater	Do you plan to release any haza non-hazardous pollutants into the		Yes  No	Yes  No
E – Producing waste	Hazardous waste		Tonnes per year	Yes
L Troducing waste	Non-hazardous waste		Tonnes per year	No 🗌
F – Using energy	Peak energy consumption		MW	Yes 🗆
1 Oshig chergy	r car chergy consumption		14144	No 🗌
G – Preventing accidents	Do you have appropriate measu		Yes 🗌	Yes
	major releases of liquids? (See 'How to comply'.)			No 🗌
	Provide references to show how your application meets G			
	References			
H – Noise	Provide references to show how	your application meets H		Yes
	References			No 📙
I – Emissions of polluting substances	Provide references to show how	your application meets I		Yes
References				No 📙
J – Odours	Provide references to show how your application meets J			Yes ☐ No ☐
	References			NO [
V History of koardinate tha	Cau have whather were been been	involved in arre	Vac 🗆	
K – History of keeping to the regulations	Say here whether you have beer enforcement action as described		Yes  No	
	Appendix 1 explanatory notes			

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# 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	e you filled in the Relevant Offences question?	
Yes		
No		
Have	e you filled in the Technical ability question?	
Yes		
No		
2	Relevant Offences - date of birth information	
Plea	se give us the following details	
Nam	ne	L
Date	of birth (DD/MM/YY)	
3	Technical ability - date of birth information	
Nam	e	
Date	of birth (DD/MM/YY)	

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# Application for an environmental permit Part C4 – Varying a bespoke waste operation permit



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

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

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

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

The form can be:

- 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.
- printed off and filled in by hand. Please write clearly in the answer spaces.

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

#### Contents

- 1 What waste operations are you applying to vary?
- 2 Emissions to air, water and land
- 3 Operating techniques
- 4 Monitoring
- 5 How to contact us

Appendix 1 – Specific questions for clinical transfer and treatment waste operations

Appendix 2 – Specific questions for waste facilities that accept hazardous waste

Appendix 3 – Specific questions for the recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes

Appendix 4 – Specific questions for inert waste landfill and deposit for recovery operations

# 1 What waste operations are you applying to vary?

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

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

Document reference

#### Types of waste accepted

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

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

#### Table 1a - Waste operations which do not form part of an installation

Name of the waste operation	Description of the waste operation	Annex I (D codes) and Annex II (R codes) and descriptions	Hazardous waste treatment capacity (if this applies) (See note 1)	Non-hazardous waste treatment capacity (if this applies) (See note 1)
Add extra rows if you need them. If you do not have enough room, go to the line below or send a separate document and give us the document reference here	Use the description from the guidance. Include any extra detail that you think would help to accurately describe what you want to do			
For all waste operations	Total storage capacity (see note 2)			
·	New total if varying to increase			
	Annual throughput (tonnes each year)			
	New total if varying to increase			

#### Notes

- By 'capacity', we mean the total landfill capacity (cubic metres) for landfills, the total treatment capacity (tonnes each day) for waste treatment and the total storage capacity (tonnes) for waste storage operations.
- 2 By 'total storage capacity', we mean the maximum amount of waste in tonnes you store on the site at any one time.

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

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

If you want to accept any waste with a code ending in 99, you must provide more information and a full description in the document.

Document reference

Table 1b -	Template	example -	types of	waste a	ccepted a	and resti	rictions

Waste code	Description of waste
Example	Example
02 01 08*	Agrochemical waste containing hazardous substances
06 01 02*	Hydrochloric acid

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

Are you applying for a waste recovery activity inverses restoration or improvement?	olving the permanent deposit on waste on land for construction or land reclamation
No 🗌 Go to section 2 Yes 🔲	
Have we advised you during pre-application disc	cussions that we believe the activity is waste recovery?
No 🗌 Go to section 2 Yes 🔲	
Have there been any changes to your proposal si	nce the discussions?
No 🗌 Yes 🗎	
	n that complies with our guidance at lans-and-permits. You need to highlight any changes you have made since your erence number of the document with your justification.
	r the assessment of a waste recovery plan that must be submitted as part of this v.uk/topic/environmental-management/environmental-permits.
Document reference	

#### 2 Emissions to air, water and land

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

Fill in one table for each waste facility.

#### **Table 2 – Emissions**

Name of the waste operation					
Point source emissions to air					
Emission point reference and location	Source	Parameter	Quantity	Unit	

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#### 2 Emissions to air, water and land, continued

Point source emissions to water (other than $$	sewers)			
Emission point reference and location	Source	Parameter	Quantity	Unit
Point source emissions to sewers, effluent to	reatment plants or oth	er transfers off site	<b>.</b>	1
Emission point reference and location	Source	Parameter	Quantity	Unit
Point source emissions to land		-		
Emission point reference and location	Source	Parameter	Quantity	Unit

# **Supporting information**

## 3 Operating techniques

#### 3a Technical standards

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

You must justify your decisions in a separate document if:

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

This justification could include a reference to the Environmental Risk Assessment provided in part C2 (general bespoke permit) of the application form.

The documents in Table 3a should summarise the main measures you use to control the main issues identified in your risk assessment or technical guidance. For each of the activities listed in Table 3a, describe the type of operation and the options you have chosen for controlling emissions from your process.

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## 3 Operating techniques, continued

#### Table 3a - Technical standards

Fill in a separate table for each waste operation.

Waste operation		
Description of the waste operation	Appropriate measure (TGN reference)	Document reference (if appropriate)

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

Decument reference	
Document reference	

#### 3b General requirements

Fill in a separate table for each waste operation.

## Table 3b - General requirements

Name of the waste operation	
If the TGN 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
If the TGN or your risk assessment shows that odours are an important issue, send us your odour management plan.	Document reference or references
If your activity type is listed in the guidance document 'Control and monitor emissions for your environmental permit' as needing an odour management plan, or your risk assessment shows that odours are an important issue, you need to send us your odour management plan.	
If the TGN 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

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

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

#### 3c Information for specific sectors

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

#### Table 3c - Questions for specific sectors

Sector	Appendix	
Clinical waste	See the questions in appendix 1	
Disposing of and recovering hazardous waste	See the questions in appendix 2	
Recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes	See the questions in appendix 3	
Inert landfill and deposit of waste on land for construction, land reclamation, restoration or improvement	See the questions in appendix 4	

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#### **General information**

#### 4 Monitoring

Δа	Describe the measures	vou use for monitoring	emissions by r	referring to each	emission n	oint in Table 2 above
<b>7</b> a	Describe the incasures	you use ioi illollitoilli	s cillioolulio by i	iciciiiig to cati	ין ווטוככוווס ו	ullit III Table 2 abuve

Vou chould	alco	doccribo an	y environmental	monitoring	Tall us.
You Should	aisu	describe arr	v environinentai	monitoring.	ren us:

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

Document reference

#### 4b Point source emissions to air only

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

Document reference of the assessment

#### 5 How to contact us

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

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

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

Email: enquiries@environment-agency.gov.uk

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

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

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

#### **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 an	у
comments you may have about this form or the guidance notes that came with it.	

comments you may have about this form or the guidance	e 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 gui simpler.	dance notes, and to tell the Governr	ment how regulations could be made
Would you like a reply to your feedback?		
Yes please		Crystal
No thank you		Mark
		19112 Clarity approved by
		Plain English Campaign

For Environment Agency use only	
Date received (DD/MM/YYYY)	Payment received?
	No 🗆
Our reference number	Yes Amount received
	£

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Are you proposing to either

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

# Appendix 1 - Specific questions for clinical transfer and treatment waste operations

These questions apply to sites that store and/or treat clinical wastes listed in sub-tables 2.1a to 2.1b, EPR 5.07 'Technical guidance for managing clinical waste'. If other hazardous waste is received you should additionally refer to Appendix 2.

		, , , ,	
		ot additional waste for thermal or chemical disinfection not i	
	treat	a waste in Table 2.1a or Table 2c other than by the specified	methods?
No Yes		Please provide justification for the treatment of this waste	
103	Ш	Document reference	L
2 sta		vide a summary description of the treatment activited set out in the relevant technical guidance note(s	ties carried out on the waste facility which cover the ) (TGN)
Doc	umen	t reference	
3	Pro	vide layout plans detailing the location of:	
•	each	e storage (including areas and structures for separately storion treatment plant plant items	ng wastes which may be dangerous to store together)
Alsc	prov	ide process flow diagrams for each treatment plant and capa	city of waste storage areas and structures
Doc	umen	t reference	
Apı	pend	lix 2 – Specific questions for waste facilities th	at accept hazardous waste
1 sta		vide a summary description of the treatment activites set out in the relevant technical guidance note(s	ties carried out on the waste facility which cover the (TGN)
Doc	umen	t reference	L
2	Pro	vide layout plans detailing the location of:	
•	each	e storage (including areas and structures for separately storion treatment plant plant items	ng wastes which may be dangerous to store together)
		· ide process flow diagrams for each treatment plant and capa	city of waste storage areas and structures
Doc	umen	t reference(s)	
		lix 3 – Specific questions for the recovery to lar e treatment of mixed municipal solid wastes	nd for agricultural benefit of compost like outputs
	ed o	ase provide an accurate and reliable characterisation sampling and analysis of the CLO produced by the cee with section 2 of TGN 6.15	on of your compost like outputs (CLO). This should be treatment process over a 12-month period and in
Doc	umen	t reference	L
2 of T		ase provide an agricultural benefit assessment for 5.15 and should be signed and dated by an appropr	the use of your CLO. This should be based on section 2 iate technical expert
Doc	umen	t reference	L
3	Ple	ase provide a site-specific risk assessment of risks	to soil and food chain receptors. This should be based

locations where the waste will be stored and spread

and include:

 any spring, well or borehole used to supply water for domestic or food production purposes that is within 250 metres of the area being treated

on Schedule 2 of TGN 6.15 and include a map with a green outline showing the boundary of the area being treated

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# Appendix 3 – Specific questions for the recovery to land for agricultural benefit of compost like outputs from the treatment of mixed municipal solid wastes, continued

- any spring, well or borehole not being used for domestic or food production purposes that is within 50 metres of the area being treated
- any European designated sites (candidate or Special Area of Conservation, proposed or Special Protections Area in England and Wales or Ramsar Site) or Sites of Special Scientific Interest (SSSI) which are within 500 metres of the place where waste is to be stored or spread
- the location of public rights of way

Yes

any Groundwater Source Protection Zones

	surface watercourses any buildings or houses within 250 metres of the area being treat	ed
•	land drains within the boundary	
Doci	ument reference	
<b>4</b> No	Are the technical standards and measures fully in line  Provide justification for departure from TGN 6.15 and a cop  Document reference	with those set out in section 3 of TGN 6.15? y of the proposed technical standards, measures or procedures
Yes		
Арр	endix 4 – Specific questions for inert waste landfil	l and deposit for recovery operations
<b>1</b> Doci	Please provide your Environmental Setting and Site De	esign (ESSD) report
Note	: You should use the Environment Agency template to help you do	evelop an environmental setting and site design (ESSD) report.
2	Please provide your Waste Acceptance Procedures (inc	cluding Waste Acceptance Criteria)
	ument reference	
3	Have you provided a hydrogeological risk assessment	(HRA) for the site?
No Yes	<ul><li>☐ Please refer to the section of your ESSD that explains why t</li><li>☐ Document reference</li></ul>	
4	Have you completed an outline engineering plan for th	e site?
No Yes	<ul><li>Please refer to the section of your ESSD that explains why t</li><li>Document reference</li></ul>	his is unnecessary for your site
5	Have you provided a stability risk assessment (SRA) for	or your site?
No Yes	<ul><li>Please refer to the section of your ESSD that explains why t</li><li>Document reference</li></ul>	his is unnecessary for your site
6	Have you completed a monitoring plan for the site?	
No Yes	<ul><li>☐ Please refer to the section of your ESSD that explains why t</li><li>☐ Document reference</li></ul>	his is unnecessary for your site
7	Have you completed a plan for closing the site and pro	cedures for looking after the site once it has closed?
No	If no for deposit for recovery activities please refer to the sesite	ection of your ESSD that explains why this is unnecessary for your
Yes	For inert waste landfill you must provide a closure plan	
	Document reference	
Spr	eading waste to support plant growth	
8a	Does the activity involve the deposit of waste to create	e or treat a growing medium (R10 for land treatment)?
No	Now go to question 9	

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# Appendix 4 - Specific questions for inert waste landfill and deposit for recovery operations, continued

# 8b If you have answered 'Yes' to question 8a, can you meet both of the following criteria?

		e types to be used for the R10 activity are top soils (EWC 17 05 04 or 20 02 02), peat (EWC 17 05 04 or 20 02 02) and/or soil cleaning and washing beet (EWC 02 04 01) only, and					
•	The d	epth of deposit for the R10 activity will not exceed the final 50cm					
No							
Yes							
<b>8c</b> No	•	ou have answered 'No' to question 8b, have you completed a benefit statement?  Please explain why					
		Document reference					
Yes	es 🗌						
Note	ote: Refer to our guidance when completing your statement (including EPR 8.01, section 6).						

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# Application for an environmental permit Part F1 – Charges and declarations



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:

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

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	Plant (MCP)/Specified	Water discharge/point source discharge to groundwater	Groundwater spreading onto land

#### 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
Total A			

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# Working out charges (you must fill in this section), continued

	Additional assessment charges (B)			
Part 1.19 Ch	arges 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 installation)	farming	£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 installation)	is a farming	£1,246	
1.19.7	Noise and vibration management plan (except where the appli farming installation)	cation activity is a	£1,246	
1.19.8	Ammonia emissions risk assessment (intensive farming applic	ations only)	£620	
1.19.9	Dust and bio-aerosol management plan (intensive farming app	lications only)	£620	
	Advertising		£500	
Total B				
Payman Payman Postal order	o show how you have paid.			
Cash Tick below to confirm you are enclosin application		ing cash with the		
Credit or del	pit card			
Electronic tra	ansfer (for example, BACS)			
Remittance ı	number			
Date paid (D	D/MM/YYYY)			
low to pay	/			
Paying by ch	neque, postal order or cash			
Cheque deta	ails			
Cheque mad	de payable to			
Cheque number				
Amount £				
	nake cheques or postal orders payable to 'Environment Agency' ady printed on.	and make sure they	have 'A/c Paye	e' written across them
	the name of your company and application reference number or h a future date on them.	n the back of your ch	eque or postal	order. <b>We will not</b> acce
	ecommend sending cash through the post. If you cannot avoid the rapplication reference details. Please tick the box below to confi			oostal service and
have enclo	sed cash with my application			

page 2 of 8 EPF1 Version 12, January 2020

#### 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.

You should also email your payment details and reference number to ea fsc ar@sscl.gse.gov.uk.

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.

Now read section 3 below

#### 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
- 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

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#### 3 Privacy notice, continued

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

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

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#### 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 ap	plication
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.

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)	
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)	

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5	Declaration, continued	
Toda	y's date (DD/MM/YYYY)	
For tr	ransfers only – declaration for person receiving the permit	
	evant person should make the declaration (see the guidance no ant person.	tes on part F1). An agent acting on behalf of an applicant is NOT a
	lare that the information in this application to transfer an enviro f. I understand that this application may be refused or approval	
abov	: If you cannot trace a person or persons holding the permit you e. Please contact us to discuss this and supply evidence in your it holders.	
lf you	deliberately make a statement that is false or misleading in ord	er to get approval you may be prosecuted.
decla	this box to confirm that you understand and agree with the eration above, then fill in the details below do not have to provide a signature as well)	
Nam	e	
Title	(Mr, Mrs, Miss and so on)	
First	name	L
Last	name	
	ehalf of evant; for example, a company or organisation and so on)	L
Posit (if rel	ion evant; for example, in a company or organisation and so on)	L
Toda	y's date (DD/MM/YYYY)	
Now	go to section 6	
6	Application checklist	
You r	nust fill in this section.	
	ır application is not complete we will return it to you. If you aren't application.	sure about what you need to send, speak to us before you submit
You r	nust do the following:	
	plete legibly all parts of this form that are relevant to you and activities	
	ify relevant supporting information in the form and send it the application	
nece need	all the documents you are sending in the table below. If ssary, continue on a separate sheet. This separate sheet also s to have a reference number and you should include it in the below	
	ew permits or any changes to the site plan, provide a plan that is the standards given in the guidance note on part F1	
	de a supporting letter for any claim that information is dential	
Get t	he declaration completed by a relevant person (not an agent)	
Send	the correct fee	

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#### 6 Application checklist, continued

Question reference	Document title	Document reference

#### 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

Environment Agency Permitting and Support Centre Environmental Permitting Team 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)

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	_	-	
Feed	ha	~ I,	
reeu	เวส	t.K	

(You don't have to answer this part of the form, but it will help us important the control of th	rove 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, a simpler.	and to tell the Government how regulations could be made	
Would you like a reply to your feedback?		
Yes please		
No thank you		

Crystal Mark 19132 Clarity approved by Plain English Campaign
---

For Environment Agency use only	
Date received (DD/MM/YYYY)	Payment received?
	No 🗆
Our reference number	Yes Amount received
	£

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GCE00692/EPv3/4/21

Appendix A – Non-Technical Summary

# **Eales Farm Landfill**

# **Environmental Permit Application**

Non-technical Summary

**April 2021** 

Tamar Valley Projects Ltd is intending to re-open the Eales Farm inert waste landfill which is currently in closure. This application is being made, following protracted consultation with Environment Agency, to vary the existing environmental permit (EPR/FB3403XR) to facilitate inert waste deposition in the circa 210,000m³ void space that remains at the site to complete the land levels indicated in the planning permission.

The following documents comprise the Environmental Permit Variation Application, prepared under the Environmental Permitting (England & Wales) Regulations 2010. It is a requirement of these regulations that the application is accompanied by a non-technical summary of the submitted documentation.

Eales Farm Landfill was run as an inert landfill from the 1970's and is currently in the aftercare stages. This site is situated just north of Tamar View Industrial Estate approximately 1-mile north-west of Saltash. The Ordnance Survey Grid Reference for the site is SX 414 605.

Assessment of the site has been carried out by review of the investigation and monitoring data gathered for the Closure Report on the underlying Eales Farm Landfill supplemented with additional comprehensive data gathered specifically for this application. The resultant Environmental Risk Assessments conclude that the operation will not have an adverse effect on the surrounding environment provided that the proposed operating systems are followed.

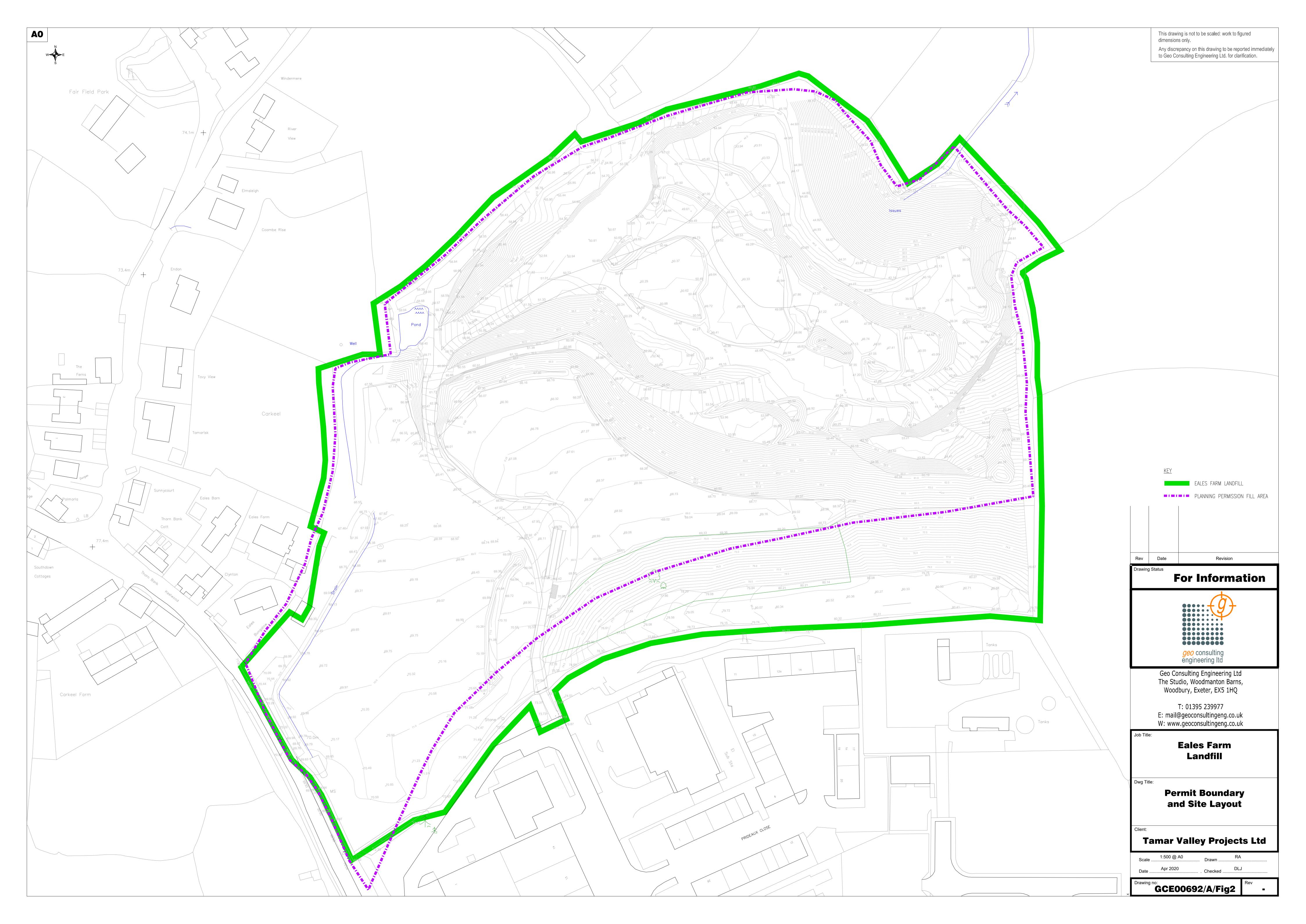
Details are provided to address Waste Acceptance Criteria, Operational Management, the Environment Setting and Site Design, and planned monitoring.

