Scale: 1:1500 @ A3

0 20 40 60 m

Phase 3 - LAeq, 1hr

< 35 dB	55 dB
35 dB	60 dB
40 dB	65 dB
45 dB	70 dB
50 dB	75 dB
	80 dB

Project: Eales Farm Landfill, Saltash

Title: Predicted Specific Noise Level (LAeq,1hr) Phase 3 – Restoration level (Scenario 8)

Drawing Ref: 11942 - N8

Rev	Date	Issue	Drawn	Chk'd	App'd
0	25/03/21	For Issue	MM	IMac	EHC

clarke saunders acoustics

Scale: 1:1500 @ A3

0 20 40 60 m

Restoration - LAeq, 1hr

- < 35 dB
- 35 dB
- 40 dB
- 45 dB
- 50 dB
- 55 dB
- 60 dB
- 65 dB
- 70 dB
- 75 dB

Project: Eales Farm Landfill, Saltash

Title: Predicted Specific Noise Level (LAeq,1hr) Restoration (Scenario 9)

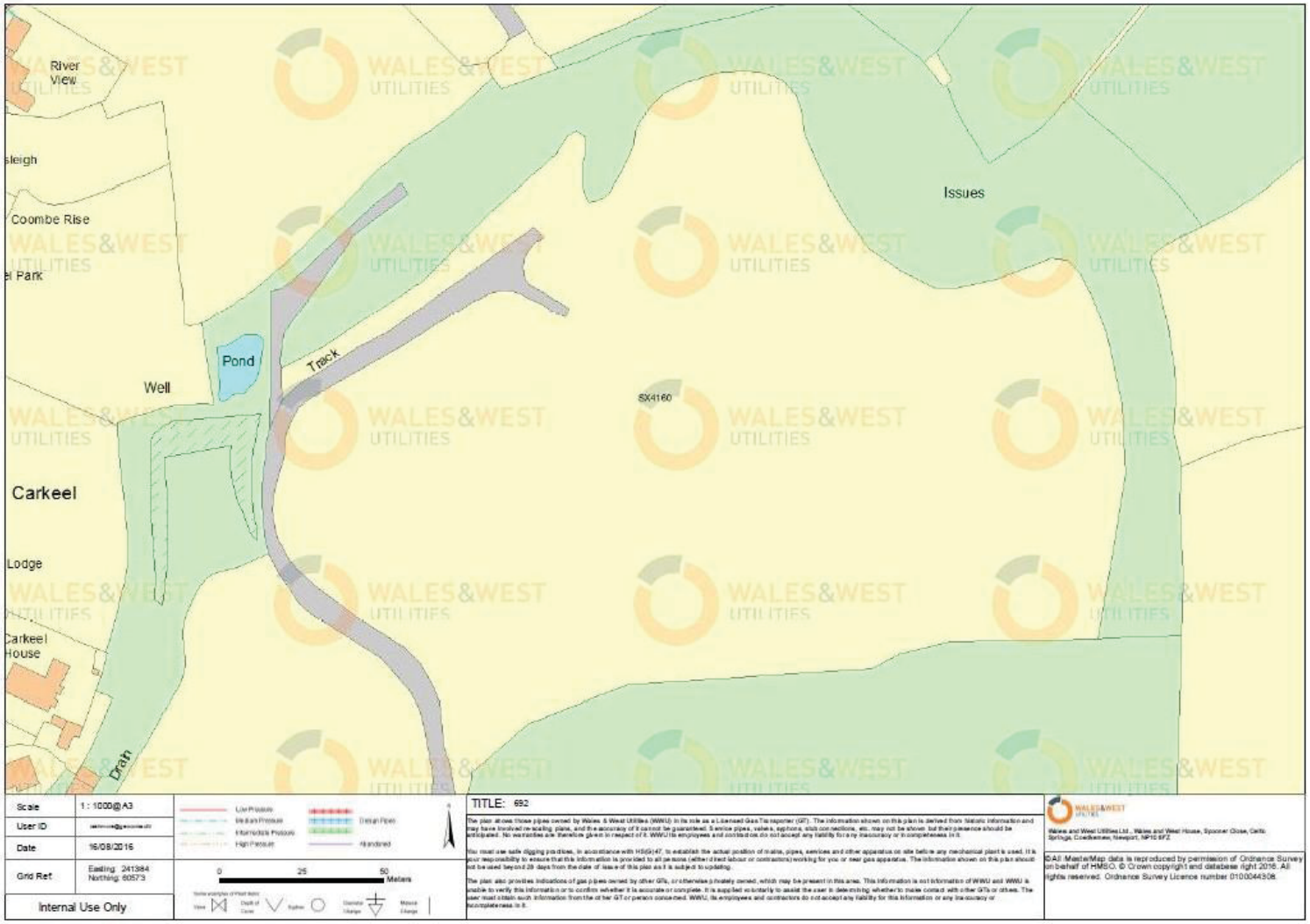
Drawing Ref: 11942 - N9

Rev	Date	Issue	Drawn	Chk'd	App'd
0	25/03/21	For Issue	MM	IMac	EHC

clarke saunders acoustics

Appendix B Service Information

Gas: Wales & West Utilities



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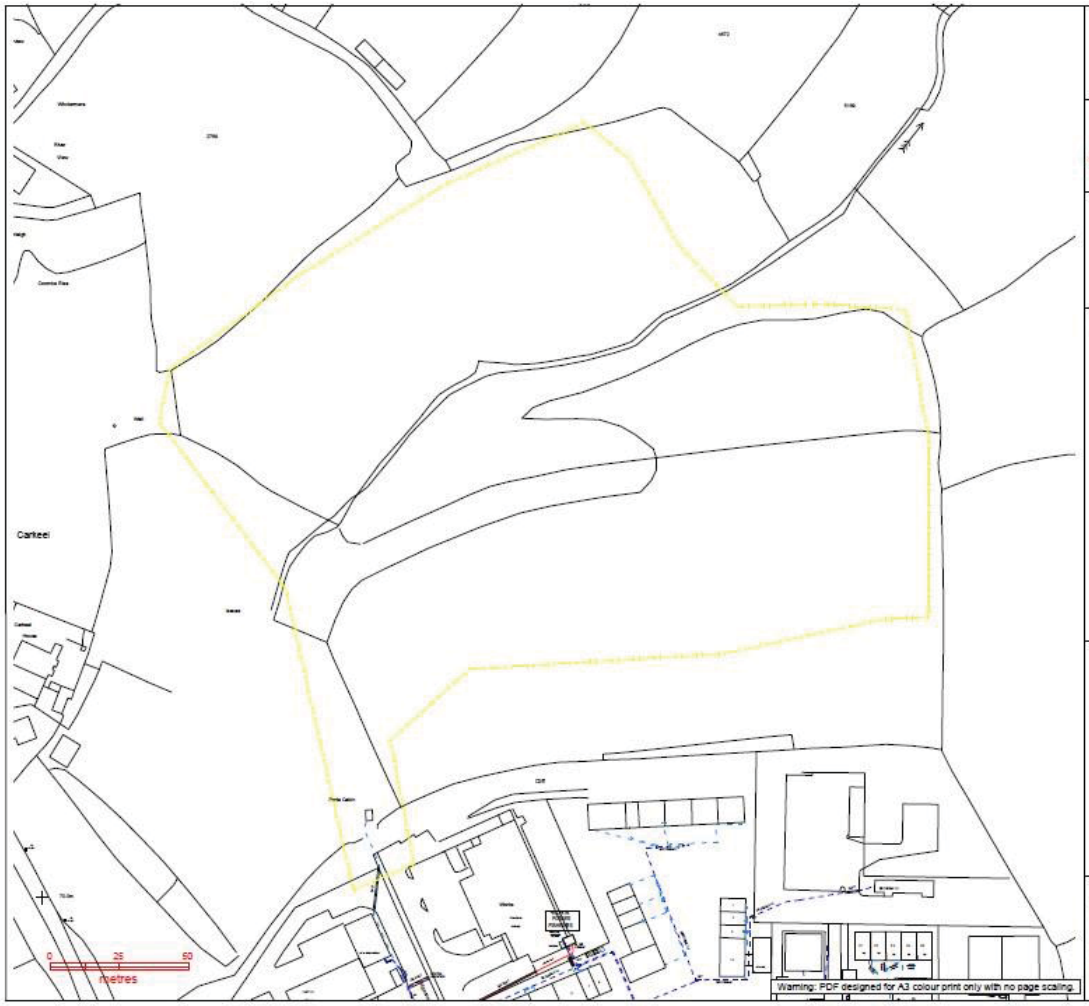
Electric: Western Power Distribution



WESTERN POWER DISTRIBUTION

Serving the Midlands, South West and Wales

Contact Us

Mapping Enquiries:		General Enquiries:	
All areas	0121 623 9780	All areas	0800 096 3080

Report damage immediately – KEEP EVERYONE AWAY FROM THE AREA
0800 6783 105

Date Requested: 17/10/2017
Job Reference: 11434213
Site Location: 241391 60544
Requested by: Miss Rose Ashmore
Your Scheme/Reference: GCE00692
Exact Scales:
1:1250 Area or Circle dig site
1:500 Line dig site

IMPORTANT NOTICES

- This information is given as a guide only and its accuracy cannot be guaranteed. Services or recent additions to the network may not be shown.
- Cables, overhead lines & substations owned by other electricity network owners or private companies may be present and may not be shown.
- You should always verify exact locations of cables using a cable locator and by careful use of hand tools in accordance with HSE guidance note HSG47.
- When working within 10m of any overhead electric line you should follow the requirements of HSE Guidance Note GS6.
- For further advice on working near our electricity cables or lines, call our Contact Centre on 0800 096 3080.
- Advice should be sought from the Western Power Distribution Contact Centre for any work that is to take place in proximity to 66kV or 132kV underground cables and 66kV 132kV overhead lines – 0800 096 3080

Overhead Line: PL, Service, LV, HV (11kV), HV (33kV), HV (66kV), HV (132kV)

Underground Cable: PL, Service, LV, HV (11kV), HV (33kV), HV (66kV), HV (132kV)

SURF Telecoms

Pilot Cables

Link Box

Site Location

Line/Area

PME Earth

Underground Earth

Pole Mounted Transformer