The completed site will fill the area to the profile defined within the site's planning permission and restore the land to agricultural use, as was initially intended within the original restoration plans.



GCE00692/EPv3/4/21

Appendix B – Site Plan





GCE00692/EPv3/4/21

Appendix C – Operational Management Plan



# Eales Farm Landfill Operational Management Plan March 2021

This document forms the basis of all operations undertaken with regard to landfill at Eales Farm. The Waste Management Plan will be reviewed periodically in line with Environment Agency guidance, or subject to the following:-

- Minimum review every four years
- When activities or working methods change
- Following a reportable incident.

Permit Number EPR/FB3403XR



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# Summary of Activities 2021.

Eales Farm Landfill is an inert landfill facility.

Any waste brought onto the site is only tipped in the identified storage, containment areas or into the operational phase of the landfill. Each load is inspected before loading, prior to unloading and when unloaded.

Any waste material deemed inappropriate will be quarantined following site procedure, and the Producer of the waste notified.

If a Third Party is responsible for bringing the unsuitable waste onto the site it will be re-loaded onto their vehicle for removal by them.

Particular attention will be paid to the early identification of any contamination.

Inert material suitable for land filling is recorded and moved to the landfill for deposit.

Detailed records are kept of all waste entering and leaving the site, and a quarterly 'electronic return' of this information will be submitted to the Environment Agency.

First aid kits and Fire Extinguishers are available on site and are prominently positioned in the Main Office.

All staff are issued with a Health and Safety Document relating specifically to this site, in addition to any necessary personal protection equipment and clothing.

Written instructions are issued regarding:

- The separation and storage of material received on site.
- The location and use of Chemical and Oil Spillage Kits.
- The location and use of the sealed chemical container and quarantine area for use in the event of a contamination incident.

Staff are instructed in the whereabouts and use of the Daily Incident Diary and Accident Management Plan, both of which are located in the site office.

A map showing routes to the nearest Minor Injuries Unit, attached to Plymouth Derriford Hospital, is displayed in the site office. It includes details of Site and Hospital postcodes, in addition to Hospital Emergency and Main Office telephone numbers.

A Notice Board will be displayed at the site entrance displaying;

- The permit holder's name
- An emergency contact name and number
- A statement that the site is permitted by the Environmental Agency
- The permit number
- Environment Agency telephone number (03708 506506) and incident hotline (0800 807060)

Staff have access to information regarding European Waste Codes and Descriptions of Acceptable Material. These are located in the site office.

Records of all quantities of and types of waste brought in will be recorded.



# **Working Daily Management Plan**

#### Control of Visitors, Contractors and Drivers

The Technically Competent Manager will be responsible for controlling and regulating the activities of visitors, contractors and drivers and ensuring that all staff have been trained in procedures to accept all visitors entering the site.

Trained staff will ensure that a copy of the Visitors and Drivers rules are given all new visitors that arrive at the site and that all Visitors and Drivers are equipped with full PPE.

## Operational Procedure - Waste Acceptance

The Technically Competent Manager will be responsible for ensuring that staff are trained in accepting waste that is in accordance with the Environmental Permit.

Trained staff will be responsible for ensuring that drivers entering the site with waste are directed to the control office and that they are in possession of a Waste Carriers Duty of Care Transfer Note.

Trained staff will check the load to confirm the site can accept the waste in accordance with the Environmental Permit.

#### **Operational Procedure - Waste Validation**

The Technically Competent Manager will be responsible for ensuring that staff are trained in accepting only wastes that are permitted by the Environmental Permit.

Trained staff will insure that the waste matches the description on the Waste Transfer Note, if the waste is accepted then the waste is booked into the site and all records of each load of waste that enters the site will be kept for at least three years.

### Operational Procedure - Waste Rejection

The Technically Competent Manager will be responsible for ensuring that trained staff follow procedure if loads are to be rejected.

Trained staff will ensure that rejected wastes are recorded and reported and all records will be kept for at least three years.

## **Operational Procedure - Site Diary**

The Technically Competent Manager will be responsible for ensuring that a trained supervisor will record daily events, maintenance of machinery, work being carried out on site, breakdowns, emergencies, accidents, severe weather conditions and any other unusual daily events.

The trained supervisor will be responsible for keeping all site records and records will be kept for the duration of the site.



#### Operational Procedure - Noise On Site

The site will be operated in accordance with the recommendations of the Clarke Saunders "Sound Impact Assessment and Management Plan" of March 2021, reference AS11942 appended to this plan.

The Technically Competent Manager will be responsible for ensuring that the trained site supervisor ensures that all machinery and plant is maintained in accordance with the manufacturer's guidelines, and that all daily maintenance and service records are kept for at least three years.

The site supervisor will inspect the site for the presence of excessive noise on a daily basis and ensure that all machinery and plant is fitted with the correct noise suppressors in line with current legislation.

#### Operational Procedure - Waste Transfer Notes Handling and Filing

The Technically Competent Manager will be responsible for ensuring that trained staff will keep correctly completed Waste Transfer Notes, Weighbridge Tickets and all Waste records in accordance with Environmental Permit.

All records will be kept for at least three years.

#### **Operational Procedure - Site Security**

The Technically Competent Manager will be responsible for ensuring that the site supervisor is following procedure with regards to site security, the site fencing is to be inspected at least once per week, alarm systems, all machinery is locked when not in use and all faults are reported onsite inspection forms.

Records will be kept for the duration of the site.

#### Operational Procedure - Dust Suppression

The site will be operated in accordance with the recommendations of the Kairus Ltd "Dust Management Plan" of April 2021, reference AQ051779 appended to this plan.

The Technically Competent Manager will be responsible for implementing procedures to ensure that dust is kept under control and does not become a hazard or a nuisance.

All staff and operators will be responsible for following dust and litter procedures. Dust and litter will not be allowed to migrate from the site.

All records and site diary will be kept for the duration of the site.

### **General Emergency Procedure**

The Technically Competent Manager will be responsible for implementing this procedure.

All staff at the site will be responsible for following this procedure of which includes contacting the relevant services in the event of an emergency, completing accident records and relevant documents and ensuring that all records are kept for the duration of the site.

### **Suspected Unauthorised Waste Procedure**

The Technically Competent Manager will be responsible for implementing this procedure.

Suitably trained staff will be responsible for following the procedure and non-conforming waste will be dealt with in accordance with the Environmental Permit and records will be kept for the duration of the site



### **Daily Checks Procedure**

The Technically Competent Manager will be responsible for implementing this procedure.

All staff and operators shall be responsible for undertaken daily checks. The TCM shall be empowered to delegate responsibility to identified members of staff. A day constitutes a 24 hour period therefore is a daily check is undertaken at 10am on a Monday, for example, then it must be undertaken before 10am on Tuesday. Any exceptions to this must be recorded within the site diary.

### Operational Procedure - rainwater run-off settlement ponds

The Technically Competent Manager will be responsible for implementing procedures to ensure that water level is managed to prevent silty rainwater from leaving the site.

All staff and operators will be responsible for following water management procedures. Water will not be allowed to migrate from the site unless it is via the two identified ditches.

All records and site diary will be kept for the duration of the site.



# **Operational Procedures Waste Acceptance**

## Objective

To ensure that wastes are accepted in accordance with the Environmental Permit.

# Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

Suitable trained Staff at the site shall be responsible for following this procedure.

### Frequency

This procedure shall be followed for the arrival of every load and every new driver or haulier.

### **Procedure**

When waste enters the site, the driver must pull over and allow the site operator to verify the material.

The operator will check and record details of his carrier's licence unless the operator is known and those details have been previously recorded.

If the carrier does not have a carrier's licence, the waste can be accepted for the **first time only**. The carrier must be given a copy of the DETR leaflet, "Waste, A Duty of Care" and the E.A. leaflet, "The Registration of Waste Carriers". Details of the carrier and the vehicle registration are to be recorded and reported to the E.A.

The operator is to ask the carrier for a waste transfer note (see WTN procedure) and visually inspect the load to ensure it matches the description.

If the waste transfer note and visual inspection do not match then the waste is to be turned away and a non-conformance report completed.

The driver can then be advised to proceed to the tipping area. The waste is then validated. (See Waste Validation Procedure).

### Records

These records will be retained for a minimum of three years.



# **Operational Procedures Waste Validation**

## Objective

To ensure that only wastes accepted are those permitted by the Environmental Permit.

# Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

Suitable trained staff or operators at the site shall be responsible for following this procedure

### Frequency

This procedure shall be followed for every incoming load.

#### **Procedure**

When waste enters the site, visually inspect the waste to ensure that it matches the description on the Waste Transfer Note (see WTN procedure).

Check that the type of waste and volume are acceptable under the terms of the site permit.

Ensure that the waste is deposited in the appropriate area of the site.

The machine operator / site operatives are to check the waste once tipped.

A waste validation record is to be completed.

Check to ensure the waste validation record and waste transfer note match.

File the waste validation record and waste transfer note.

If the description of the waste on the transfer note does not match the waste or is unacceptable under the Conditions of the Environmental Permit – reject the waste and complete a non-conformance report.

If the comparison of the waste transfer note and waste validation inspection does not match, summon a supervisor.

The supervisor will determine, whether the waste is acceptable under the terms of the permit. If so, it can be segregated into the normal waste streams and processed accordingly. A non-conformance report is to be completed.

If the waste is not acceptable under the terms of the permit, the waste must be quarantined. The Environment Agency must be informed and a section 62 waste rejection form completed.

#### Records

These records will be retained for a minimum of three years, or as long as the site holds an Environmental Permit.



# **Operational Procedures Waste Rejection**

# Objective

To ensure that wastes not permitted are rejected.

## Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

Suitable trained staff or operators at the site shall be responsible for following this procedure

### Frequency

This procedure shall be followed for every incident where material that is not acceptable under the conditions attached to the Environmental Permit is identified within the waste.

### **Procedure**

When waste enters the site:

- Check that the type of waste and volume are acceptable under the terms of the site permit.
- Ensure that the machinery / equipment on site needed to deal with the waste is operational.
- Ensure that the waste is as described on the Waste Transfer Note.

Unless the above three criteria are satisfied, reject the waste and complete a non-conformance report. Waste may be rejected for other reasons, please see emergency procedure, rejected waste.

### **Records**

These records will be retained for a minimum of three years, or as long as the site holds an Environmental Permit.



# **Operational Procedures Waste Leaving Site**

## Objective

To ensure that wastes leave site in accordance with the Environmental Permit.

## Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

Suitable trained staff at the site office shall be responsible for following this procedure

## Frequency

This procedure shall be followed for every outgoing load of waste.

### **Procedure**

All waste materials leaving the site must have the correct paperwork.

Biodegradable waste leaving the site must have a W.T.N per load or a yearly one.

If special waste is leaving the site, a Hazardous waste Consignment note must be raised if applicable.

Disposal site must be checked to ensure they are licensed to take the type of waste being disposed of.

All details to entered on the waste out log.

All hauliers must have a carrier's licence, and A.D.R qualifications if applicable to load.

All vehicles to securely netted or sheeted to ensure that no waste escapes the vehicle in transit.

#### Records

These records will be retained for a minimum of three years.



# **Operational Procedures Hazardous Waste Paperwork**

### Objective

To ensure that Hazardous waste Consignment paperwork is handled and filed correctly.

## Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

Suitable trained staff at the site control office shall be responsible for following this procedure.

### Frequency

Every load of Hazardous Waste outgoing.

### **Procedure**

Hazardous Waste Filing System

Hazardous Waste Consignment Notes - Blanks.

Notes Pending Removal From Customer.

"WASTE IN" (Consignee's Copy).

"WASTE IN" (Carrier's Copy).

Present Container on Site at the Transfer Station.

"LOADS OUT" (With a copy of Section Numbers).

"WASTE OUT" Carrier's Copy.

The full set of Hazardous Waste notes is:

White = Producer/holder's/consignor copy.

Person's/company who holds the waste.

Orange = Carrier's Copy

Person/company who is carrying the waste

Pink = Consignee's Copy

Transfer Station or Landfill Site copy where the waste is Deposited.

Each Outgoing set of Hazardous waste paperwork should be checked for;

Adequate pre-notice period if applicable

That it is signed by the Technically Competent Manager and/or Site Supervisor and all site details are correct



That the waste is acceptable under the conditions of the Environmental Permit of the receiving site

The waste matches its written description

Sites should be registered with the Environment Agency if applicable. Documents checked and signed by Dangerous Goods Safety Adviser if applicable.

## Records

These records will be retained for a minimum of three years.



# <u>Operational Procedures Personal Protective Equipment (PPE)</u>

# Objective

To ensure that Appropriate Personal Protective Equipment is used on Site.

## Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

All staff and operators shall be responsible for following this procedure.

### Frequency

At ALL times.

#### **Procedure**

The standard Personal Protective Equipment (PPE) to be worn on site is:

- Hi-Viz Jacket
- Gloves for sorting waste
- Hard Hat.
- Suitable strong boots with steel toe caps and steel mid-soles.

When checking and validating waste or sorting out recyclable materials ensure hi-viz jacket, gloves and boots are worn.

Dusty Loads – i.e. loads of fine soil etc. ensure hi-viz jacket, gloves and boots are worn along with extra protection such as goggles and dust mask.

Where the waste is suspected to contain Asbestos ensure gloves, mask and goggles are worn, plus a white disposable suit to be worn in addition to standard PPE and water spray to keep material damp.

IF IN ANY DOUBT WHEN DEALING WITH ANY WASTE (PARTICULARLY REJECTED WASTE) ASK.



# **Operational Procedures Site Diary**

## Objective

To ensure that accurate and appropriate records are kept of the daily activities and unusual occurrences.

# Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

All Site supervisor or deputy shall be responsible for following this procedure

## Frequency

Daily for all items listed

### **Procedure**

The following information should be entered into the Site Diary every operational day.

- Any construction work being carried out on site.
- Any maintenance or daily checks of machinery and vehicles; referring to daily checks is permissible.
- Details of any breakdowns.
- Details of any emergencies, incidents, accidents or drills etc.
- Details of any problems with wastes received, actions taken, i.e. rejected wastes, odorous waste etc.
- Any sampling of waste.
- Site inspections carried out, monitoring forms etc.
- Details of any records despatched to the Environment Agency, date, time etc. of E.A. Returns.
- Details of any severe weather conditions, tips shut etc.
- Environmental threats and problems and remedial actions, i.e. blocked drains etc.

### **Records**

This record must be kept for the duration of the site.



# **Operational Procedures Waste Separation and Treatment**

# Objective

To ensure that waste is segregated and stored correctly.

## Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

All staff and operators shall be responsible for following this procedure.

### Frequency

For every load

#### **Procedure**

All waste coming on to site will be site will be subjected to inspection and if deemed suitable subject to separation sorting and storage.

All persons doing this will be trained in the operations and the wearing of the correct P.P.E.

All waste materials will be stored correctly and taken off site at regular intervals to ensure compliance with the Environmental Permit.

Incidents or unusual occurrences will be recorded in the site diary.

### **Records**

This record must be kept for the duration of the site.



# **Operational Procedures Noise Management**

## Objective

To ensure that noise from site operation is limited so as not to have an adverse effect on the surrounding area

## Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

The site supervisor shall be responsible for following this procedure

## Frequency

Daily

### **Procedure**

Operational Practices will accord with the recommendations of Section 9 of the Clarke Saunders "Noise Impact Assessment and Noise Management Plan" appended to this plan and summarised below:

In order to minimise and manage noise impacts at neighbouring properties, the operator should;

- At all times and subject to availability, select and use quietest plant, machinery and vehicles appropriate for the task being undertaken. All vehicles and mechanical plant used for the purpose of the works will be fitted with effective exhaust silencers, will be maintained in good and efficient working order and operated in such a manner as to minimise noise emissions.
- Where practical and under the operator's control, to use white noise reversing or movement alarms on mobile plant.
- Employ at all times the Best Practicable Means (BPM), as defined in Section 72 of the Control of Pollution Act 1974, to reduce noise to a minimum, with reference to the general principles contained in British Standard BS5228:2009.
- Facilitate an early community involvement exercise with neighbours to establish and agree protected areas of their properties and then to continually update progress and forewarn of impending noisy works. A member of onsite staff should be designated as community relations manager to maintain good communications with neighbours.
- If deemed necessary, undertake, or employ an independent third party to undertake noise monitoring at locations to be agreed with the EA, with pre-set 'soft' and 'hard' trigger levels and text message alerts to instantly notify when and where they are exceeded. The operator should commit to stop work immediately once an alert is received and to investigate. Working procedures may then need to be reviewed and modified to prevent re-occurrence. Records of monitor data should be compiled and reported weekly to all relevant parties. The extent of monitoring required can then be continually assessed and amended as found necessary or desirable.
- Operator to undertake proper maintenance of equipment, control use of radios on site, site equipment with due consideration to proximity of neighbours and ensure machines are turned off when not in use.

### Records

Noise levels should be recorded on the site inspection form.

Noise levels of machinery checked at service and logged

Records should be kept for 3 years or the lifetime of the machinery.



# **Operational Procedures Waste Transfer Notes**

### Objective

To ensure that Waste Transfer Notes and other records associated with the movement of waste in and out of the site are correctly completed.

### Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

Site staff shall be responsible for following this procedure

### Frequency

For every load or batch.

#### **Procedure**

Waste Transfer Notes are required for waste coming on to site, on description of waste.

Waste Transfer Notes are required for waste leaving the site.

All transaction records will be completed as follows.

Waste in log for all materials on to site including:

- Haulier's name, address, phone number.
- Carriers Registration Number or reason for exemption.
- Waste Transfer Note reference or description of waste, conformance with the waste hierarchy.
- Source of Waste
- Date and time of transfer.
- Signatures of both parties.

Material / Waste out log for all materials off site including:

- Haulier's name, address, phone number.
- Carriers Registration Number or reason for exemption.
- Waste Transfer Note reference or description of material.
- Destination of material or waste
- Date and time of transfer.
- Signatures of both parties.

Waste and materials in and out logs may be either manually generated or in the form of a computerised report

Hazardous waste consignment notes completed and filed as required by Hazardous Waste procedure. Site diary to be kept as described by Site Diary procedure. Sampling/validation records available for inspection

### Records

Records generated by the procedure will be kept as specified in the appropriate procedure



# **Operational Procedures Security**

# Objective

To ensure that the site is secure to prevent trespassing and theft.

## Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

The site supervisor shall be responsible for following this procedure.

### **Procedure**

The site fencing and buildings are to be inspected daily, and any faults reported on the site inspection form and dealt with as soon as possible.

Entrance gates 2m high (incorporating barbed wire tops) and boundary fences ensure the site security. All buildings are kept securely locked at night and protected by alarm systems.

All machinery etc. will be securely locked outside operational hours.

### **Records**

Site Inspection Forms will be kept for three years.

Site Diary to be kept for the duration of the site.



# **Operational Procedures Dust Suppression**

# Objective

To ensure that dust is kept under control and does not become a hazard or a nuisance.

### Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

All staff and operators shall be responsible for following this procedure

### Frequency

Daily or continuous during dusty conditions.

### **Procedure**

Operational Practices will accord with the recommendations of the Dust & Emissions Management Plan presented in Section 4 of the Kairus "Dust Management Plan" appended to this plan and summarised below:

- A Technically Competent Manager (TCM) will be appointed at the Site who will be responsible for implementing measures set out within the DEMP to ensure that dust is kept under control and does not become a hazard or a nuisance.
- A Trained Supervisor (TS) will be appointed who will assist the TCM in implementing the DEMP.
- The name and contact details of person(s) accountable for air quality and dust issues will be displayed on the site boundary.
- The head or regional office contact information will also be displayed.
- All staff and operators will be responsible for following dust and litter procedures. Dust and litter will not be allowed to migrate from the site.
- A site diary will be kept/maintained recording all daily activities, inspections and unusual occurrences. These records will be kept for the duration of the landfill operations and will include details of:
- construction activities carried out on site;
- Maintenance and daily checks of machinery and vehicles;
- Details of any emergencies, incidents, accidents or drills etc;
- Site inspections and monitoring carried out;
- Details of severe weather episodes which may give rise to excess dust emissions i.e. exceptional dry periods, prolonged dry periods, high winds;
- Details of any dust or air quality complaints including, the cause(s) identified and appropriate measures taken take to reduce emissions in a timely manner;
- Any exceptional incidents that cause dust and/or air emissions, either on or off site and the action taken to resolve the situation.
- The site diary will be made available to the relevant authorities when asked.
- The TS will inspect the site for the presence of dust on a daily basis, with the frequency of inspections increased throughout the working day during dry and windy conditions.
- The TS will inspect the site, including fencing and barriers for dust emissions and deposits on a daily basis and will ensure deposits are cleaned using wet methods where deposits are found.
- All stored material will be kept damp to reduce the risk of dust emissions.
- At all times steps will be taken to ensure suppression of dust on site.
- Dust will not be allowed to mitigate from the site, should it do so then appropriate measures such as dust suppression should be carried out to prevent further emissions.
- If excessive dust is identified the situation will be assessed for correct procedure to reduce/prevent emissions and site office will be informed
- Dusty areas will be damped down using a mobile bowser, while ensuring area does not become muddy by excessive use of water.
- A road sweeper will be used where high volumes of mud and dust are identified to damp down and sweep up debris.



- If high volumes of dust persist a risk assessment will be undertaken, appropriate mitigation applied and the location monitored.
- During excessively dry and windy conditions the weather conditions and site conditions, including dust levels during tipping and moving of materials will be regularly monitored and where excessive dust identified appropriate damping down measures used.
- All stock piles of waste material, topsoil and other dust generating materials will be damped down in dry windy conditions.
- Drop heights to lorries and from delivery trucks will be minimised and fine water sprays will be used where appropriate to prevent dust emissions.
- A waste management system will be implemented on site.
- The TS will ensure that all relevant machinery and plant is fitted with the correct dust suppressors in line with current legislation and guidance.
- TCM and TS will be responsible for ensuring that all machinery and plant is maintained in accordance with the manufacturers guidelines and that all daily maintenance and service records are kept for at least three years.
- Plant operators will undergo a site induction which will cover the issue of over revving of plant.

Operatives will also be advised to isolate plant/equipment during idle periods to reduce fumes.

- An adequate water supply will be available on site for effective dust/particulate matter suppression/mitigation where weather conditions require it, with damping down across the site being undertaken during long dry spells. Non-potable water will be used where possible and appropriate and measures will be put in place to protect water supplied from frost
- Equipment will be readily available on site to clean any dry spillages, and clean up spillages as soon as reasonable practicable after the event using wet cleaning methods;
- No burning of any material will be permitted on site.
- Haul roads will be inspected and where compromised, repaired as soon as practicable;
- Haul roads will be regularly damped down and regularly cleaned;
- All inspections of haul roads and any subsequent action will be recorded in the site diary;
- There will be no dry sweeping across the Site.
- A maximum speed limit of 10 mph will be imposed on hard-surfaced haul routes and areas of hard standing, with 5 mph applied to unsurfaced haul routes.
- A wheel washing facility will be provided at the Site for use on vehicles leaving the Site throughout operation of the landfill.
- There will be an adequate area of hard surfaced road between the wheel wash facility and the site exit.
- Hard standing areas will be maintained across the site and regularly cleaned.
- Water-assisted dust sweepers will be used to remove any mud or debris that gets deposited on the public highway.
- All vehicles visiting and leaving site to be securely netted or sheeted to ensure that no dust/waste escapes the vehicle during transit.
- All vehicle engines will be switched off when stationary. No vehicles will be left idling.

#### Records

The site diary must be kept for the operational duration of the site



# **Operational Procedures Odour**

## Objective

To ensure that odours are dealt with promptly.

## Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

Suitably trained staff shall be responsible for following this procedure

### **Procedure**

If strong unpleasant odours are detected on site, contact the office immediately.

Find the source of the odour.

Immediately load the offending wastes onto a vehicle and remove from the Site

Ensure that the procedure is followed for "waste out" residues and transport the waste for disposal at an appropriate site.

If the source of the odorous waste is unusual or arises from non-conforming waste then the Waste Rejection Procedure and the Non Conforming Waste Procedure should be followed.

Always ensure the correct PPE is being used for the waste being handled.

### Records

This record should be kept for the duration of the site.



# **Operational Procedures Pest Control**

## Objective

To ensure the site does not attract pests.

## Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

Suitably trained staff shall be responsible for following this procedure

### **Procedure**

If large numbers of pests/vermin are detected on site, contact the office immediately.

Find the cause.

Immediately load the offending wastes onto a vehicle and remove from the Site

Ensure that the procedure is followed for "waste out" residues and transport the waste for disposal at an appropriate site.

If the source of the odorous waste is unusual or arises from non-conforming waste then the Waste Rejection Procedure and the Non Conforming Waste Procedure should be followed.

Always ensure the correct PPE is being used for the waste being handled.

### **Records**

This record should be kept for the duration of the site.



# **Operational Procedures Litter**

## Objective

To ensure that Litter is dealt with promptly.

# Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

Suitably trained staff shall be responsible for following this procedure

#### **Procedure**

Visual inspections for the presence of litter are to be made on a daily basis, and throughout the working day.

In the event of excess litter on site, report the situation to the weighbridge office.

Assess the situation. Cease operations as necessary and deploy an appropriate number of staff to pick up litter by hand.

Ensure the correct PPE is being worn, i.e. gloves, boots and hi-viz.

Place litter in covered skip.

Enter the details of any events in the site diary as a threat to the environment.

Report to the Site Manager to confirm that any incidents have been dealt with.

### Records

This record must be kept for the duration of the site



# **Operational Procedures Mud**

# Objective

To ensure that mud is dealt with promptly.

# Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

Suitably trained staff shall be responsible for following this procedure

#### **Procedure**

Visual inspections for the presence of mud are to be made on a daily basis, in wet weather - continuously.

Assess the situation of mud on premises.

Report findings to office.

If possible wash down area and sweep clean, ensuring that all-liquid etc. is disposed of correctly.

If area too large inform office immediately.

On reporting to office of large or continual mud on road arrange for road sweeper to come to site immediately.

Find sources of problem and try to rectify.

If problem persists close site until problem resolved.

### **Records**

This record must be kept for the duration of the site.



# **Operational Procedures Spillages and Accidents**

### Objective

To ensure site personnel respond to spillages in the correct manner.

### Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

All Staff at the site shall be responsible for following this procedure

#### **Procedure**

The designated person is nominated to contact the Emergency Services if the spillage is suspected of being dangerous.

All staff should evacuate to the emergency assembly area if the spillage is suspected as being dangerous.

Visitors should be escorted to the emergency assembly point

Staff must not stop to collect personal belongings.

The designated person must call a roll, at the assembly point.

Personal Protective equipment must be administered as required.

The process or equipment which caused the spillage should be shut down (if this action will not cause a threat to human health).

If the spillage will not cause harm to human health, an inert material (such as sand) should be used to absorb the spillage; waste material can also be used. This should be later segregated and a Hazardous waste Consignment note completed (if dangerous). If the spillage is waste material, then the spillage should be contained with netting.

The Environment Agency must be notified if the spillage is suspected as being dangerous.

Staff/visitors should be prevented from re-entering the building.

The details of the spillage should be entered in the Site Diary and an Accident Register form completed.

#### **Records**

These records will be retained for the duration of the site.



# **Operational Procedures Plant Malfunction**

# Objective

To ensure site personnel respond to Plant Malfunction in the correct manner.

## Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

All Staff at the site shall be responsible for following this procedure

#### **Procedures**

Assess the situation.

Obtain an idea of how long the machine will be out of action.

Can the site still take in waste, is there enough space?

After assessing situation, use spare machine if possible.

Close site if required.

Record in diary/site log as plant malfunction and threat to the environment.

Inform customers when the site is to be re-opened.

### **Records**

These records will be retained for a minimum of three years.



# **Operational Procedures Suspected Unauthorised Waste**

### Objective

To ensure that non-conforming wastes are handled in accordance with the relevant legislation.

### Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

Suitably trained staff shall be responsible for following this procedure

### **Procedure**

Inform the supervisor unless formally trained to deal with waste rejection.

Isolate waste into quarantine area, but only if safe to do so.

Ensure appropriate PPE is being worn.

If waste is Hazardous waste fill in Hazardous Waste Consignment Note.

Inform the following people:

Producer

Carrier

**Environment Agency** 

Await response/advice from Environment Agency.

Once the E.A. has advised appropriate actions, disposal in appropriate manner i.e. at a correctly licensed site and use of consignment notes etc.

### **Records**

This record should be kept for the duration of the site.



# **Operational Procedures Complaints**

## Objective

To ensure that any complaints are resolved with and recorded.

### Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

### **Procedure**

If a complaint is received a complaints form will be completed by a suitably qualified member of staff.

All practical steps will be carried out to resolve the issue(s) raised within the complaint.

Any issue(s) not resolved will be discussed further with the EA during their site visit.

### **Records**

This record should be kept for the duration of the site.



# **Operational Procedures Staff Training**

## Objective

To ensure that all staff are sufficiently trained for their roles.

# Responsibility

The Technically Competent Manager will be responsible for implementing this procedure.

## **Procedure**

All staff training needs and completed training will be recorded on the 'Training Checklist' and 'Training Record' spreadsheets. A copy of the spreadsheets will be kept in the site office.

### **Records**

This record should be kept for the duration of the site



# **Tamar View Landfill Site Form Templates:**

# **Emergency Contact List**

SITE DETAILS
--------------

Location: Eales Farm, Tamar View Industrial Estate, Carkeel, Saltash

Postcode: PL12 6PG

Site Access Grid Reference: 2	41318E 060410N		
SITE CONTACTS	Name	Office Hours (specify)	Out of hours
Director:	Carina Batten	01579 350105	07795 151990
Site Supervisor:	ГВА		
Security Contact:			
EMERGENCY SERVICES		Office Hours	Out of hours
Emergency		999	999
Medical:		0845 4647	999
Police:		101	999
Fire:		01392 872200	999
REGULATORS		Office Hours	Out of hours
Health and Safety Executive (HSE)		0151 951 4000	0151 922 9235
Local Authority, Cornwall Council:		0300 1234 141	0300 1234 161
Environment Agency (Local)		03708 506 506	0800 80 70 60
UTILITY / KEY SERVICES	S Name	Office Hours	Out of hours
Water undertaker:		0800 169 1133	0800 169 1133
Electricity supplier:		0845 6012989	0800 365 900
Oil supplier:			
Fuel supplier:			
Oil spill contractor:			
Maintenance contractor:			
OTHER KEY CONTACTS	Name	Office Hours	Out of hours
Head Office:		01579 350105	
Adjacent landowners:			
Neighbours:			
Specialist advisors:	David Jackson	01395 239977	07964 098599



# Accident Register

Date and time of the incident:				
What happened, what was it about?				
Was anyone else aware of this –	other witnesses? If so who?			
Tras anyone else aware or ans other withesses. It so who.				
What caused it?				
What have you done to make sure that it does not happen again?				
What have you done to make safe that it does not happen again.				
,	on or environmental damage to land, water or			
protected areas – for example: dust, odour or noise pollution outside the site or spillage of polluting liquids onto the ground, or at a site of special scientific interest, or				
into a drain or a watercourse? If so what?				
Is there a continuing threat? Yes / No				
If there was (or still is), then	Who did you phone?			
you must take steps to prevent				
further damage and notify the	At what time did you phone?			
Environment Agency on 0800				
807060 and any other relevant regulators ASAP.				
Have you done so? Yes / No				
Please print your name and sign				



# Complaints Form

Who made the complaint?				
Name:				
Address:				
Phone No:				
Date and time they made the complaint:				
What happened, what was it about?				
Was anyone else aware of this – other neighbours or your staff? If so who?				
Did the complaint relate to this site? If so, what happened? What went wrong?				
What have you done to make sure that it does not happen again?				
Was there any cignificant pollution or environmental damage	to land water or protected			
Was there any <b>significant pollution</b> or <b>environmental damage</b> to land, water or protected areas – for example: dust, odour or noise pollution outside the site or spillage of polluting				
liquids onto the ground, or at a site of special scientific interest, or into a drain or a				
watercourse? (If so, then complete an incident form in Section 6.5)				
If there was, then you must take steps to prevent further	Who did you phone?			
damage and notify the Environment Agency on 0800	At what time did you phone?			
807060 and any other relevant regulators ASAP. Have you				
done so? Yes / No				
You must also write or send an email to confirm this to the	Yes/No			
local office (see your accident management plan for the address) Have you done so?	What date did you contact?			
, ,				
Please print your name and sign:				



# Training Checklist

							Tra	inin	g Ch	eck	list							
JOB					(ti	ck boxe			QUIR needs		ch trai	ning)					COMMENTS	
		Envi	ironm	ental	awar	eness	ľ	Mainte	enance	e/ope	eration	าร			iden nerg			
	Certificate of Technical Competence	Supervision of waste management sites	Environmental and permit awareness	Waste receipt inc. Duty of Care	Waste separation and storage	Awareness of local sensitive sites for example sites of special scientific interest	Maintenance of tracked plant						Fire procedure	Spill response procedure	Flood procedure (where applicable)	Failure of services	Date Received	Signature



# Training Record

# **Training Record**

Employee Name	Job Title					
Training Required	Date due	Date done	Passed as competent? yes/no	Reviewers Signature	Date for Refresher	Comments



Appendix A Operational Environmental Risk Assessment



# **Environmental Permit Variation Application**

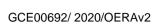
Permit: EPR/FB3403XR

Eales Farm Landfill, Tamar View Industrial, Saltash

Operational Environmental Risk Assessment

**Report: GCE00692/2020/OERAv2** 

March 2021





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# **Appendices**

Appendix A – Dust Management Plan

Appendix B – Sound Impact Assessment and Management Plan



# 1.0 INTRODUCTION

The proposed variation utilises roughly 4ha of the landfill known as Eales Farm Landfill. Waste disposal ceased at Eales Farm Landfill in 2005 while under the ownership of Downderry Construction (Western) Ltd (DCW). The site is currently in the aftercare stage following the EA's acceptance of the Closure Report (ref: 12933/R6) in November 2016. Prior to closure very limited monitoring had been undertaken across the site. Tamar Valley Projects Ltd took over the site in May 2017 since when regular quarterly monitoring has been carried out along with further ground investigations.

This document sets out the Environmental Management Plan to be used at Tamar View Landfill. The EMP will be used as a vehicle for the setting, measuring and monitoring of environmental objectives.

The document has been produced in conjunction with the Operation Management Plan and Environmental Setting and Site Design Report attached as part of this application.



#### 2.0 ENVIRONMENTAL RISK ASSESSMENT

This risk assessment has been prepared to identify the potential hazard scenarios associated with the handling and deposition of inert waste at Eales Farm Landfill. It identifies the sources of the hazard, the potential pathways by which the environment will be exposed to the hazard, and the potential receptors that may be affected by the release of that hazard and the overall risk factor to the environment taking mitigation measures into account.

#### 2.1 Source

The source of potential hazards occurring as a result of the waste deposition is reviewed in terms of the properties of the waste types and site operations. In many cases the hazard listed such as "dust" or "noise" is shorthand for a more specific hazard such as " the generation of dust (or noise, etc) sufficient to cause nuisance or complaint".

# 2.2 Pathway

The pathway for any potential hazard will be dependent on the nature of the waste and on the method of release. The main causes for the release of any contaminants include spillages, leaks and poor management of site operations. The main routes for contaminants will be to the atmosphere, surface water run-off and groundwater.

Other potential vectors for transferring hazards in the environment include birds, pests and scavengers.

# 2.3 Receptors

The potential receptors to hazards occurring at the site have been categorised according to the Practical Guide to Environmental Risk Assessment for Waste Management Facilities (Guidance Note 25 Version 2. National Centre for Risk Analysis and Options Appraisal EA Nov 2000).

The guidance suggests that this level of risk assessment should involve a basic scoring or ranking technique. The basis of the risk matrices set out below use a variation of the standard pattern as follows:-



		CO	NSEQUENC	ES				
		Low	Medium	High				
ΙΤΥ	Low	Low or Negligible	Low or Medium	Medium				
PROBABILITY	Medium	Medium	Medium	High				
PRC	High	Medium	Medium- High	High				
	RISK (Combination of Probability and Consequences)							

The risk assessment takes into account the following receptors:-

- People outside the site boundary;
- Properties outside the site boundary;
- Eco-systems including Plymouth Sound & Estuaries SAC, Tamar Estuaries Complex SPA and Tamar-Tavy Estuary SSSI;
- Surface water;
- · Groundwater; and
- Atmosphere.

People who are authorised to be on the site are covered specifically by the Health & Safety at Work Act 1974.

The risk assessment considers potential hazard scenarios in the context of the source-pathway-receptor linkage. It provides a rating for the probability of hazard occurring, the consequence of the hazard, the risk of the hazard and the mitigated risk factor, taking into account the operational and emergency procedures in place to prevent hazards occurring and the response implemented should a hazard occur.



# 2.4 Tamar View Landfill Environmental Risk Assessment: March 2020

HAZARD	PATHWAY/RECEPTOR	PROBABILITY OF HAZARD	CONSEQUENCE OF HAZARD	RISK FACTOR	PROTECTIVE MEASURES/ CONTROLS (MITIGATION)	PROCEDURE	MITIGATED RISK FACTOR
	Contraction of disease / infection by site operatives.	Low	Medium	Low	Strict waste handling procedures + knowledge of site health and safety rules. Inert nature of waste. PPE.		Low
Contraction of disease/ Infecti by unauthorised persons.		Low	Medium	Low	Provision of site security, fencing, gates. Inert nature of waste.	Waste	Low
Contact with Waste Materials			Medium	Low	Provision of site security, fencing, gates.	Acceptance Procedure	Low
	Contraction of disease / infection by local fauna.	Low	Medium	Low	Provision of site security, fencing, gates. Daily pest inspections and appointment of pest control contractor if necessary. Low risk to adjoining ecology.		Low
	Contaminated run-off entering surface water and/or groundwater via site drainage.	Low	Medium	Medium	Contaminated material not accepted at the site.		Low
Contamination of Surface Water	Contaminated run-off entering surface water drainage impacting on the flora, fauna and habitats in the surrounding environments including nearby SSSI, SPA and SAC.	Low	Medium	Medium	Contaminated material not accepted at the site.	Waste Acceptance Procedure	Low
Road Traffic Hazard	Spreading of mud and debris onto public highway.	Low	Low	Low	Wheel cleaning facility.		Low



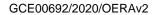
HAZARD	PATHWAY/RECEPTOR	PROBABILITY OF HAZARD	CONSEQUENCE OF HAZARD	RISK FACTOR	PROTECTIVE MEASURES/ CONTROLS (MITIGATION)	PROCEDURE	MITIGATED RISK FACTOR
	Accidental spillage of fuel oil during filling operations leading to surface or groundwater contamination drainage impacting on the flora, fauna and habitats in the surrounding environments including nearby SSSI, SPA and SAC	Low	Medium	Low	Use of appropriate filling procedures, tanks placed on bunded areas. Implementation of spillage procedure. Refuelling restricted to site compound		Low
Contamination of surface and groundwater by fuel oil/engine oil	Accidental spillage of fuel oil through ruptures leading to surface or groundwater contamination drainage impacting on the flora, fauna and habitats in the surrounding environments including nearby SSSI, SPA and SAC	cidental spillage of fuel oil rough ruptures leading to rface or groundwater ntamination drainage pacting on the flora, fauna d habitats in the surrounding vironments including nearby		Low	All tanks on bunded areas + regular inspection/ maintenance. Implementation of spillage procedure.  Spillage and Accident Procedure Plant Malfunction Procedure		Low
	Accidental spillage of engine oil during oil change leading to surface or groundwater contamination drainage impacting on the flora, fauna and habitats in the surrounding environments including nearby SSSI, SPA and SAC	Low	Low	Low	All oil changes take place in site compound and undertaken by trained personnel. Negligible quantities involved. Implementation of spillage procedure.		Negligible
	Generation of dust by waste discharge. Inhalation by operatives.	Medium	Medium	Medium	Implementation of dust suppression measures, provision of PPE.	Refer to Dust &	Low
Inhalation of dust	Generation of dust by waste		Medium	Low	suppression measures. Kairus Ltd		Negligible
	Generation of dust by waste discharge. Impacts upon adjacent flora.	Low	Low	Low Implementation of dust suppression measures.		appended to this risk assessment.	Low



HAZARD	PATHWAY/RECEPTOR	PROBABILITY OF HAZARD	CONSEQUENCE OF HAZARD	RISK FACTOR	PROTECTIVE MEASURES/ CONTROLS (MITIGATION)	PROCEDURE	MITIGATED RISK FACTOR
Nuisance of Odours	Windborne odours from waste, detectable at site boundary by public.	Low	Low	Low	Inert nature of waste. Low probability of odorous waste being accepted. Removal of such waste from the site within 48 hours.		Low
Fires in Waste	Air pollution in neighbourhood.	Low	High	Medium	Waste checking procedures. Implementation of fire control procedure. Inert nature of waste.	Waste Acceptance Procedure	Low
Unacceptable noise levels	Noise generation by use of equipment and plant movements. Impacts on residential properties and persons in the vicinity of the site.	Low	Low	Low	Implementation of noise mitigation measures including use of well-maintained plant and equipment with efficient silencers	Refer to Noise Management Plan prepared by Clarke Saunders appended to this risk assessment	Low
	Attraction of pests to the site due to the presence of biodegradable waste. Spread of disease by rats and flies to operations.	Low	Medium	Low	Only inert waste accepted at the site. Regular inspection for evidence of infestation.  Appointment of pest control contractor if necessary.	Waste	Low
Attraction of pests to site - spread of disease.	Attraction of pests to the site due to the presence of biodegradable waste. Spread of disease by pests to persons outside site.	Low	Medium	Low	Only inert waste accepted at the site. Regular inspection for evidence of infestation. Appointment of pest control contractor if necessary.	Acceptance Procedure Pest Control Procedure	Low
	Attraction of pests to the site due to the presence of biodegradable waste. Spread of disease by rats and flies to local fauna.	Low	Low	Low	Only inert waste accepted at the site. Regular inspection for evidence of infestation.  Appointment of pest control contractor if necessary.		Negligible
Bird nuisance	Attraction of birds to the site due to the presence of biodegradable waste. Nuisance to nearby residents and possible spread of litter to nearby dwellings.	Low	Low	Low	Only inert waste accepted at the site.	Waste Acceptance Procedure	Low



HAZARD	PATHWAY/RECEPTOR	PROBABILITY OF HAZARD	CONSEQUENCE OF HAZARD	RISK FACTOR	PROTECTIVE MEASURES/ CONTROLS (MITIGATION)	PROCEDURE	MITIGATED RISK FACTOR
Bird Nuisance	Attraction of birds to the site due to the presence of biodegradable waste. Impact on birds native to site and environs.	Low	Medium	Low	Only inert waste accepted at the site.		Low
Litter nuisance	Spread of windblown litter to beyond site boundary. Visual Amenity issues.  Low Low Low Low Low Low Low Low Low Lo		Waste Acceptance Procedure Litter Procedure	Low			
Contamination of Groundwater	Contaminating liquids entering groundwater. Pollution of water resource drainage impacting on the flora, fauna and habitats in the surrounding environments including nearby SSSI, SPA and SAC	Low	Medium	Medium generation. See Accepta		Waste Acceptance Procedure	Low
Unauthorised site access	Unauthorised access to site by vehicle or persons leading to damage + possible personal injury.	Low	Medium	Medium	Site security, site fencing, site gates, and site notice boards.		Low
Landfill Gas	Landfill Gas migrating off site leading to danger to public health.	Low	High	Low	Inert nature of waste. Landfill gas should not be generated.	Waste Acceptance	Low
Migration	Landfill Gas migrating under buildings and services.	Low	High	Low	Inert nature of waste. Landfill gas should not be generated.	Procedure	Low
Road Traffic	Vehicle collisions leading to discharge of waste in unauthorised part of the site.	Low	Medium	Medium	Speed restrictions on site, and clearly signed. Clearly defined haul routes.		Low
Accident	Vehicle collisions resulting in fuel leaks or spillages.	Low	Medium	Medium	Speed restrictions on site, and clearly signed. Clearly defined haul routes. Implement spillage procedure.	Spillage and Accident Procedure	Low
Explosions	People, atmosphere, buildings.	Low	High	Wasta accentance procedures		Waste Acceptance Procedure	Low





Appendix A – Dust Management Plan



# **Dust Management Plan**

# Eales Farm Landfill Saltash

Project Reference	AQ051779
Revision	V4 FINAL
Issue Date	01/04/21
Author	SH
Approved	JK

# **Client:**

# **Tamar Valley Projects Ltd**

# **Prepared by:**

Jo Kirk Kairus Ltd Higher Metcombe Devon EX11 1SL

T: 01404 811572 www.kairus.co.uk



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3	Risk Assessment of Dust Impacts	7
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4	Dust and Emissions Management Plan	12
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5	Conclusion	14

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# 1 Introduction

A Dust and Emissions Management Plan (DEMP) has been prepared for Tamar Valley Projects Ltd to cover activities and potential impacts from dust emissions during the re-opening and operation of the Eales Farm Landfill site under Environmental Permit EPR/FB3403XR.

Inert waste will be deposited at the Site to fill the void space the remains following the closure of the landfill in 2005, to land levels agreed within the sites planning permissions to allow restoration to agricultural land.

This DEMP sets out mitigation measures that will be deployed at the Site to prevent significant dust effects at nearby receptors.



AQ051779 V4

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# 2 Site Description

Eales Farm Landfill site is located to the north of Tamar View Industrial Estate, approximately 1 mile north-west of Saltash and covers an area of 7.4 hectares (Ha) within the previous Landfill area.

The Landfill is bounded to the south-west by the A388 and residential properties at Carkeel, approximately 70 m from the expected landfill activities. To the west and north-west is an area of scrubland and open fields with residential properties beyond (approximately 85-95 m from the site boundary). To the north is an area of woodland and to the east open fields/agricultural land.

Approximately 140 m to the north-east is the Tamar Estuary Site of Special Scientific Interest (SSSI). The location of the Landfill is shown below in Figure 2.1.

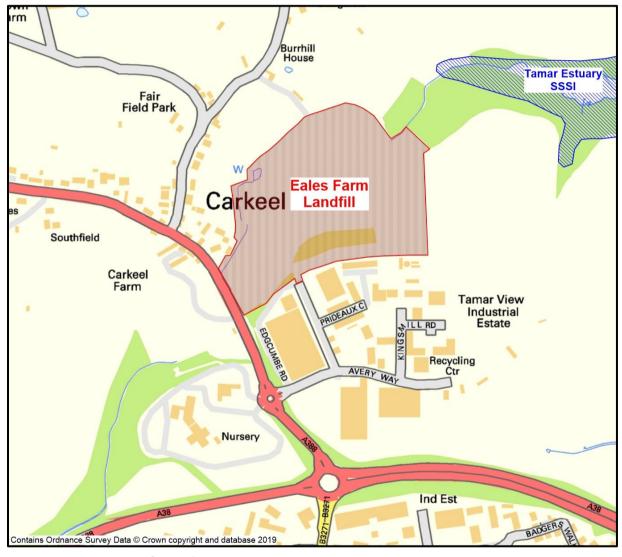


Figure 2.1: Location of Development Site



The Site was operated as an inert landfill from the 1970's. The site was closed in 2005 and is now in the aftercare stages.

The Site currently comprises the existing landfill area made up of predominantly gravelly slightly sandy clay, with zones with an abundance of rubble with boulders of concrete, granite and occasional blacktop.

Following a variation of Environmental Permit EPR/FB3403XR the Site will be reopened, and the current void space left after the previous landfill operations, infilled with inert waste up to the profile heights agreed within the sites planning permission.

Under the permit conditions the Site will accept up to 100,000 tonnes of inert waste per annum to include:

- Mineral excavations;
- Waste gravel, rock, sand and clays;
- Construction waste such as concrete, bricks, tiles and ceramics;
- Soil and stone from excavation; and
- Spoil from dredging.

Initial enabling works will be carried out prior to infill activities being started. These will include:

- Establishing a site office and associated infrastructure including new haul road on south side of site
- Constructing and improving surface water ditches around site
- Construction of new culvert
- Reprofiling of north-east boundary slope to a flatter angle;
- Material generation from north-east boundary slope reprofiling to be used in construction of bund on north boundary;
- Constructing surface water containment ponds
- Preparing the containment bay
- Improving vehicle access around the site
- Improving site security with installation of new site gate and perimeter fences

During enabling works clean imported clays will be used to line the containment ponds.

During the infull operations the Site will be worked in five phases. Plans showing the areas covered by these phases are provided in **Appendix A.** 

The estimated areas and volumes of each phases are set out in Table 2.1.

Table 2.1: Estimated Areas and Volumes of Phasing <sup>1</sup>					
Phase	Estimated Area (m²)	Estimated Volume (m³)			
Enabling	11,718	-16,650			
Phase 1	8,364	55,436			
Phase 2	11,781	83,432			
Phase 3	14,608	75,305			

<sup>1</sup> Geo Consulting Engineering Ltd (2020) Environmental Permit Variation Application, Permit EPR/FB3403XR, Eales Farm Landfill, Tamar View Industrial, Saltash, Environmental Setting and Site Design Report, Report GCE00692/2020/ESSD

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Restoration	34,697	10,409
-------------	--------	--------

Phase 1 will develop the bund on the north boundary by infilling to form the finished profile of the northern edge of the site with a steeper southern slope, The is intended to minimise the noise impact on the residents to the north from the remainder of the works. The outer, northern edge of this bund will be topsoiled and planted as soon as practical to improve soil retention and reduce visual impact.

Phase 2 will take the bulk fill area up to 3m below proposed finished level; again to minimise noise impact on residents to the north. The containment [ponds will be relocated upwards as the filling progresses with the number of times the ponds have to be moved being minimised.

Phase 3 will complete the remaining 3m of filling, commencing with the formation of a temporary bund on the northern margin, again to minimise noise impact, the bund being the last fill material to be incorporated into the mass.

The following activities will be carried out during phases 1 and 2:

- Clearing of vegetation;
- Preparing the surface including minor reprofiling;
- Placing basal liner;
- Constructing side liners using 'Christmas tree method';
- Placing and compacting of waste layers.

Phase 3 will include the following activities:

- Form temporary bund on north boundary of remaining filling area;
- Place and compact waste in layers;
- Final filling to be with temporary bund on north margin of filling areas;
- Level surface, cap with 300 mm of clean imported topsoil and seed;
- Decommission containment ponds;
- Construct lined ditches along the bund between the proposed slope and north slope;

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Decommission and remove site office and compound.

Following completion the site will be restored to agricultural land.



# 3 Risk Assessment of Dust Impacts

# 3.1 Methodology

The main air quality impacts that may arise as a result of the landfill activities are dust deposition resulting in the soiling of surfaces e.g. cars, window sills; visible dust plumes and elevated  $PM_{10}$  concentrations as a result of dust generating activities on the site. These dust emissions can give rise to annoyance at nearby receptors due to the soiling of surfaces by the dust.

Separation distance is also an important factor. Research indicates that particles greater than  $30\mu m$ , will largely deposit within 100m of sources, while intermediate particles (10- $30\mu m$ ) can travel up to  $200-300m^2$ . Particles of greater than  $30\mu m$  are responsible for the majority of dust annoyance. Consequently, significant dust annoyance is usually limited to within a few hundred meters of its source. Smaller particles ( $<10\mu m$ ) are deposited slowly and can travel up to 1 km; however, the most significant impacts on short-term concentrations of  $PM_{10}$  occur within a shorter distance from source. This is due to the rapid decrease in concentrations with distance from the source due to dispersion.

In the absence of any specific guidance on assessing emissions from landfill operations the assessment of potential impacts has been based on guidance published by the Institute of Air Quality Management (IAQM) on the assessment of dust from demolition and construction<sup>3</sup>. The IAQM assessment methodology considers three separate dust effects and defines their significance according to the sensitivity of the surrounding area, as follows:

- Annoyance due to dust soiling;
- The risk of health effects due to significant increase in PM<sub>10</sub>; and
- Harm to ecological receptors.

The assessment has been carried out in a number of steps following the IAQM guidance:

- Step 1, the need for an assessment was screened, based on the proximity of receptors;
- Step 2, the risk of dust impacts was assessed taking into account the level of activity and the proximity of sensitive receptors;
- Step 3, site specific mitigation integral to the site operations was reviewed and supplemented where necessary; and
- Step 4, the significance of the dust effects, after applying the site-specific mitigation, was assessed.

Full details of the assessment methodology are provided in Technical Appendix B.

#### 3.2 Dust Risk Assessment

# 3.2.1 Site and Surroundings

A summary of the proposed development is provided in Section 2 of this report.

As detailed in Section 2, the main land uses surrounding the Site are a mix of residential and industrial premises, woodland and agricultural land. All the above receptors are within 350 m of the

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<sup>2</sup> Arup, The Environmental Effects of Dust at Surface Mineral Workings. (Report to the DETR)

<sup>3</sup> Holman et al (2014. IAQM Guidance on the Assessment of Dust from Demolition and Construction, Institute of Air Quality Management, London <a href="https://www.iaqm.co.uk/text/guidance/construction-dust-2014.pdf">www.iaqm.co.uk/text/guidance/construction-dust-2014.pdf</a> – V1.1 01/06/16 Alterations to Table 3

Site boundary, therefore following the screening approach within the IAQM, the risk of effects on human receptors has been undertaken.

The guidance indicates that dust emissions from this type of activity (i.e. moving and handling of inert waste materials) are unlikely to result in significant impacts on ecologically sensitive receptors beyond 50 m from the site boundary. A review of data set out on Defra's Magic website<sup>4</sup> identifies the Tamar Valley SSSI approximately 140 m to the north-east of the landfill (Figure 2.1). The risk of significant effects on this designated wildlife site is therefore low and no further assessment is considered necessary.

Details on background PM $_{10}$  concentrations in the vicinity of the Site have been obtained from the DEFRA 2018 based background maps available on the UK-Air website $^5$ . The maps estimate a background concentration of 9-10  $\mu$ g/m $^3$  in the vicinity of the Site during 2020, less than 30% of the UK objective limit of 40  $\mu$ g/m $^3$ .

The precise behaviour of the dust, its residence time in the atmosphere, and the distance it may travel before being deposited would depend upon a number of factors. These include wind direction and strength, local topography and the presence of intervening structures (buildings, etc.) that may intercept dust before it reaches sensitive locations. Furthermore, dust would be naturally suppressed by rainfall. The landfill is surrounded by dense trees and shrubs, which would act as screens reducing the dispersion of dust in the direction of the nearest residential and industrial premises and therefore reducing the risk of significant effects at the residential receptors to the south-west, west and north-west.

A windrose from the Plymouth Meteorological Station for 2018 is provided below in Figure 3.1, which shows that the prevailing wind is from the south-west. Receptors located to the north-east of any dust generating activities are therefore most at risk of experiencing significant effects. The main land-use to the north-east is woodland and agricultural land which has a low sensitivity to dust effects.

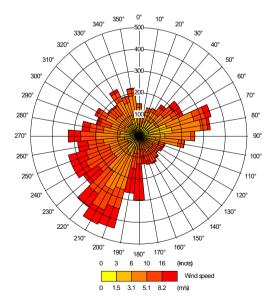


Figure 3.1: Windrose from Plymouth for 2018

<sup>5</sup> https://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html



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<sup>4</sup> http://magic.defra.gov.uk/

#### 3.2.2 Defining the Dust Emissions Magnitude

With reference to the criteria detailed in the IAQM guidance, the guidance recommends assessing potential dust emissions from each phase of construction activities, Demolition, Earthworks, Construction and Trackout. For the purpose of this assessment anticipated activities on the Site are considered to be similar to those activities which fall under the earthworks (i.e. movement and handling of soils, minerals and other inert waste) and trackout (movement of delivery vehicles in and out of the site) categories, therefore the assessment has been limited to these two activities. Based on the anticipated activities on the site the dust emission magnitude for site operations have been determined based on the IAQM guidance for earthworks (operational activities) and trackout (vehicle movements). These have been summarised below.

#### **Operational Activities**

The total site area covered by the landfill operations is 74,000 m<sup>2</sup>, with upto 100,000 tonnes of inert waste being delivered and handled per annum, with a total volume of 241,232 m<sup>3</sup> being required to fill and restore the existing void area. It is anticipated that the landfill will be operating for a minimum of five years prior to final restoration.

The landfill is already covered with previously deposited inert waste made up of a mix of sandy clay, concrete and rocks which will have a high potential for dust generation when dry and during any earthwork operations. During the enabling stage there will be activities carried out on site that will result in the disturbance of the existing ground material, such as establishing a site office with associated infrastructure, constructing and improving water ditches, reprofiling of boundary slope, construction of containment ponds, and improving site access roads. area will also include materials with a high potential for dust generation.

Material being delivered to the Site, stored, sorted and then transported and deposited to the relevant infill areas (Phases 1 to 5) will include mineral excavations, waste gravel, rock, sand and clay, waste construction materials and spoil from dredging., all of which have a high potential for dust generation, particularly when dry.

In undertaking site operations there will be one bulldozer, a 13t swing shovel and a dumper truck on site to sort and move material around the site.

Based on the activities being carried out on the site the dust magnitude if considered to be 'high'.

#### **Vehicle Movements**

The Environmental Permit allows for up to 100,000 tonnes of waste material to be delivered to site per annum which would generate on average 27 heavy goods vehicle (HGV) deliveries per day. The vehicles would travel, in part, over unpaved roads made up of sandy clay, concrete and rock material, which has a high potential for generating dust. The extent of the unpaved areas are likely to be >50 m.

The dust magnitude in relation to vehicle movements is considered to be 'medium'.

#### 3.2.3 Sensitivity of Surrounding Area

Using the criteria set out in Tables B.2 and B.3, Appendix B, the risk categories for the activities have been determined and are set out in Table 3.1.

#### **Dust Soiling**

The properties adjacent to the Site to the south-west, west and north-west are mainly residential houses, which are considered to be of high sensitivity to dust soiling. The nearest properties are approximately 70 m, with there being in the region of 15 properties within 70-100 m of the Site



boundary with the remainder over 100 m. To the south is the Tamar View Industrial Estate. Premises here would be of low sensitivity to dust effects. The overall sensitivity of the surrounding area in relation to dust soiling effects is considered to be 'medium'.

As discussed previously, there will be on average 27 outward movements of HGV per day during operation of the landfill. These vehicles would travel to and from the Site through the industrial estate via Edgecumbe Road. As a general guide, significant impacts from trackout may occur up to 500 m from large sites, 250 m from medium sites and 50 m from small sites, as measured from the site exit. There are no residential receptors within the industrial estate and vehicles accessing the Site would travel past other industrial units within the park, therefore the sensitivity of the area to dust soiling effects from trackout is considered to be 'low'.

# PM<sub>10</sub> Effects

As previously discussed, annual mean  $PM_{10}$  concentrations in the vicinity of the Site are expected to be in the region of 9-10  $\mu$ g/m³, so below 24  $\mu$ g/m³. Based on the proximity of sensitive receptors to the site boundary and the local concentrations of  $PM_{10}$  the sensitivity of the surrounding area is considered to be low with regards human health impacts (Table B.3, Appendix B).

Table 3.1: Sensitivity of Receptors				
Potential Impact		Sensitivity at Site		
Dust Soiling (operational	Receptor Sensitivity	High		
activities)	Number of Receptors	Approx. 15 within 50-100m		
	Sensitivity of the area	Low		
Dust Soiling (vehicle	Receptor Sensitivity	Low		
movements)	Number of Receptors	<10 within 250 m of site exit		
	Sensitivity of the area	Low		
Human Health (operational activities)	Receptor Sensitivity	High		
	Annual Mean PM <sub>10</sub> Concentration	< 24 μg/m³		
	Number of Receptors	Approx. 15 within 50-100m		
	Sensitivity of the area	Low		
Human Health (vehicle	Receptor Sensitivity	Low		
movements)	Annual Mean PM <sub>10</sub> Concentration	< 24 μg/m³		
	Number of Receptors	<10 within 250 m of site exit		
	Sensitivity of the area	Low		

# 3.2.4 Defining the Risk of Impacts

The dust emission magnitude as discussed in section 3.2.2 is combined with the sensitivity of the area (Table 3.1) to determine the risk of both dust soiling and human health impacts, assuming no mitigation measures applied at site. The risk of impacts associated with each activity is provided in Table 3.2 below and has been used to determine site-specific mitigation measures, which have been included within the DEMP set out in Section 4.



Table 3.2: Summary of Effects Without Mitigation			
Source	Dust Soiling	PM <sub>10</sub> Effect	
Operational Activities	Medium	Low	
Vehicle Movements	Low	Low	



# 4 Dust and Emissions Management Plan

# 4.1 Mitigation Measures

The following section outlines the best practice measures that will be implemented at the Site during operation to minimise off-site effects. However, the DEMP should be considered as a live document and will be reviewed and updated on a regular basis to ensure mitigation is kept relevant to site operations.

- A Technically Competent Manager (TCM) will be appointed at the Site who will be responsible
  for implementing measures set out within the DEMP to ensure that dust is kept under control
  and does not become a hazard or a nuisance.
- A Trained Supervisor (TS) will be appointed who will assist the TCM in implementing the DEMP.
- The name and contact details of person(s) accountable for air quality and dust issues will be displayed on the site boundary.
- The head or regional office contact information will also be displayed.
- All staff and operators will be responsible for following dust and litter procedures. Dust and litter will not be allowed to migrate from the site.
- A site diary will be kept/maintained recording all daily activities, inspections and unusual occurrences. These records will be kept for the duration of the landfill operations and will include details of:
  - construction activities carried out on site;
  - Maintenance and daily checks of machinery and vehicles;
  - Details of any emergencies, incidents, accidents or drills etc;
  - Site inspections and monitoring carried out;
  - Details of severe weather episodes which may give rise to excess dust emissions i.e.
     exceptional dry periods, prolonged dry periods, high winds;
  - Details of any dust or air quality complaints including, the cause(s) identified and appropriate measures taken take to reduce emissions in a timely manner;
  - Any exceptional incidents that cause dust and/or air emissions, either on or off site and the action taken to resolve the situation.
- The site diary will be made available to the relevant authorities when asked.
- The TS will inspect the site for the presence of dust on a daily basis, with the frequency of inspections increased throughout the working day during dry and windy conditions.
- The TS will inspect the site, including fencing and barriers for dust emissions and deposits on a daily basis and will ensure deposits are cleaned using wet methods where deposits are found.
- All stored material will be kept damp to reduce the risk of dust emissions.
- At all times steps will be taken to ensure suppression of dust on site.
- Dust will not be allowed to mitigate from the site, should it do so then appropriate measures such as dust suppression should be carried out to prevent further emissions.
- If excessive dust is identified the situation will be assessed for correct procedure to reduce/prevent emissions and site office will be informed
- Dusty areas will be damped down using a mobile bowser, while ensuring area does not become muddy by excessive use of water.



- A road sweeper will be used where high volumes of mud and dust are identified to damp down and sweep up debris.
- If high volumes of dust persist a risk assessment will be undertaken, appropriate mitigation applied and the location monitored.
- During excessively dry and windy conditions the weather conditions and site conditions, including dust levels during tipping and moving of materials will be regularly monitored and where excessive dust identified appropriate damping down measures used.
- All stock piles of waste material, topsoil and other dust generating materials will be damped down in dry windy conditions.
- Drop heights to lorries and from delivery trucks will be minimised and fine water sprays will be used where appropriate to prevent dust emissions.
- A waste management system will be implemented on site.
- The TS will ensure that all relevant machinery and plant is fitted with the correct dust suppressors in line with current legislation and guidance.
- TCM and TS will be responsible for ensuring that all machinery and plant is maintained in accordance with the manufacturers guidelines and that all daily maintenance and service records are kept for at least three years.
- Plant operators will undergo a site induction which will cover the issue of over revving of plant.
   Operatives will also be advised to isolate plant/equipment during idle periods to reduce fumes.
- An adequate water supply will be available on site for effective dust/particulate matter suppression/mitigation where weather conditions require it, with damping down across the site being undertaken during long dry spells. Non-potable water will be used where possible and appropriate and measures will be put in place to protect water supplied from frost.
- Equipment will be readily available on site to clean any dry spillages, and clean up spillages as soon as reasonable practicable after the event using wet cleaning methods;
- No burning of any material will be permitted on site.
- Haul roads will be inspected and where compromised, repaired as soon as practicable;
- Haul roads will be regularly damped down and regularly cleaned;
- All inspections of haul roads and any subsequent action will be recorded in the site diary;
- There will be no dry sweeping across the Site.
- A maximum speed limit of 10 mph will be imposed on hard-surfaced haul routes and areas of hard standing, with 5 mph applied to unsurfaced haul routes.
- A wheel washing facility will be provided at the Site for use on vehicles leaving the Site throughout operation of the landfill.
- There will be an adequate area of hard surfaced road between the wheel wash facility and the site exit.
- Hard standing areas will be maintained across the site and regularly cleaned.
- Water-assisted dust sweepers will be used to remove any mud or debris that gets deposited on the public highway.
- All vehicles visiting and leaving site to be securely netted or sheeted to ensure that no dust/waste escapes the vehicle during transit.
- All vehicle engines will be switched off when stationary. No vehicles will be left idling.



# 5 Conclusion

A Dust and Emissions Management Plan has been prepared setting out mitigation measures that will be implemented during operation of the landfill to reduce dust and emissions on the site and prevent significant effects at nearby sensitive receptors.

The DEMP should be seen as a working document and updated with additional measures should these be implemented or considered necessary.

Through the implementation of the measures proposed within this DEMP, it is considered that dust impacts during operation will be effectively managed and mitigated to ensure off site impacts are negligible.



# Appendix A – Details of Each Infill Phase

The following figures show the overall layout of the Site and the proposed infill and restoration phases.

Figure A1: Overall Site Layout

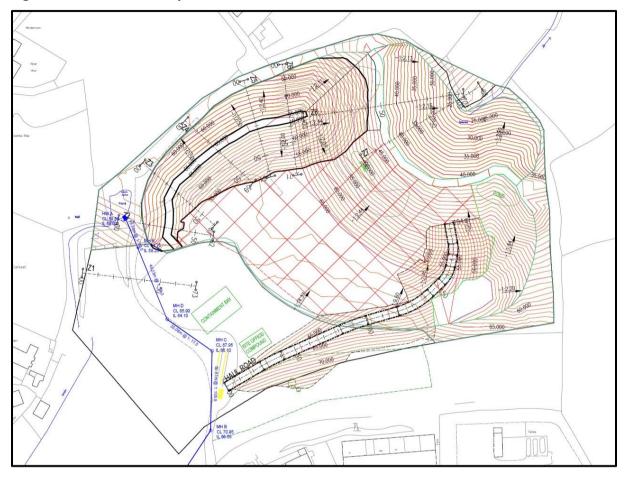




Figure A2: Enabling

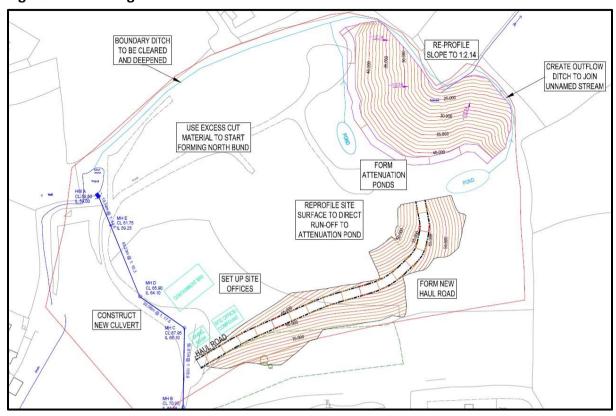
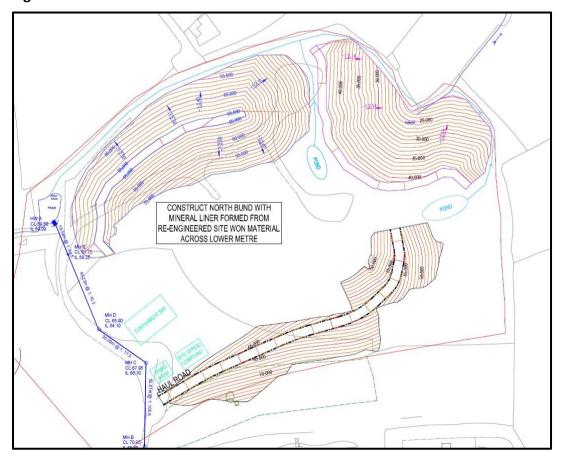


Figure A3: Phase 1



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Figure A4: Phase 2

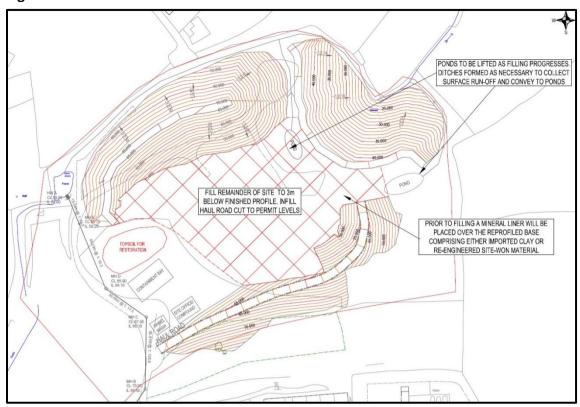
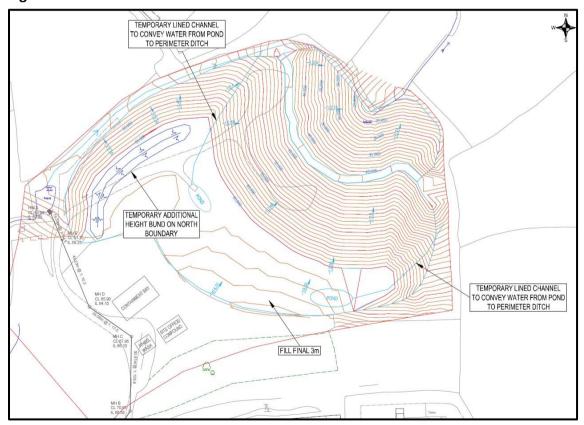


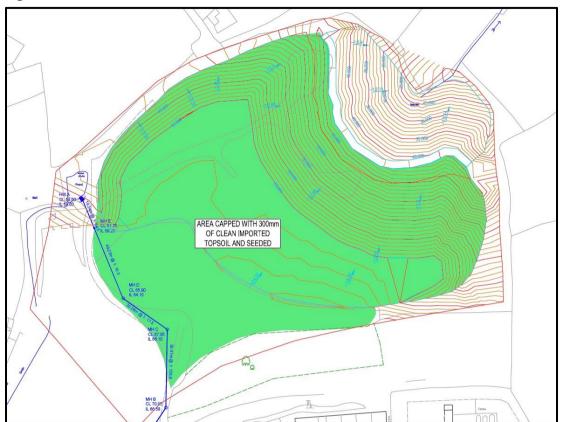
Figure A5: Phase 3



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Figure A6: Restoration





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# Appendix B – Approach Used for the Assessment of Dust and Emissions

The following methodology has been sued to assess the risk of significant effects on nearby receptors due to dust and emissions from the landfill operations. The approach is based on the guidance set out in the IAQM Guidance on the Assessment of Dust from Demolition and Construction.

In order to assess the potential impacts, the following activities have been assessed:

- Operational activities (soil-stripping, ground-leveling, excavation, movement and depositing of waste material etc);
- trackout (the transport of dust and dirt from the site onto the public road network where it may be deposited and then re-suspended by vehicles using the network).

For each activity, the risk of dust annoyance, health and ecological impact is determined using three risk categories: low, medium and high risk. The risk category may be different for each of the four activities. The risk magnitude identified for each of the construction activities is then compared to the number of sensitive receptors in the near vicinity of the site in order to determine the risks posed by the construction activities to these receptors.

#### Step 1: Screen the Need for an Assessment

The first step is to screen the requirement for a more detailed assessment. An assessment is required where there is:

- a 'human receptor' within 350m of the boundary of the site or 50m of the route(s) used by construction vehicles on the public highway, up to 500m from the site entrance(s); and/or
- an 'ecological receptor' within 50m of the boundary of the site; or 50m of the route(s) used by the construction vehicles on the public highway, up to 500m from the site entrance(s).

#### Step 2A: Define the Potential Dust Emission Magnitude

This is based on the scale of the anticipated works and the proximity of nearby receptors. The risk is classified as small, medium or large for each of the four categories.

*Operational Activities:* This involves excavating material, haulage, tipping and stockpiling. The potential dust emission classes for earthworks are:

- Large: Total site area >10,000m², potentially dusty soil type (e.g. clay, which will be prone to suspension when dry due to small particle size), >10 heavy earth moving vehicles active at any one time, formation of bunds >8 m in height, total material moved >100,000 tonnes;
- Medium: Total site area 2,500 m<sup>2</sup> 10,000m<sup>2</sup>, moderately dusty soil (e.g. silt), 5 10 heavy earth moving vehicles active at any one time, formation of bunds 4m 8m in height, total material moved 20,000 tonnes- 100,000 tonnes; and
- Small: Total site area <2,500m², soil type with large grain size (e.g. sand), <5 heavy earth moving vehicles active at any one time, formation of bunds <4 m in height, total material moved <20,000 tonnes, earthworks during wetter months.

*Trackout (Vehicle Movements):* The risk of impacts occurring during trackout is predominantly dependent on the number of vehicles accessing the Site on a daily basis. However, vehicle size and speed, the duration of activities and local geology are also factors which are used to determine the emission class of the Site as a result of trackout. The categories are:



- Large: >50 HDV (>3.5t) outward movements in any one day, potentially dusty surface material (e.g. high clay content), unpaved road length > 100m;
- Medium: 10-50 HDV (>3.5t) outward movements in any one day, moderately dusty surface material (e.g. high clay content, unpaved road length 50-100m; and
- Small: <10 HDV (>3.5t) outward movements in any one day, surface material with low potential for dust release, unpaved road length >50m.

#### Step 2B: Defining the Sensitivity of the Area

The sensitivity of the area is defined for dust soiling, human health ( $PM_{10}$ ) and ecological receptors. The sensitivity of the area takes into account the following factors:

- the specific sensitivities of receptors in the area;
- the proximity and number of receptors;
- in the case of PM<sub>10</sub>, the local background concentration; and
- site specific factors, such as whether there are natural shelters, such as trees, to reduce the risk of wind-blown dust.

Table B1.1 is used to define the sensitivity of different types of receptors to dust soiling, health effects and ecological effects.

Based on the sensitivities assigned to the different receptors surrounding the site and numbers of receptors within certain distances of the site, a sensitivity classification can be defined for each. Tables B1 to B4 indicate the criteria used to determine the sensitivity of the area to dust soiling, human health and ecological impacts.



Table B1: Ex	Table B1: Examples of Factors Defining Sensitivity of an Area							
Sensitivity of Area	Dust Soiling	Human Receptors	Ecological Receptors					
High	Users can reasonably expect enjoyment of a high level of amenity  The appearance, aesthetics or value of their property would be diminished by soiling'  The people or property would reasonably be expected to be present continuously, or at least regularly for extended periods, as part of the normal pattern of use of the land.  E.g. dwellings, museums and other important collections, medium and long term car parks and car showrooms.	10 – 100 dwellings within 20 m of site.  Local PM <sub>10</sub> concentrations close to the objective (e.g. annual mean 36 -40 μg/m³).  E.g. residential properties, hospitals, schools and residential care homes.	Locations with an international or national designation and the designated features may be affected by dust soiling.  Locations where there is a community of a particularly dust sensitive species such as vascular species included in the Red List for Great Britain.  E.g. A Special Area of Conservation (SAC).					
Medium	Users would expect to enjoy a reasonable level of amenity, but would not reasonably expect to enjoy the same level of amenity as in their home.  The appearance, aesthetics or value of their property could be diminished by soiling  The people or property wouldn't reasonably be expected to be present here continuously or regularly for extended periods as part of the normal pattern of use of the land.  E.g. parks and places of work.	Less than 10 receptors within 20 m.  Local PM <sub>10</sub> concentrations below the objective (e.g. annual mean 30-36 µg/m³).  E.g. office and shop workers but will generally not include workers occupationally exposed to PM <sub>10</sub> as protection is covered by the Health and Safety at Work legislation.	Locations where there is a particularly important plant species, where its dust sensitivity is uncertain or unknown.  Locations with a national designation where the features may be affected by dust deposition  E.g. A Site of Special Scientific Interest (SSSI) with dust sensitive features.					
Low	The enjoyment of amenity would not reasonably be expected.  Property would not reasonably be expected to be diminished in appearance, aesthetics or value by soiling.  There is transient exposure, where the people or property would reasonably be expected to be present only for limited periods of time as part of the normal pattern of use of the land.  E.g. playing fields, farmland unless commercially sensitive horticultural, footpaths, short lived car [parks and roads.	Locations where human exposure is transient.  No receptors within 20 m.  Local PM <sub>10</sub> concentrations well below the objectives (less than 75%).  E.g. public footpaths, playing fields, parks and shopping streets.	Locations with a local designation where the features may be affected by dust deposition.  E.g. Local Nature Reserve with dust sensitive features.					



Table B2: Sensitivity of the Area to Dust Soiling on People and Property							
Receptor Sensitivity	Number of	Distance from	Distance from the Source (m)				
	Receptors	<20	<50	<100	<350		
High	>100	High	High	Medium	Low		
	10-100	High	Medium	Low	Low		
	1-10	Medium	Low	Low	Low		
Medium	>1	Medium	Low	Low	Low		
Low	>1	Low	Low	Low	Low		

Table B3: Sensitivity of the Area to Human Health Impacts							
Receptor Sensitivity	Annual Mean PM <sub>10</sub> Concentration	Number of Receptors	Distance from Source (m)				
			<20	<50	<100	<200	<350
High	>18 μg/m³	>100	High	High	High	Medium	Low
		10-100	High	High	Medium	Low	Low
		1-10	High	Medium	Low	Low	Low
	16-18 μg/m³	>100	High	High	Medium	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	High	Medium	Low	Low	Low
	14-16 μg/m³	>100	High	Medium	Low	Low	Low
		10-100	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	<14 μg/m³	>100	Medium	Low	Low	Low	Low
		10-100	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Medium	>18 μg/m³	>10	High	Medium	Low	Low	Low
		1-10	Medium	Low	Low	Low	Low
	16-18 μg/m³	>10	Medium	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	14-16 μg/m³	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
	<14 μg/m³	>10	Low	Low	Low	Low	Low
		1-10	Low	Low	Low	Low	Low
Low	-	>1	Low	Low	Low	Low	Low



Table B4: Sensitivity of the Area to Ecological Impacts					
Receptor Sensitivity	Distance from the Source (m)				
	<20 <50				
High	High	Medium			
Medium	Medium Low				
Low	Low				

# Define the Risk of Impacts

The final step is to combine the dust emission magnitude determined in step 2A with the sensitivity of the area determined in step 2B to determine the risk of impacts with no mitigation applied. Tables B5 to B7 indicate the method used to assign the level of risk for each construction activity. The identified level of risk is then used to determine measures for inclusion within a site-specific Construction Management Plan (CMP) aimed at reducing dust emissions and hence reducing the impact of the construction phase on nearby receptors. The mitigation measures are drawn from detailed mitigation set out within the IAQM guidance document.

Table B5: Risk of Dust Impacts from Demolition						
Sensitivity of Area Large Medium Small						
High	High Risk	Medium Risk	Medium Risk			
Medium	High Risk	Medium Risk	Low Risk			
Low Medium Risk Low Risk Negligible						

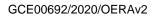
Table B6: Risk of Dust Impacts from Earthworks/ Construction						
Sensitivity of Area Large Medium Small						
High	High Risk	Medium Risk	Low Risk			
Medium Risk Medium Risk Low Risk						
Low Risk Low Risk Negligible						

Table B7: Risk of Dust Impacts from Trackout						
Sensitivity of Area Large Medium Small						
High	High Risk	Medium Risk	Low Risk			
Medium	um Medium Risk Low Risk Negligible					
Low Risk Low Risk Negligible						

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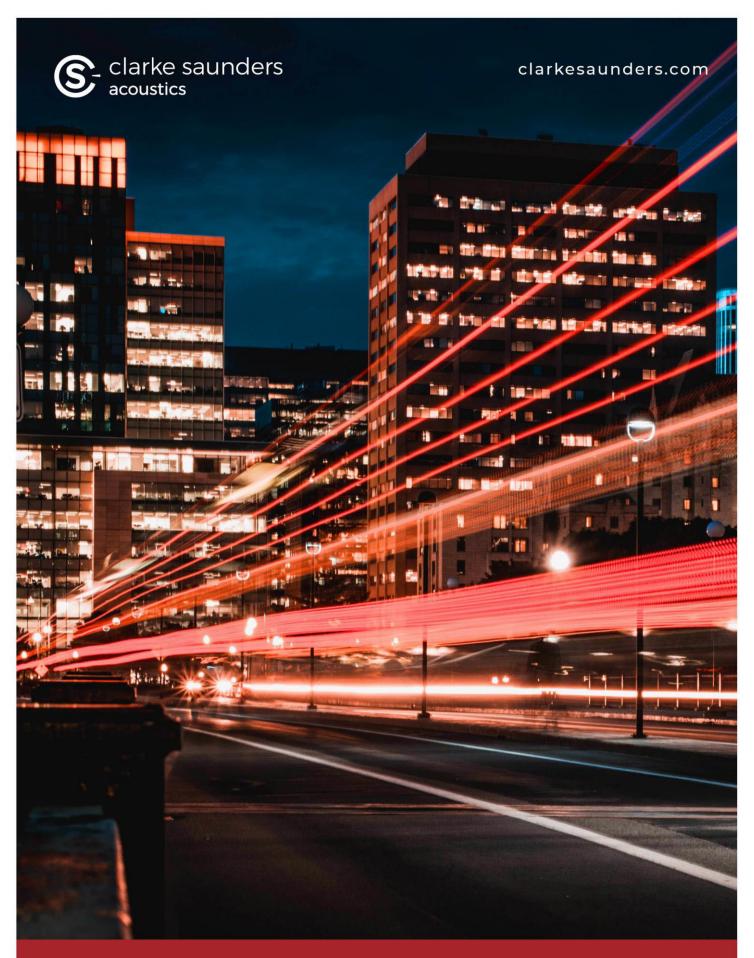


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Appendix B – Sound Impact Assessment and Management Plan



PREPARED: Friday, 26 March 2021

# Eales Farm Landfill, Saltash

Sound Impact Assessment and Management Plan



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# LIST OF ATTACHMENTS

AS11942/SP1	Indicative Site Plan and Measurement Positions
AS11942/TH1-TH2	LTI Environmental Noise Time Histories – Jan 2021
AS11942/TH3-TH9	LT2 Environmental Noise Time Histories – Jan 2021
AS11942/TH10-TH15	LTI Environmental Noise Time Histories – Feb 2021
AS11942/TH16-TH21	LT2 Environmental Noise Time Histories – Feb 2021
AS11942/N1	Enabling (Haul Road) – Predicted Noise Level (L <sub>Aeq,1hr</sub> )
AS11942/N2	Enabling (Regrading slope) – Predicted Noise Level (L <sub>Aeq,1hr</sub> )
AS11942/N3	Phase 1 – Base of Northern bund – Predicted Noise Level (L <sub>Aeq,1hr</sub> )
AS11942/N4	Phase 1 – Top of Northern bund – Predicted Noise Level ( $L_{Aeq,1hr}$ )
AS11942/N5	Phase 2 – Base of main fill area – Predicted Noise Level (L <sub>Aeq,1hr</sub> )
AS11942/N6	Phase 2 – 55m elevation main fill area – Predicted Noise Level ( $L_{Aeq,1hr}$ )
AS11942/N7	Phase 2 – 60m elevation main fill area – Predicted Noise Level (L <sub>Aeq,1hr</sub> )
AS11942/N8	Phase 3 – Works at restoration elevation – Predicted Noise Level ( $L_{Aeq,1hr}$ )
AS11942/N9	Restoration – Predicted Noise Level ( $L_{Aeq,1hr}$ )
APPENDIX A	Acoustic Terminology
APPENDIX B	Complaints Reporting Form

Project Ref:	AS11942	742 Title: Eales Farm Landfill, Saltash			
Report Ref:	AS11942.200326.NIA	Title: Noise Impact Assessment and Noise Management Plan			
Client Name:	Burcombe Haulage Ltd				
Project Manager:	Mike McLoughlin				
Report Author:	Mike McLoughlin				
Clarke Saunders Acous Winchester SO22 5BE	stics		port has been prepared in response to the instructions of our client. It is not ed for and should not be relied upon by any other party or for any other e.		



#### 1.0 EXECUTIVE SUMMARY

- 1.1 Clarke Saunders Acoustics has been commissioned by Burcombe Haulage Ltd to assess the potential noise impact of proposed reopening of Eales farm landfill site, Saltash.
- 1.2 The proposals have incorporated noise reduction practices to reduce the potential noise impact on noise sensitive receptors, including creating a new haul road to the south of the site with 2.5m bund, and building an earth bund to the north of the site at an early stage of the works.
- 1.3 Environmental noise surveys have been undertaken in order to establish the existing noise climate in the area surrounding the site. This has enabled suitable assessment of noise emissions to the nearest residential premises. Assessment has been undertaken using the Planning Practice Guidance and BS4142:2014, as requested by the Environment Agency.
- 1.4 Data for the proposed plant and landfill activities have been used to predict the potential noise impact on the nearest noise sensitive receptors.
- 1.5 The predicted noise levels at surrounding noise sensitive receptors during all stages of works are below the maximum guideline limit levels set out in the minerals Planning Practice Guidance (PPG).
- 1.6 The initial impact estimate using BS4142 indicates that nearby noise sensitive receptors could experience temporary significant adverse impacts depending on context, which are dependant on the specific operational phase of the land fill and location of noise sensitive receptor.
- 1.7 The context of the noise impact has been investigated based on the likelihood of operations scenarios occurring and the relative magnitude of noise levels during these operations compared to existing ambient noise levels. It is concluded that the noise impact from the proposed development at the noise sensitive receptors is likely to be acceptable given the context of operations and the site's history.
- 1.8 The BS4142 noise assessment has identified that the proposed operations may result in noise levels which may result in significant adverse impacts during some operational phases on Saturday mornings (07:30 13:00). Noise mitigation has been recommended to limit site operations on Saturday mornings (07:30 13:00) to Phase 2 works only, which has reduced noise impacts due to the effect of the northern bund.
- 1.9 A noise management plan has been developed to support the operation of the landfill and contains guidance on management measures to be implemented and a complaints procedure to follow.

#### 2.0 INTRODUCTION

- 2.1 Clarke Saunders Acoustics has been commissioned by Burcombe Haulage Ltd to assess the potential noise impact of proposed reopening of the Eales farm landfill site, Saltash.
- 2.2 The landfill site has extant permission for the continued landfill (ref 5/74/1136 dated 06/12/1975. Tipping of waste in valley between Carkeel & Tamar View Ind. Est) and no conditions within that permission relating to noise emissions.



- 2.3 Consultation with the Environment Agency (EA) has highlighted that noise emissions from the site should be considered as part of the permit application for the site.
- 2.4 Clarke Saunders Acoustics have been appointed carry out an assessment the potential noise impact of the proposed development on surrounding noise sensitive receptors as part of permit application to the EA for reopening the landfill.
- 2.5 The assessment includes undertaking environmental noise surveys in order to measure the prevailing background noise climate at the site, and proposed site activities. The background noise levels measured will be used to inform the daytime assessment of noise emissions from the proposed development, and, where required, assist in specification of mitigation to achieve suitable noise levels at surround noise sensitive receptors.
- 2.6 CSA is a full member of the Association of Noise Consultants. The authors of this report are Corporate Members of the Institute of Acoustics.

## 3.0 SITE DESCRIPTION AND DEVELOPMENT PROPOSAL

- 3.1 The site is currently a unoperated landfill which has been approximately filled to half the volume of fill as set out in the level of the 1975 permission. The site is located approximately 2km to the north west of Saltash, and circa 425m north of the A38.
- 3.2 The dominant noise source in the area and at the northern noise sensitive receptors is road traffic noise from the major roads (A38 and A388) with additional contributions from industrial / commercial activities on the Tamar View Industrial Estate located to the south of the site. The location of these sources is shown on the indicative site plan AS11942/SP1.
- 3.3 The landfill site has extant permission for the continued landfill (ref 5/74/1136 dated 06/12/1975. Tipping of waste in valley between Carkeel & Tamar View Ind. Est) and no conditions within that permission relating to noise emissions. The landfill stopped receiving waste in May 2004.
- 3.4 Noise sensitive receptors are located to the north and north west of the proposed site on an unnamed road and are shown in Figure AS11942/SP1.
- 3.5 In addition, 1,000 new homes are proposed (Land at Broadmoor Farm, Stoketon PA14/02447) on land to the west of the A388, however these are located further from the existing noise sensitive receptors and, due to the proximity of the site to the A388, will likely have higher background noise levels that the existing noise sensitive receptors.
- 3.6 The proposed operation of the landfill is comprised into five different stages;
  - Enabling works
  - Phase 1
  - Phase 2
  - Phase 3
  - Restoration
- 3.7 The proposals have incorporated noise reduction practices aimed to reduce the potential noise impact on noise sensitive receptors to the north and north west, including creating a new haul road to the south of the site, and building an earth bund to the north of the site at an early stage of the works. In addition, a 2.5m bund is to be constructed to the north of



- the haul road from the site entrance to the start of the decline to reduce the noise impact of truck movements to the site.
- 3.8 The enabling works include creating a site office and a new haul road to the south of site. In addition, there will be construction of surface water ditches around site, new culvert, and reprofiling the north-east boundary slope to a flatter angle. Material generated from northeast boundary slope reprofiling to be used in construction of bund on north boundary.
- 3.9 Phase I will develop the bund on the north boundary by filling to form the finished profile of the northern edge of the site (gradient 1:2.5) with a steeper (1:2) internal southern slope. This is intended to minimise the noise impact on the residents to the north for the remainder of the works. The outer, northern edge of this bund will be topsoiled and planted as soon as practical to improve soil retention and reduce visual impact.
- 3.10 Phase 2 will take the bulk fill area up to 3m below proposed finished level; again, to minimise noise impact on residents to the north in the latter stages of the phase. The containment ponds will be relocated upwards as the filling progresses with the number of times the ponds have to be moved being minimised.
- 3.11 Phase 3 will complete the remaining 3m of filling, commencing with the formation of a temporary bund on the northern margin, again to minimise noise impact, the bund being the last fill material to be incorporated into the mass.
- 3.12 The restoration period will have the surface capped with 300mm of clean imported topsoil and seeded. Once all phases have been completed the site will be restored back to agricultural land.
- 3.13 A summary of the proposed operational periods is provided in the following table.

PHASE	PROPOSED CONSTRUCTION	ESTIMATED VOLUME (M³)
Enabling	<ul> <li>Establishing a site office and associated infrastructure including new haul road on south side of site to provide access into main filling area which minimises noise impact to properties to the north,</li> <li>Constructing and improving surface water ditches around site</li> <li>Construction of new culvert</li> <li>Reprofiling the north-east boundary slope to a flatter angle.</li> <li>Material generated from north-east boundary slope reprofiling to be used in construction of bund on north boundary,</li> <li>Constructing the surface water containment ponds,</li> <li>Preparing the Containment Bay</li> <li>Improving site security with installation of new site gate and perimeter fences.</li> </ul>	-16,650 (net)
Phase 1	<ul><li>Clearing vegetation</li><li>Preparing the surface including minor reprofiling</li></ul>	55,436



Total		207,932
	- Return site to agricultural rand	
Restoration	- Return site to agricultural land	10,409
	<ul> <li>Decommission containment ponds.</li> <li>Construct lined ditches along the bund between the proposed slope and North Slope.</li> <li>Decommission and remove the site office and compound.</li> </ul>	
Phase 3	<ul> <li>Final filling to be with temporary bund on north margin of filling area.</li> <li>Level surface, topsoil and seed.</li> </ul>	75,305
	<ul><li>Form temporary bund on north boundary of remaining filling area.</li><li>Place and compact waste in layers.</li></ul>	
Phase 2	<ul> <li>Clearing vegetation</li> <li>Preparing the surface including minor reprofiling</li> <li>Placing basal liner</li> <li>Constructing side liner using 'Christmas tree method'.</li> <li>Place and compact waste in layers</li> <li>Stop filling at level approximately 3m below finished surface.</li> </ul>	83,432
	<ul> <li>Placing basal liner sourced from acceptable site won material generated from the reprofiling of the existing slope to the east.</li> <li>Form northern "bund" using imported waste soils placed and compacted in layers and benched into existing slope with side liner constructed using "Christmas tree" method.</li> <li>Once finished profile reached level north face, topsoil surface and seed.</li> </ul>	

## Table 1.1 Proposed Operational Phases

- 3.14 Site operational hours are proposed as being Monday Friday 07:30 17:30, and occasional occurrences of operations on Saturdays between 07:30 13:00.
- 3.15 The proposed environmental permit for the site allows 100,000t of landfill per annum, and the client indicates that operating to fill that allowance, there would need to be an average of 27 loads (6-wheel trucks) arriving to the site per day.
- 3.16 The client has indicated that they would be aiming to maintain a fill rate of 75,000 100,000t of landfill per annum. On the assumption of the average inert waste has a density of 2,000 kg / m $^3$ , if the land fill were filled at this range of tonnage per annum, each of the phased would have the following estimated durations.



PHASE	ESTIMATED VOLUME (M³)	ESTIMATED TONNAGE	ESTIMATED DURATION
Enabling	-16,650 (net)	33,300	3 – 6 months
Phase 1	55,436	110,872	13 - 18 months
Phase 2	83,432	166,864	20 months – 2 years
Phase 3	75,305	150,610	20 months – 2 years
Restoration	10,409	20,818	3 months
Total	207,932	482,464	5 – 6.5 years

**Table 1.2 Estimated Durations of Operational Phases** 

## 4.0 POLICY, LEGISLATION, GUIDANCE AND STANDARDS

#### 4.1 CONSULATION

4.1.1 Consultation with the Environment Agency (EA) was undertaken with Elisabeth Platts on 24/11/20. The EA requested that that noise emissions from the site should be considered as part of the permit application and assessed following BS4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound'.

#### 4.2 CONTROL OF POLLUTION ACT 1974

- 4.2.1 The Control of Pollution Act 1974 (COPA 1974) gives the local authority power to serve a notice under Section 60 imposing requirements as to the way in which works are to be carried out. This could specify times of operation, maximum levels of noise which may be emitted and the type of plant which should or should not be used. This is a common way of enforcing reasonable levels of construction noise.
- 4.2.2 Alternatively, contractors may obtain prior consent under Section 61 of COPA 1974. Section 61 enables anyone who intends to carry out noisy works to apply to the local authority for consent in advance. In this way, under Section 61, local authorities and those responsible for construction work have an opportunity to identify potentially noisy activities and appropriate mitigation measures before work starts.

## 4.3 NATIONAL PLANNING POLICY FRAMEWORK

- 4.3.1 In March 2012 the 'National Planning Policy Framework' (NPPF) was introduced as the current planning policy guidance within England and revised in February 2019.
- 4.3.2 Paragraph 180 of the NPPF states:
  - 'Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:
  - mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life;



- identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and
- limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.'

#### 4.4 NOISE POLICY STATEMENT FOR ENGLAND' (NPSE)

4.4.1 In terms of 'adverse effects' the NPPF refers to the 'Noise Policy Statement for England' (NPSE) (Defra, 2010), which defines three categories, as follows:

'NOFL - No Observed Effect Level

• This is the level below which no effect can be detected. In simple terms, below this level, there is no detectable effect on health and quality of life due to the noise.

LOAFL - Lowest Observed Adverse Effect Level

• This is the level above which adverse effects on health and quality of life can be detected.

SOAEL - Significant Observed Adverse Effect Level

- This is the level above which significant adverse effects on health and quality of life occur.'
- 4.4.2 However, whilst the above terms are provided in NPSE, paragraph 2.22 acknowledges that these terms require further research in order to establish what is meant in terms of 'adverse impact'.

'2.22 It is not possible to have a single objective noise-based measure that defines SOAEL that is applicable to all sources of noise in all situations. Consequently, the SOAEL is likely to be different for different noise sources, for different receptors and at different times. It is acknowledged that further research is required to increase our understanding of what may constitute a significant adverse impact on health and quality of life from noise. However, not having specific SOAEL values in the NPSE provides the necessary policy flexibility until further evidence and suitable guidance is available.'

#### 4.5 PLANNING PRACTICE GUIDANCE

4.5.1 The Planning Practice Guidance, published in March 2014, is available for mineral sites . In assessing the acceptable noise levels as a consequence of this development, reference should be made to the *Planning Practice Guidance on assessing environmental impacts from mineral extraction*, paragraph 021:

'Mineral planning authorities should aim to establish a noise limit, through a planning condition, at the noise-sensitive property that does not exceed the background noise level ( $L_{A90,1h}$ ) by more than 10dB(A) during normal working hours (0700-1900). Where it will be difficult not to exceed the background level by more than 10dB(A) without imposing unreasonable burdens on the mineral operator, the limit set should be as near that level as practicable. In any event, the total noise from the operations should not exceed 55dB(A)  $L_{Aeq, 1h}$  (free field). For operations during the evening (1900-2200) the noise limits should not exceed the background noise level ( $L_{A90,1h}$ ) by more than 10dB(A) and



should not exceed 55dB(A)  $L_{Aeq, 1h \text{ (free field)}}$ . For any operations during the period 22.00 – 07.00 noise limits should be set to reduce to a minimum any adverse impacts, without imposing unreasonable burdens on the mineral operator. In any event the noise limit should not exceed 42dB(A)  $L_{Aeq,1h \text{ (free field)}}$  at a noise sensitive property.

Where the site noise has a significant tonal element, it may be appropriate to set specific limits to control this aspect. Peak or impulsive noise, which may include some reversing bleepers, may also require separate limits that are independent of background noise (e.g.  $L_{max}$  in specific octave or third-octave frequency bands – and that should not be allowed to occur regularly at night.)

Care should be taken, however, to avoid any of these suggested values being implemented as fixed thresholds as specific circumstances may justify some small variation being allowed.'

4.5.2 The Planning Practice Guidance also describes circumstances where higher noise limits can be considered for particularly noisy short-term activities that cannot meet the limits set for normal activities. Paragraph 22 states that:

'Increased temporary daytime noise limits of up to 70dB(A) L<sub>Aeq Th</sub> (free field) for periods of up to eight weeks in a year at specified noise-sensitive properties should be considered to facilitate essential site preparation and restoration work and construction of baffle mounds where it is clear that this will bring longer-term environmental benefits to the site or its environs.'

#### 4.6 EXISTING PERMISSIONS

- 4.6.1 The extant permission for the continued landfill (ref 5/74/1136 dated 06.12.1975. Tipping of waste in valley between Carkeel & Tamar View Ind. Est) contains no noise conditions relating to noise emissions.
- 4.6.2 Consultation received by Public Protection at Cornwall Council in relation to environmental permit EPR/FB3402CD/A001, stated;

'There are no records of any noise complaints from the landfill site however whilst the site has permission there has been no activity for a number of years, it is possible that on-site activities may generate new complaints. However any noise complaints should be directed to the operator and ultimately the Environmental Agency.'

#### 4.7 BS4142:2014 ASSESSMENT

- 4.7.1 British Standard BS4142:2014 Methods for rating and assessing industrial and commercial sound describes a method for rating and assessing noise of an industrial and/or commercial nature, which includes:
  - Sound from industrial and manufacturing processes;
  - Sound from fixed installations which comprise mechanical and electrical plant and equipment;
  - Sound from the loading and unloading of goods and materials at industrial and/or commercial premises, and;
  - Sound from mobile plant and vehicles that is an intrinsic part of the overall sound emanating from premises or processes.



- 4.7.2 This Standard compares the sound levels in terms of a  $L_{Aeq}$  for a one-hour period during the daytime (07:00 to 23:00 hours) and a fifteen-minute period during the night-time (23:00 to 07:00 hours) due to the sound source, the "Specific Sound Level", with the existing background sound level in terms of an  $L_{A90}$  when the sound source is not operating.
- 4.7.3 The Specific Sound Level can be determined by various means, depending upon the relative level, of otherwise-occurring sound, i.e. the "Residual Sound Level".
- 4.7.4 As part of the assessment, consideration is given to the character of the sound, which acoustic character corrects applied if applicable.

## Tonality

4.7.5 For sound ranging from not tonal to prominently tonal, the Joint Nordic Method gives a correction of between 0 dB and +6 dB. Subjectively, this can be allocated as a penalty of 2 dB for a tone which is just perceptible at the noise receptor, 4 dB where it is clearly perceptible and 6 dB where it is highly perceptible.

### **Impulsivity**

4.7.6 A correction can be applied for sound that is highly impulsive considering both the rapidity and scale of sudden changes in sound level. Subjectively, this can be allocated as a penalty of 3 dB for impulsivity which is just perceptible at the receiver, 6 dB where it is clearly perceptible and 9 dB where it is highly perceptible.

### Other sound characteristics

4.7.7 Where the specific sound contains characteristics that are neither tonal nor impulsive, but are otherwise startling, disturbing or incongruous with the residual acoustic environment, a penalty of +3 dB can be applied.

## Intermittency

4.7.8 When the specific sound has identifiable on/off conditions within the assessment period, if the intermittency is readily distinctive against the residual acoustic environment, a penalty of +3 dB can be applied.

## Impact Assessment

- 4.7.9 The resultant background sound level is subtracted from the Rating Level to obtain an initial estimate of the impact.
  - Typically, the greater this difference, the greater the magnitude of the impact.
  - A difference of around +10 dB or more is likely to be an indication of a significant adverse impact, depending on the context.
  - A difference of around +5 dB could be an indication of an adverse impact, depending on the context.
  - The lower the rating level is relative to the measured background sound level, the less likely it is that there will be an adverse impact. Where the rating level does not exceed the background sound level, this is an indication of the specific sound having a low impact, depending on the context.
- 4.7.10 The initial estimate of the impact may then be modified by taking consideration of the context in which the sound occurs.



#### 4.8 TRAFFIC NOISE

- 4.8.1 Potential changes in noise levels caused by increases in road traffic due to the development will be assessed using the classifications of magnitude of impact given in DMRB.
- 4.8.2 Using the DMRB guidance, the magnitude of impact due to change in the short-term (immediately after opening) at noise sensitive receptors is shown in the following table:

MAGNITUDE	SIGNIFICANCE	ROAD NOISE LEVEL CHANGE L <sub>A10</sub> (SHORT TERM)	
No Change	Negligible	0 dB	
Slight	Negligible	0.1 to 0.9 dB	
Low	Minor	1 to 2.9 dB	
Medium	Moderate	3 to 4.9 dB	
High	Major	5+ dB	

Table 1.3 Traffic Noise Assessment Criteria

## 5.0 NOISE SURVEY PROCEDURE & EQUIPMENT

- 5.1 Surveys of the background noise levels were undertaken in free-field positions at the locations shown in the indicative site plan AS11942/SP1. These locations were selected primarily for security of noise monitoring equipment, but are considered representative of the noise climate at nearest noise receptors, which are to the north and north west of the proposed development site.
- 5.2 The dominant noise source in the area and at the northern noise sensitive receptors is road traffic noise from the major roads (A38 and A388) with additional contributions from industrial / commercial activities on the Tamar View Industrial Estate located to the south of the site. The location of these sources are shown on the indicative site plan AS11942/SP1.
- 5.3 Measurements of 5-minute L<sub>Aeq</sub>, L<sub>Amax</sub>, L<sub>A10</sub> and L<sub>A90</sub> sound pressure levels were taken between Thursday 21<sup>st</sup> January and the morning of Wednesday 27<sup>th</sup> January 2021. The noise meter at LTI stopped monitoring due to a suspected power interruption during the early morning of Saturday 23<sup>rd</sup> January 2021.
- 5.4 Additional short term noise measurements were conducted at the location STI on the morning of Wednesday 27<sup>th</sup> January 2021.
- 5.5 A second survey was conducted at the site between Thursday 25<sup>th</sup> February and the morning of Wednesday 3<sup>rd</sup> March 2021, to provide additional ambient and bacgrounddata.
- 5.6 The following equipment was used during the surveys:
  - 1 no. Norsonic sound level meter type 118 with GRAS microphone (LTI Jan 2021)
  - 1 no. Svan 958 sound level meter (LT2 Jan 2021 / LT1 Feb 2021)
  - 1 no. NTi XL2 sound level meter (STI Jan 2021)
  - 1 no. Rion NL-32 sound level meter (LT2 Feb 2021)
  - 1 no. Norsonic sound level calibrator type 1251.
  - 1 no. Rion NC-74 sound level calibrator.



- 5.7 The calibration of the sound level meters was verified before and after use. No significant calibration drift was detected (<0.2 dB).
- 5.8 All measurement equipment has current certified laboratory calibration to traceable national standards. Copies of equipment calibration certificates are available upon request.
- 5.9 The weather during the survey was generally dry with light winds, with some period of rain and elevated winds. Conditions were deemed suitable for environmental noise measurements.
- 5.10 All measurements were made following procedures in *BS7445:1991* (*ISO1996-2:1987*) Description and measurement of environmental noise Part 2-Acquisition of data pertinent to land use, and conducted in free-field locations at a height of approximately 1.5m above ground level. Procedures described in *BS4142:2014 + A.1:2019 Methods for rating and assessing industrial and commercial sound* were also followed, where appropriate, in measuring background sound levels.
- 5.11 Please refer to Appendix A for details of the acoustic terminology used throughout this report.

#### 5.12 NOISE SURVEY RESULTS

- 5.12.1 It is noted that the period of the noise survey coincided with Government advice on the Coronavirus disease (COVID-19) for social distancing and working from home. This may have reduced traffic flows on local roads. This in turn may have resulted in lowered background noise levels at the monitoring position, resulting in a more stringent noise assessment criteria than may have otherwise been applied.
- 5.12.2 Figures AS11942/TH1-TH9 show the L<sub>Aeq</sub>, L<sub>Amax</sub>, L<sub>A10</sub> and L<sub>A90</sub> sound pressure levels as time histories at monitoring position LTI and LT2 during the January 2021 survey, and Figures AS11942/TH10-TH21 show the sound pressure levels at monitoring position LTI and LT2 during the February 2021 survey.
- 5.12.3 A summary of the noise levels measured during the whole survey periods, in the 'Daytime' and 'Night-time' periods at LTI and LT2 are shown in the table below. The table includes the typical highest  $L_{AFmax}$ , defined as the 90<sup>th</sup> percentile of the  $L_{AFmax}$  dataset, and average  $L_{A90}$  of the  $L_{A90}$  dataset.



		NOISE LEVEL			
LOCATION	PERIOD	L <sub>AEQ,T</sub>	TYPICAL L <sub>AMAX</sub> (90 <sup>TH</sup> PERCENTILE)	AVERAGE L <sub>A90</sub>	
LTI	Daytime (07:00-23:00)	42 dB	64 dB	36 dB	
(Jan 2021)	Night-time (23:00-07:00)	34 dB	50 dB	29 dB	
LT2 (Jan 2021)	Daytime (07:00-23:00)	48 dB	64 dB	40 dB	
	Night-time (23:00-07:00)	39 dB	55 dB	29 dB	
LT1 (Feb 2021)	Daytime (07:00-23:00)	43 dB	62 dB	36 dB	
	Night-time (23:00-07:00)	37 dB	51 dB	28 dB	
LT2 (Feb 2021)	Daytime (07:00-23:00)	46 dB	67 dB	40 dB	
	Night-time (23:00-07:00)	41 dB	57 dB	29 dB	

Table 1.4 Results of Long-Term Environmental Noise Surveys

[dB ref. 20µpa]

5.12.4 A summary of the noise levels measured during the survey at STI is shown in the table below.

LOCATION		NOISE LEVEL				
	PERIOD	L <sub>AEQ,T</sub>	TYPICAL L <sub>AMAX</sub> (90 <sup>TH</sup> PERCENTILE)	AVERAGE L <sub>A90</sub>		
STI	21/01/2021 (13:40-14:55)	50 dB	67 dB	45 dB		

Table 1.5 Results of Short-Term Environmental Noise Survey

[dB ref. 20µpa]

5.12.5 is the site is proposed to operate between Monday – Friday 07:30 – 17:30 and occasional operations on Saturdays between 07:30 – 13:00. The background noise levels at the monitoring positions have been determined to form the basis of the noise assessment as shown in the table below.



LOCATION	PERIOD	AVERAGE L <sub>A90</sub>
LΠ	Weekday Operations (07:30 – 17:30)	38 dB
(Jan 2021)	Saturday Operations (07:30 – 13:00)	N/A
LT2	Weekday Operations (07:30 – 17:30)	43 dB
(Jan 2021)	Saturday Operations (07:30 – 13:00)	37 dB
LΠ	Weekday Operations (07:30 – 17:30)	38 dB
(Feb 2021)	Saturday Operations (07:30 – 13:00)	35 dB
LT2	Weekday Operations (07:30 – 17:30)	43 dB
(Feb 2021)	Saturday Operations (07:30 – 13:00)	38 dB

Table 1.6 Background Noise Levels During Proposed Operational Periods

[dB ref. 20µpa]

# 6.0 PREDICTED NOISE IMPACT ASSESSMENT

#### 6.1 OPERATIONAL ASSESSMENT

- 6.1.1 The operator (Burcombe Haulage Ltd) has provided expected numbers and type of plant to be used throughout the continued landfill and restoration process. Noise levels emitted by the proposed mechanical plant have been based on those detailed in the noise database in BS 5228: Part 1: 2009: 'Code of practice for noise and vibration control on construction and open sites Part 1: Noise'.
- 6.1.2 As is typical with construction or landfill sites, the exact location and duration of activities within each phase will vary depending upon operational requirements. Where these uncertainties are present, pessimistic assumptions have been made to ensure a robust assessment of the proposed restoration. Actual noise levels at any given time are therefore likely to be lower than those predicted, and the assessment is therefore likely to represent a worst case.
- 6.1.3 Calculations have been undertaken to determine the likely worst-case noise emissions, in terms of an  $L_{Aeq,1hr}$ , from the landfill operations at the surrounding noise sensitive receptors during the different phases of the landfill operations, including plant operations detailed in the table below.



SCENARIO	PHASE	PLANT OPTIONS AND DURATIONS
1	Enabling – Haul Road	<ul> <li>Haul Truck (A25 or similar), 8 movements per hour</li> <li>Bulldozer (100% on time) creating new haul road</li> <li>21T swing shovel (100% on time) loading up haul trucks / earth moving</li> </ul>
2	Enabling – Regrading slope	<ul> <li>Haul Truck (A25 or similar), 8 movements per hour</li> <li>Bulldozer (100% on time) re-grading slope</li> <li>21T swing shovel (100% on time) loading up haul trucks / earth moving.</li> </ul>
3	Phase 1 – Works at base of Northern bund	<ul> <li>Truck deliveries of landfill material (4 per hour)</li> <li>Bulldozer (75% on time)</li> <li>17T excavator (25% on time)</li> </ul>
4	Phase 1 – Works at top of northern bund	<ul> <li>Truck deliveries of landfill material (4 per hour)</li> <li>Bulldozer (75% on time)</li> <li>17T excavator (25% on time)</li> </ul>
5	Phase 2 – Works at base of main fill area	<ul> <li>Truck deliveries of landfill material (4 per hour)</li> <li>Bulldozer (75% on time)</li> <li>17T excavator (25% on time)</li> </ul>
6	Phase 2 – Works at 55m elevation within main fill area	<ul> <li>Truck deliveries of landfill material (4 per hour)</li> <li>Bulldozer (75% on time)</li> <li>17T excavator (25% on time)</li> </ul>
7	Phase 2 – Works at 60m elevation within main fill area	<ul> <li>Truck deliveries of landfill material (4 per hour)</li> <li>Bulldozer (75% on time)</li> <li>17T excavator (25% on time)</li> </ul>
8	Phase 3 – Works at restoration elevation within main fill area	<ul> <li>Truck deliveries of landfill material (4 per hour)</li> <li>Bulldozer (75% on time)</li> <li>17T excavator (25% on time)</li> </ul>
9	Restoration	<ul><li>Truck deliveries of topsoil (4 per hour)</li><li>Bulldozer (75% on time)</li></ul>

Table 1.7 Noise Assessment Scenarios

- 6.1.4 Noise emissions to the surrounding area have been calculated using calculation protocols defined within ISO9613-2 Acoustics -- Attenuation of sound during propagation outdoors -- Part 2: General method of calculation, as implemented within CadnaA noise prediction software. Topography for the landfill and surrounding area has been incorporated into the model from Lidar digital terrain surveys and the project site investigation drawings and the proposed phased site levels. The ground absorption coefficient has been set at 0.7 within the model.
- 6.1.5 The operator of the land fill is proposing to utilise a Komatsu D41E P-6 bulldozer for earth works. The guaranteed sound power level emitted provided by the manufacture as specified in European directive 2000/14/EC for dynamic values is  $L_{WA}$  105 dB.
- 6.1.6 Octave band noise source data from BS5228:1 for all sources, as summarised below, has formed the base of the noise model.



PLANT (Lw)	63	125	250	500	1K	2K	4K	8K	DBA
Dulldozer Komatsu D41E P6 (BS 5228 C.2-13 corrected to L <sub>WA</sub> 105 dB)	100	109	104	100	100	96	93	88	105
Truck on haul road (BS 5228 C.11-9) <sup>1</sup>	127	110	109	104	106	102	99	94	110
Articulated Dump Truck (BS 5228 C.6-17) <sup>1</sup>	114	112	114	111	107	104	100	95	113
Truck unloading (BS 5228 C1-11)	122	104	105	103	104	101	96	91	108
17T Excavator / 21T swing shovel (BS 5228 C.2-17)	106	106	103	99	100	96	91	83	104

**Table 1.8 Noise Model Source Sound Power Levels** 

6.1.7 Based on the noise surveys the adopted background noise ( $L_{A90}$ ) at the surrounding noise sensitive receptors are shown in the table below,

TIME	RECEPTORS	BACKGROUND NOISE LEVEL, LA90
	North Eastern Residential	38 dB
Weekday Operations (07:30 – 17:30)	Northern Residential	43 dB
(67.36 17.36)	North Western Residential	43 dB
	North Eastern Residential	35 dB
Saturday Operations (07:30 – 13:00)	Northern Residential	37 dB
(87.88 18.88)	North Western Residential	37 dB

Table 1.9 Adopted Background Noise Levels at Receptor Locations

[dB ref. 20µpa]

6.1.8 To account for the number of noise sensitive receptor locations to the north, noise predictions have been made a key locations representative of the most affected noise sensitive receptors, at the following locations and a height of 1.5m above ground level.

<sup>&</sup>lt;sup>1</sup> Drive-by maximum sound pressure level in L<sub>max</sub>



MODELLED RECEPTOR	EASTING	NORTHING
North Eastern Residential (NER)	241298.9	60741.2
Northern Residential –1 (NR-1)	241207.2	60672.9
Northern Residential – 2 (NR-2)	241176.8	60614.7
Northern Residential – 3 (NR-3)	241153.4	60542.3
North Western Residential (NWR)	241210.5	60494.9

Table 1.10 Representative Noise Sensitive Receptor Locations

6.1.9 The table below detailed the predicted specific noise levels ( $L_{Aeq,1hr}$ ) at the location's representative of the noise sensitive receptors.

#	PHASE	PREDICTED SPECIFIC NOISE LEVELS (LAEQ,1HR) AT RECEPTORS, DB					
		NER	NR-1	NR-2	NR-3	NWR	
1	Enabling – Haul Road	46 dB	47 dB	45 dB	44 dB	43 dB	
2	Enabling – Regrading slope	43 dB	445 dB	43 dB	42 dB	40 dB	
3	Phase 1 – Works at base of Northern bund	42 dB	46 dB	45 dB	45 dB	44 dB	
4	Phase 1 – Works at top of northern bund	46 dB	47 dB	46 dB	45 dB	46 dB	
5	Phase 2 – Works at base of main fill area	39 dB	40 dB	40 dB	40 dB	41 dB	
6	Phase 2 – Works at 55m elevation within main fill area	42 dB	41 dB	41 dB	42 dB	42 dB	
7	Phase 2 – Works at 60m elevation within main fill area	44 dB	43 dB	44 dB	43 dB	43 dB	
8	Phase 3 – Works at restoration elevation within main fill area	44 dB	47 dB	47 dB	46 dB	48 dB	
9	Restoration	43 dB	46 dB	46 dB	45 dB	48 dB	

Table 1.11 Predicted Specific Noise Levels ( $L_{Aeq,1hr}$ ) During Proposed Operational Periods [dB ref. 20 $\mu$ pa]

## **Planning Guidance (Minerals) Assessment**

- 6.1.10 Planning Practice Guidance highlights that for mineral usages noise levels ( $L_{Aeq,1hr}$ ) should not exceed the background noise level ( $L_{A90,1hr}$ ) by more than 10dB during normal working hours (07:00-19:00).
- 6.1.11 The predicted specific noise levels ( $L_{Aeq,1hr}$ ) do not exceed the background noise level ( $L_{A90,1hr}$ ) at receptors by more than 10dB, other than the follow scenarios on Saturday morning, with exceedances of up to 11 dB.
  - Enabling Haul Road (scenario 1)
  - Phase 1 Works at top of northern bund (scenario 3)
  - Phase 3 Works at restoration elevation within main fill area



- Restoration
- 6.1.12 Each of these phases would be of short duration relative to the total the project scheme.
- 6.1.13 In line with the Planning Practice Guidance none of the proposed operations of the landfill on weekdays of Saturday morning are predicted to exceed  $L_{Aeq, 1hr}$  55 dB (free field) at the surrounding noise sensitive receptors.

#### BS4142:2014 Assessment

- 6.1.14 Based on the background noise survey data, the proposed operation of the landfill results in the predicted rated noise levels being above the background noise levels during operational periods during weekdays and the weekend. The magnitude of the rating level is dependent on the operational phase and the noise receptor location.
- 6.1.15 An acoustic character correction of +3 dB has been applied to the predicted specific noise levels, on the basis that noise from the landfill operations may be distinctive from the residual noise environment, to obtain the BS4142 rating noise levels.
- 6.1.16 The difference between the rating noise level ( $L_{Ar,Tr}$ ) and the background noise level ( $L_{A90}$ ) of the proposed operations during the weekday periods (07:30-17:30) are shown in the following table.

#	PHASE	PREDICTED DIFFERENCE BETWEEN RATED NOISE LEVEL (L <sub>AR,TR</sub> ) AND BACKGROUND NOISE LEVEL (L <sub>A90</sub> ) AT RECEPTORS DURING WEEKDAYS (07:30 – 17:30), DB					
		NER	NR-1	NR-2	NR-3	NWR	
1	Enabling – Haul Road	+11 dB	+7 dB	+5 dB	+4 dB	+3 dB	
2	Enabling – Regrading slope	+8 dB	+5 dB	+3 dB	+2 dB	+0 dB	
3	Phase 1 – Works at base of Northern bund	+7 dB	+6 dB	+5 dB	+5 dB	+4 dB	
4	Phase 1 – Works at top of northern bund	+11 dB	+7 dB	+6 dB	+5 dB	+6 dB	
5	Phase 2 – Works at base of main fill area	+4 dB	0 dB	0 dB	0 dB	+1 dB	
6	Phase 2 – Works at 55m elevation within main fill area	+7 dB	+1 dB	+1 dB	+2 dB	+2 dB	
7	Phase 2 – Works at 60m elevation within main fill area	+9 dB	+3 dB	+4 dB	+3 dB	+3 dB	
8	Phase 3 – Works at restoration elevation within main fill area	+9 dB	+7 dB	+7 dB	+6 dB	+8 dB	
9	Restoration	+8 dB	+6 dB	+6 dB	+5 dB	+8 dB	

Table 1.12 Predicted Difference Between Rating Noise Levels ( $L_{Ar,Tr}$ ) and Background Noise Levels ( $L_{A90}$ ) During Proposed Operational Periods – Weekdays (07:30-17:30) [dB ref. 20 $\mu$ pa]



6.1.17 The difference between the rating noise level ( $L_{Ar,Tr}$ ) and the background noise level ( $L_{A90}$ ) of the proposed operations during the occasional weekend operational periods (Saturday 07:30 – 13:00) are shown in the following table.

#	PHASE	PREDICTED DIFFERENCE BETWEEN RATED  NOISE LEVEL (L <sub>AR,TR</sub> ) AND BACKGROUND  NOISE LEVEL (L <sub>A90</sub> ) AT RECEPTORS DURING  SATURDAY (07:30 – 13:00), DB					
		NER	NR-1	NR-2	NR-3	NWR	
1	Enabling – Haul Road	+14 dB	+13 dB	+11 dB	+10 dB	+9 dB	
2	Enabling – Regrading slope	+11 dB	+11 dB	+9 dB	+8 dB	+6 dB	
3	Phase 1 – Works at base of Northern bund	+10 dB	+12 dB	+11 dB	+11 dB	+10 dB	
4	Phase 1 – Works at top of northern bund	+14 dB	+13 dB	+12 dB	+11 dB	+12 dB	
5	Phase 2 – Works at base of main fill area	+8 dB	+6 dB	+6 dB	+6 dB	+7 dB	
6	Phase 2 – Works at 55m elevation within main fill area	+10 dB	+7 dB	+7 dB	+8 dB	+8 dB	
7	Phase 2 – Works at 60m elevation within main fill area	+12 dB	+9 dB	+10 dB	+9 dB	+9 dB	
8	Phase 3 – Works at restoration elevation within main fill area	+12 dB	+13 dB	+13 dB	+12 dB	+14 dB	
9	Restoration	+11 dB	+12 dB	+12 dB	+11 dB	+14 dB	

Table 1.13 Predicted Difference Between Rating Noise Levels (L<sub>Ar,Tr</sub>) and Background Noise Levels (L<sub>A90</sub>) During Proposed Operational Periods – Saturday (07:30-13:00) [dB ref. 20µpa]

- 6.1.18 The largest potential impacts are indicated to occur at the north eastern receptor (NER), with operations during the weekdays predicted to have a BS4142 indication of significant adverse impact, depending on the context, during the following phases;
  - Enabling Haul Road (Scenario 1)
  - Phase 1 Works on the northern bund (Scenario 4)
- 6.1.19 Predicted rated noise levels at the remaining noise sensitive receptors during all operational scenarios during weekday periods (07:30 17:30) do not to exceed a level where a BS4142 indication of a significant adverse impact depending on context would occur.
- 6.1.20 During the Saturday morning (07:30 13:00) operations, there is a BS4142 indication of a significant adverse impact occurring at the north eastern receptor (NER) in all operational phases other than phase 2 works at the base of the main fill area (Scenario 5). These impacts are reflected with similar and lower levels at the other surrounding noise sensitive receptor.



#### **Sound Impact Context**

- 6.1.21 The initial BS4142 sound impact assessment has indicated that there are operational scenarios which result rated noise levels at receptors which are above a level where a significant adverse impact may occur depending on context.
- 6.1.22 The history of the site is relevant in relation to the context of the proposed development. Planning permission was granted for the landfill in 1975, with no planning conditions related to noise. The landfill stopped receiving waste in May 2004. Since that time the site has lay dormant and is proposed to be re-opened to fill the landfill to the permitted restoration levels detailed in the planning permission.
- 6.1.23 The landfill has a limited lifespan, and the site will not operate indefinitely. The duration of the landfill operation is dependent on market forces for the disposal of inert waste. There is clear termination of operations when the landfill achieves the permitted restoration profile and is restored. After the restoration has taken place the site will emit no significant noise levels.
- 6.1.24 The proposed environmental permit for the site allows 100,000t of landfill per annum. Projections of the fill rate of the landfill are not available, but the infill volume is an estimated 208,000 m³. On the assumption of the average waste has a density of 2,000 kg / m³, if the land fill were filled at the maximum tonnage per annum, works could be complete in just under five years. At a reduced fill rate (75,000t of landfill per annum) operations would conclude within six and a half years.
- 6.1.25 The noise emissions from the site are linked to the rate of fill, at a reduced fill rate noise emission would not be constant and there may be days where there are no operations would occur at the landfill providing a degree of respite to surrounding residents.
- 6.1.26 During the weekday operations the greatest potential impact occurs at the north eastern receptor during Enabling Haul Road (Scenario 1), and Phase 1 Works on the northern bund (Scenario 4). These works are associated with noise mitigation measures in place to reduce the overall noise impact on the surrounding noise sensitive receptors.
- 6.1.27 These operations may temporarily raise the noise levels just above a +10dB assessment level at surrounding noise sensitive receptors but will be limited in duration relative to filling the main area of the landfill (Phase 2), and the effect of incorporating these measures are significant in reducing noise impacts during the main operation of the landfill which will occur over a longer duration.
- 6.1.28 Predicted rating noise levels at the remaining noise sensitive receptors during all operational scenarios on weekdays (07:30 17:30) do not to exceed a level where an indication of a significant adverse impact, depending on context, would be likely to occur.
- 6.1.29 The operation of the landfill on Saturday morning (07:30 13:00) during certain phases has the potential to result in noise emissions where there is an indication of a significant adverse impact, depending on context.
- 6.1.30 To reduce the potential noise impact of occasional Saturday morning (07:30 13:00) operations, the applicant/operator is proposing to only conduct Phase 2 works on



- Saturday morning, though it is noted that Saturday working in these instances would still be likely to be occasional occurrences.
- 6.1.31 The largest potential impacts of Saturday Phase 2 operations are indicated to occur at the north eastern receptor (NER), with operations predicted to have a BS4142 indication of significant adverse impact at receptor NER, at Phase 2 fill levels of 55m and above.
- 6.1.32 It is noted that background noise measurements were taken on a Saturday morning during covid restrictions, which may have lowered background noise levels at the monitoring positions, resulting in a more stringent noise assessment criteria than may have otherwise been applied.
- 6.1.33 In context to the potential impacts of at receptor NER it is considered that due to the occasional operations on Saturday mornings, and the limited duration of the phase 2 works over 55m, that the potential impacts are acceptable.
- 6.1.34 Overall, the sound impact from the landfill operations with and at the noise sensitive receptor is likely to be low.
- 6.1.35 The context of the noise impact of the operation of the landfill has been investigated based on the likelihood of operations scenarios occurring and the relative magnitude of sound levels during these operations compared to existing background sound levels.
- 6.1.36 It is concluded that given the context of the site, the sound impact from the proposed development at the noise sensitive receptors is likely to be acceptable, with suitable inbuilt mitigation measures constructed and operational restrictions applied (e.g. Saturday phase 2 working only)

#### 6.2 TRAFFIC NOISE ASSESSMENT

- 6.2.1 Changes to existing road traffic noise levels as a result of the proposed development may have an increase in noise levels along the transportation route.
- 6.2.2 Deliveries via haulage lorries are proposed to enter the site from an access route to the south through the Tamar View Industrial Estate (Avery Way / Edgcumbe Road), which is in turn accessed from the A388.
- 6.2.3 The proposed development is indicated to result in an average of 27 loads (6-wheel trucks) to the site per day. The potential increase on traffic flows on Avery Way / Edgcumbe Road may be relatively large, but no noise sensitive receptors are located on these roads.
- 6.2.4 Road traffic data<sup>2</sup> for the A388 indicates that in 2019 the estimated daily traffic flows (AADF) were 13,331 vehicles including 473 HGV's.
- 6.2.5 Accounting for the increase in traffic flows as a result of the development (27 trucks per day) the proposed development traffic is predicted to result in no significant change in

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<sup>&</sup>lt;sup>2</sup> https://roadtraffic.dft.gov.uk/manualcountpoints/8604



road traffic noise from the A388 (less than 0.02 dB increase). The impact of the development in relation to off-site traffic noise is therefore considered to be negligible.

## 7.0 MITIGATION

- 7.1 Through design studies with CSA, noise mitigation has been considered and developed by the site operator which has included intrinsic measures to reduce noise impacts on noise sensitive receptors to the north, including;
  - Creation of a new haul road to the south of the site
  - Building a large noise mitigating earth bund to the north of the site at an early stage
    of the works.
  - A 2.5m noise mitigation bund is to be constructed to the north of the haul road from the site entrance to the start of the decline.
- 7.2 Following the noise assessment of the proposed operations, additional noise mitigation has been proposed to limit site operations on Saturday mornings (07:30 13:00) to the Phase 2 works only.

#### 8.0 UNCERTAINTY

- 8.1 As per BS4142:2014, the uncertainty in the assessment is considered and reported. This is not an indication of error but an acknowledgment of possible variability of the factors contributing to the assessment.
- 8.2 Use of a calibrated type 1 sound level meters is considered to reduce measurement instrument error to insignificant levels as compared with environmental variations.
- 8.3 Whilst the noise levels shown in Table 1.8 are considered to be representative of the site as a whole, on particular days the noise levels may be higher or lower. This variation is an inherent uncertainty in the environmental noise monitoring procedure, not an indication of error. Extended monitoring periods have been used to reduce this uncertainty.
- 8.4 The period of the noise surveys coincided with Government advice on the Coronavirus disease (COVID-19) for social distancing and working from home. This may have reduced traffic flows on local roads. The result of this may have lowered background noise levels at the monitoring positions, resulting in a more stringent noise assessment criteria than may have otherwise been applied.

#### 9.0 NOISE MANAGEMENT PLAN

- 9.1 The operation of the landfill will result in noise emissions from vehicles and on-site plant noise. These operations include the delivery of materials to site and infilling the landfill to the permitted restoration profile, with main plant items comprising;
  - 1 no Bulldozer.
  - 1 no Excavator / Swing shovel.
  - Movement of haul truck / HGV's delivering material to the site.
  - Haul truck / HGV's emptying.
  - Reversing signals.



- 9.2 The noise impact assessment has determined the potential impact of the operations on the surrounding noise sensitive receptors. Measures have been implemented within the phasing and operations of the landfill to reduce the potential impact on surrounding noise sensitive receptors, including locating a bund to the northern boundary of the site as initial works, and redirect the haul road to the south of the site, to increase the spatial distance to noise sensitive receptors.
- 9.3 The following management plan outline management measures to be utilised on the landfill site to minimise noise emissions from the operation and potential impacts on surrounding noise sensitive receptors.

#### 9.4 OPERATIONAL PRACTICES

9.4.1 The following key factors have been identified as determining the degree and type of mitigation required.

### **Site Location and Existing Ambient Noise Levels**

9.4.2 Sensitive neighbours have been identified. A detailed environmental noise survey has been carried out to quantify prevailing noise levels on and around the site, which has formed the basis of the criteria.

#### **Duration of Works**

- 9.4.3 It is essential to cultivate an appropriate environment in which this exposure can be best tolerated from the outset, minimising adverse community reaction.
- 9.4.4 Communications and public relations are dealt with in detail below, but it is important to establish that communication of information regarding the overall project duration is significant in controlling adverse community reaction.
- 9.4.5 The exact duration of the operation of the landfill is dependent on market forces for the requirement for the disposal of inert waste, however there is a clear end of works on site when the landfill has been increased to the permitted restoration profile.

# **Hours of Works**

- 9.4.6 It is understood that the site operational hours are proposed as being Monday Friday 07:30 17:30, and Saturday 07:30 13:00.
- 9.4.7 These hours should be rigorously observed for any operations which are likely to generate noise levels noticeable by neighbouring residents. Any exceptions deemed essential to the works would need to be authorised by the EA and must also be communicated with the residents.
- 9.4.8 It should be noted, however, that it is sometimes preferable to extend working hours for a limited period in order to quickly complete essential noisy operations rather than increase their duration, which might cause more annoyance. Any exceptions would need to be authorised by the EA, and would be ensured to be in line with the PPG minerals guidance on temporary high noise level works.

# **Attitude of the Site Operator**



9.4.9 In conjunction with effective communication of site activities and scheduling, liaison with local residents is essential in cultivating a positive attitude in the community. A dedicated telephone number and designated staff contact should be made available to respond to any complaints or queries, with a messaging service for 'out of hours' enquiries. Information on current and forthcoming activities should be made as freely available as possible.

#### **Noise Characteristics**

9.4.10 Some noisy activities may be readily distinctive from the residual acoustic environment at receptors, which tend to draw more attention to their operation. Awareness of these issues is important in liaison with local residents. Local temporary acoustic screening to these activities, where practicable, will also significantly reduce the impact at the closest residential properties.

# **Operator's Obligations**

- 9.4.11 In order to minimise and manage noise impacts at neighbouring properties, the operator should;
  - At all times and subject to availability, select and use quietest plant, machinery and vehicles appropriate for the task being undertaken. All vehicles and mechanical plant used for the purpose of the works will be fitted with effective exhaust silencers, will be maintained in good and efficient working order and operated in such a manner as to minimise noise emissions.
  - Where practical and under the operator's control, to use white noise reversing or movement alarms on mobile plant.
  - Employ at all times the Best Practicable Means (BPM), as defined in Section 72 of the Control of Pollution Act 1974, to reduce noise to a minimum, with reference to the general principles contained in British Standard BS5228:2009.
  - Facilitate an early community involvement exercise with neighbours to establish
    and agree protected areas of their properties and then to continually update
    progress and forewarn of impending noisy works. A member of onsite staff should
    be designated as community relations manager to maintain good communications
    with neighbours.
  - If deemed necessary, undertake, or employ an independent third party to undertake noise monitoring at locations to be agreed with the EA, with pre-set 'soft' and 'hard' trigger levels and text message alerts to instantly notify when and where they are exceeded. The operator should commit to stop work immediately once an alert is received and to investigate. Working procedures may then need to be reviewed and modified to prevent re-occurrence. Records of monitor data should be compiled and reported weekly to all relevant parties. The extent of monitoring required can then be continually assessed and amended as found necessary or desirable.
  - Operator to undertake proper maintenance of equipment, control use of radios on site, site equipment with due consideration to proximity of neighbours and ensure machines are turned off when not in use.



#### 9.5 MONITORING PROTOCOLS

9.5.1 Noise monitoring may need to be undertaken subject to agreement with the Environment Agency. This would either be in the form of short-term 'spot' measurements, confirming the noise levels produced by a specific noisy process or, if necessary, a monitoring regime, which would be agreed prior to commencement of any works. The following is an example of an appropriate scope of works for monitoring.

## **Short-term noise monitoring**

- 9.5.2 During specific phases of the project, spot measurements may be required, to quantify the noise level caused by particularly noisy processes.
- 9.5.3 The results of these short-term measurements will be presented in a technical summary issued to all relevant parties, comparing the measured noise levels with any adopted limits, and advising on mitigation measures, where appropriate.

## Continuous noise monitoring

- 9.5.4 If a long-term monitoring regime is required, the following sections give an example of an appropriate scope of works.
- 9.5.5 Class 1 integrating logging sound level meters e.g. Rion NL-52 or similar, would be installed with calibration verified (before and after) with a Class 1 acoustic calibrator. The instrumentation would have been fully calibrated by the manufacturer, or other approved body, as required by the relevant British Standard, with current calibration certificates available. The meters would be set to measure and store samples of various acoustic parameters such as L<sub>Aeq</sub>, L<sub>A90</sub>, L<sub>A10</sub> and L<sub>Amax</sub>. SMS alerts of agreed triggers would be utilised and data would be downloaded remotely on a regular basis.
- 9.5.6 It is proposed that the meters would be configured to log continuous 5-minute samples of noise throughout the working day, which would be used to calculate an hourly  $L_{Aeq}$ . Daily limits and hourly trigger levels would be agreed with the Environment Agency prior to the works.

## Meteorological conditions

9.5.7 The site operator shall monitor and record meteorological condition on site, including wind speed and direction.

### 9.6 COMPLAINTS PROCEDURE

- 9.7 A clear and detailed complaints procedure shall be provided to local residents to enable them to report potential issues relating to noise.
- 9.8 The operator should investigate the cause of the complaint within 48 hours of the complaint being received, visiting the complainant's premises if required. When action is required as subjectively determined by the operator, apply remedial works to reduce the noise impact on the noise sensitive receptor.
- 9.9 Where the operator determines that the complaint is justified the operator shall inform the EA within a period of seven days from receipt of the complaint. A noise monitoring exercise



- should be carried out in accordance with the measures detailed within the monitoring protocols within a period of two weeks from the receipt of the complaint.
- 9.10 If the noise measurements confirm that the noise emissions from the site are valid, remedial actions should be undertaken where practical to reduce noise emissions from the site, which could include;
  - Relocate the operations giving rise to the complaint.
  - Replace the operation / plant with a guieter alternative.
  - Replace the operations giving rise to the complaint with an alternative method.
  - Provide noise mitigation to the operation, such as noise attenuators or localised acoustic barriers.
  - · Carry out maintenance on plant.
- 9.11 Any complaints received should be logged by the operator using the complaints reporting form (Appendix B).
- 9.12 A complaints log shall be held at the site office / central register and made available to the EA on request.

# 10.0 CONCLUSIONS

- 10.1 Clarke Saunders Acoustics has been commissioned by Burcombe Haulage Ltd to assess the potential noise impact of proposed reopening of the Eales farm landfill site, Saltash.
- 10.2 The proposals have incorporated noise reduction practices to reduce the potential noise impact on noise sensitive receptors, including creating a new haul road to the south of the site, building an earth bund to the north of the site at an early stage of the works, and a 2.5m haul road bund.
- 10.3 Environmental noise surveys have been undertaken at locations representative of the nearest noise sensitive receptors in order to establish the existing noise climate in the area surrounding the application site. This has enabled suitable assessment of noise emissions to the nearest residential premises. Assessment has been undertaken using the Planning Practice Guidance and BS4142:2014 as requested by the EA...
- 10.4 Data for the proposed plant and landfill activities have been used to predict the potential noise impact on the nearest noise sensitive receptors, based on the proposed phasing of the landfill.
- 10.5 The predicted noise levels at surrounding noise sensitive receptors during all stages of works are below the maximum guideline limiting noise levels set out in the minerals Planning Practice Guidance (PPG).
- 10.6 The initial BS4142 impact estimate indicates that nearby noise sensitive receptors could experience a temporary significant adverse impact, depending on context, dependant on the operational phase of the land fill and location of noise sensitive receptor.
- 10.7 The context of the noise impact has been investigated based on the likelihood of operations scenarios occurring and the relative magnitude of noise levels during these operations compared to existing ambient noise levels. It is concluded that the noise impact from the



- proposed development at the noise sensitive receptors is likely to be acceptable given the context of operations and the sites history.
- 10.8 Following the noise assessment of the proposed operations, additional noise mitigation has been proposed to limit site operations on Saturday mornings (07:30 13:00) to Phase 2 works only.
- 10.9 A noise management plan has been developed to support the operation of the landfill during its lifespan and contains guidance on management measures to be implemented and a complaints procedure to follow.

MM doughlin

Mike McLoughlin MIOA
CLARKE SAUNDERS ACOUSTICS

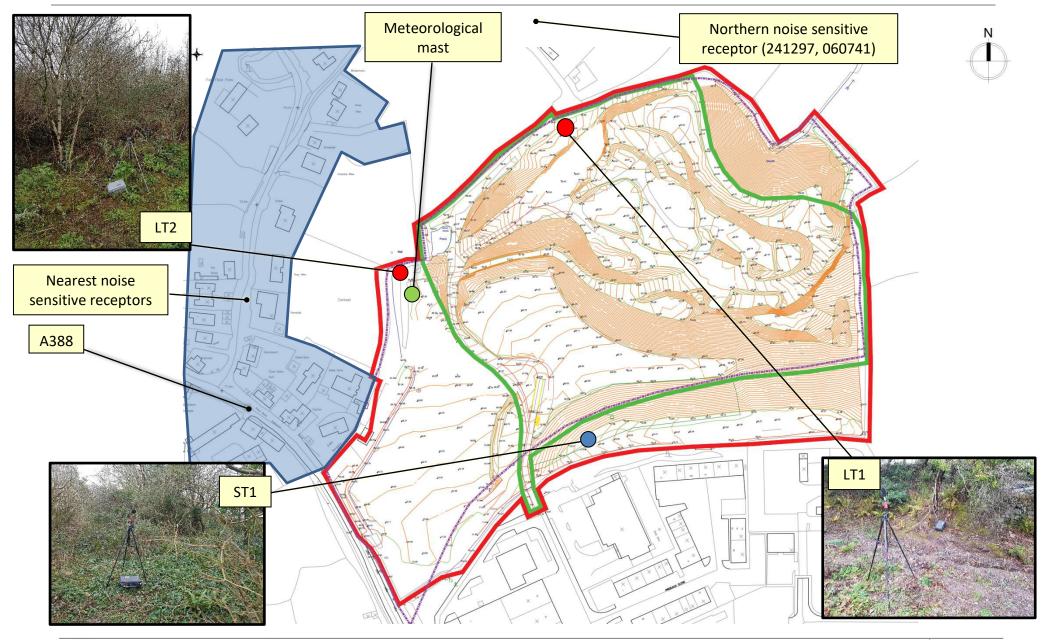
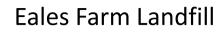
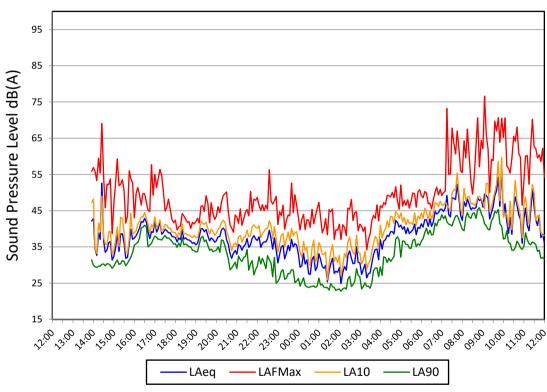




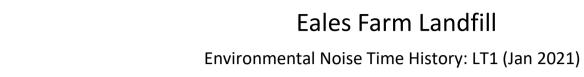
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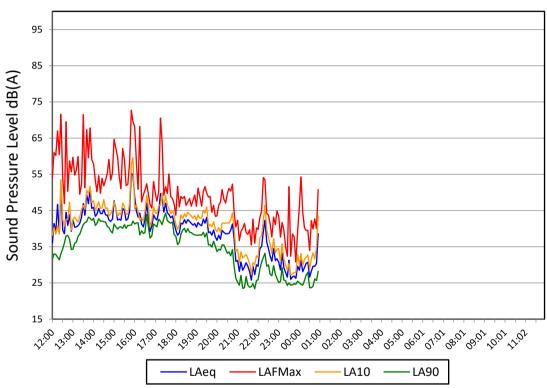


Environmental Noise Time History: LT1 (Jan 2021)



Thursday 21 January to Friday 22 January 2021

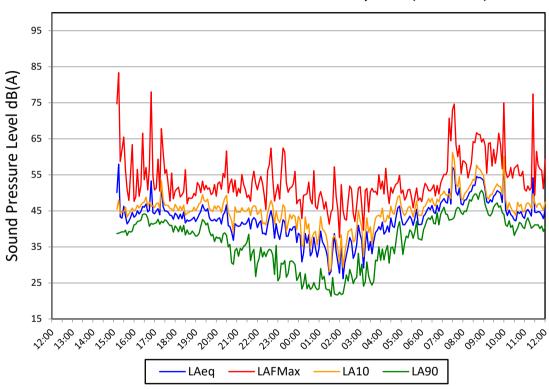




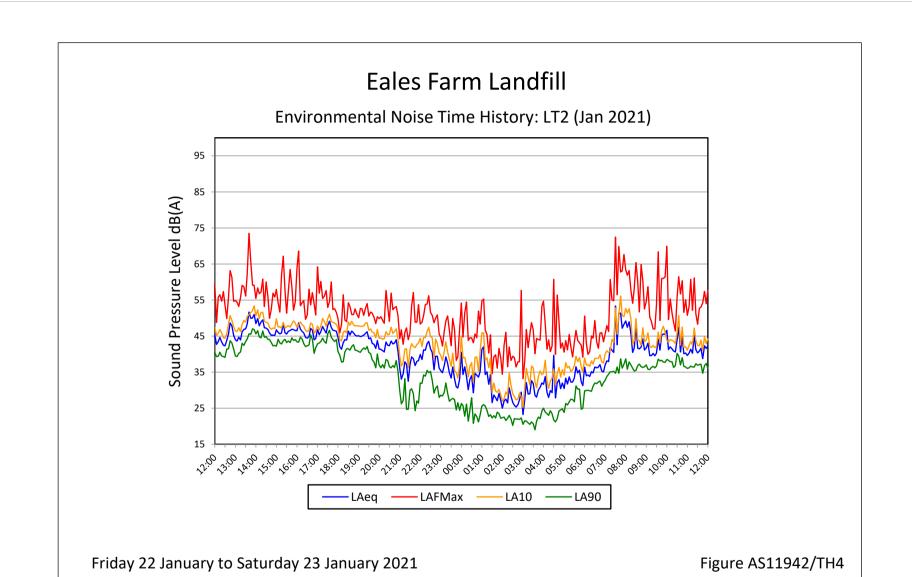
Friday 22 January to Saturday 23 January 2021

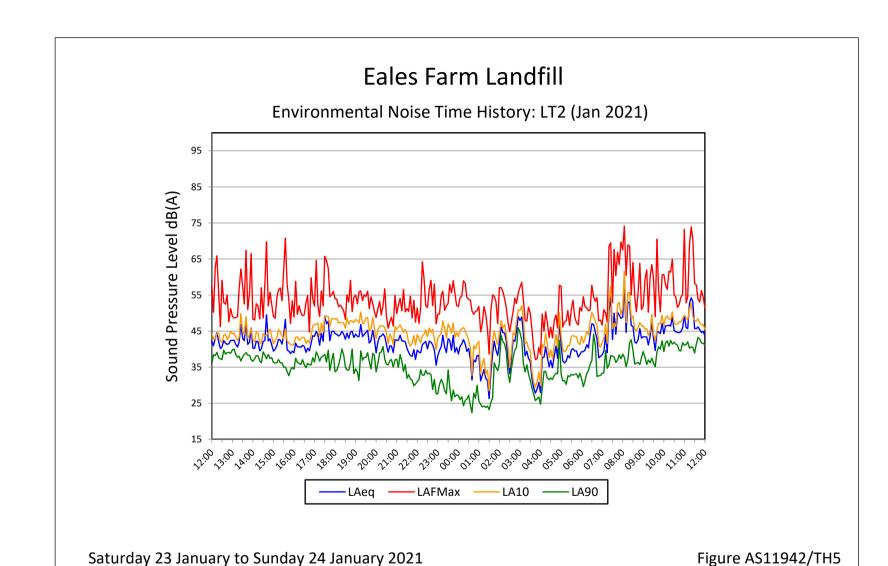


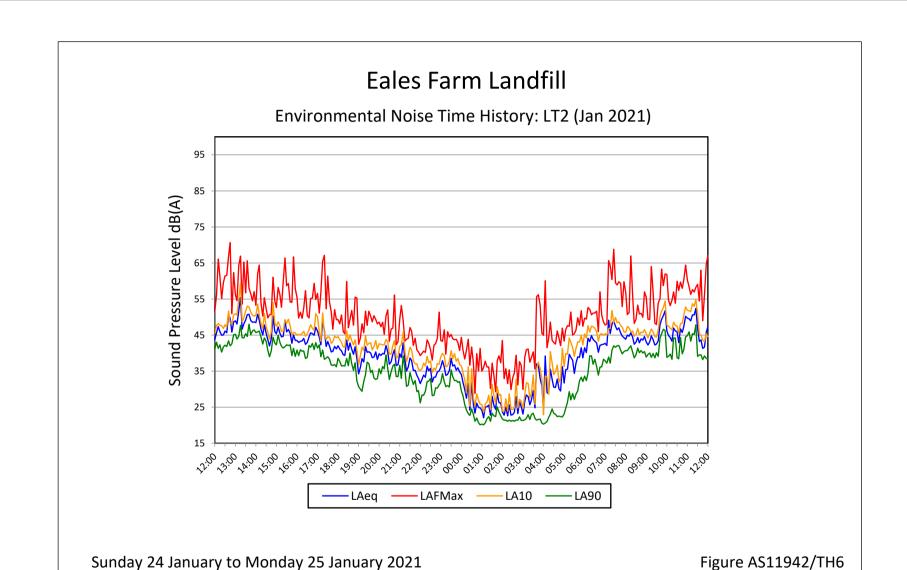
Environmental Noise Time History: LT2 (Jan 2021)



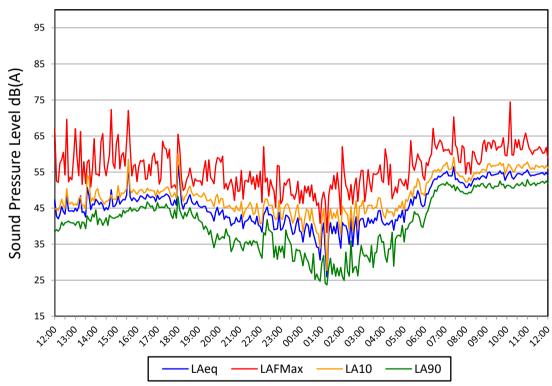
Thursday 21 January to Friday 22 January 2021



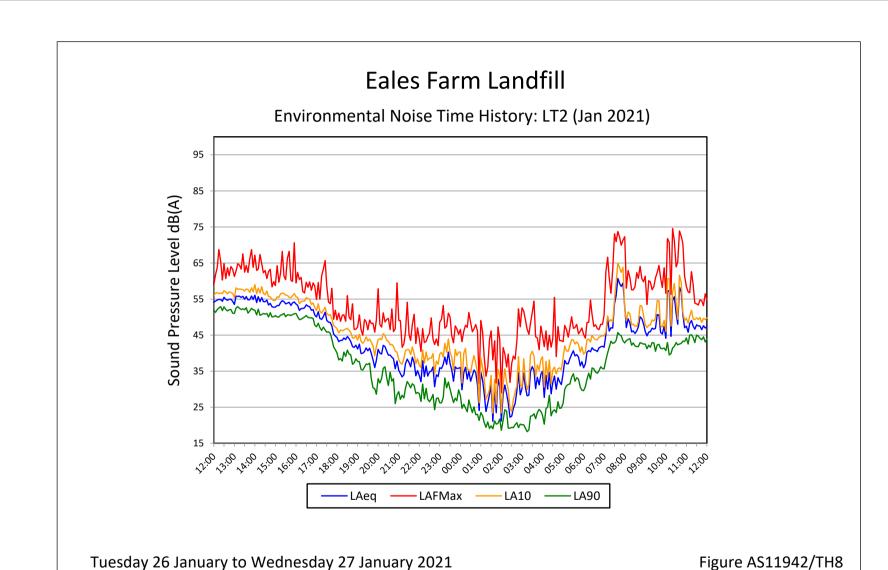






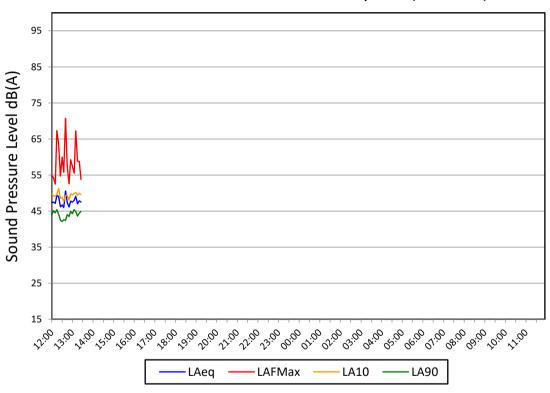


Monday 25 January to Tuesday 26 January 2021





Environmental Noise Time History: LT2 (Jan 2021)



Wednesday 27 January to Thursday 28 January 2021

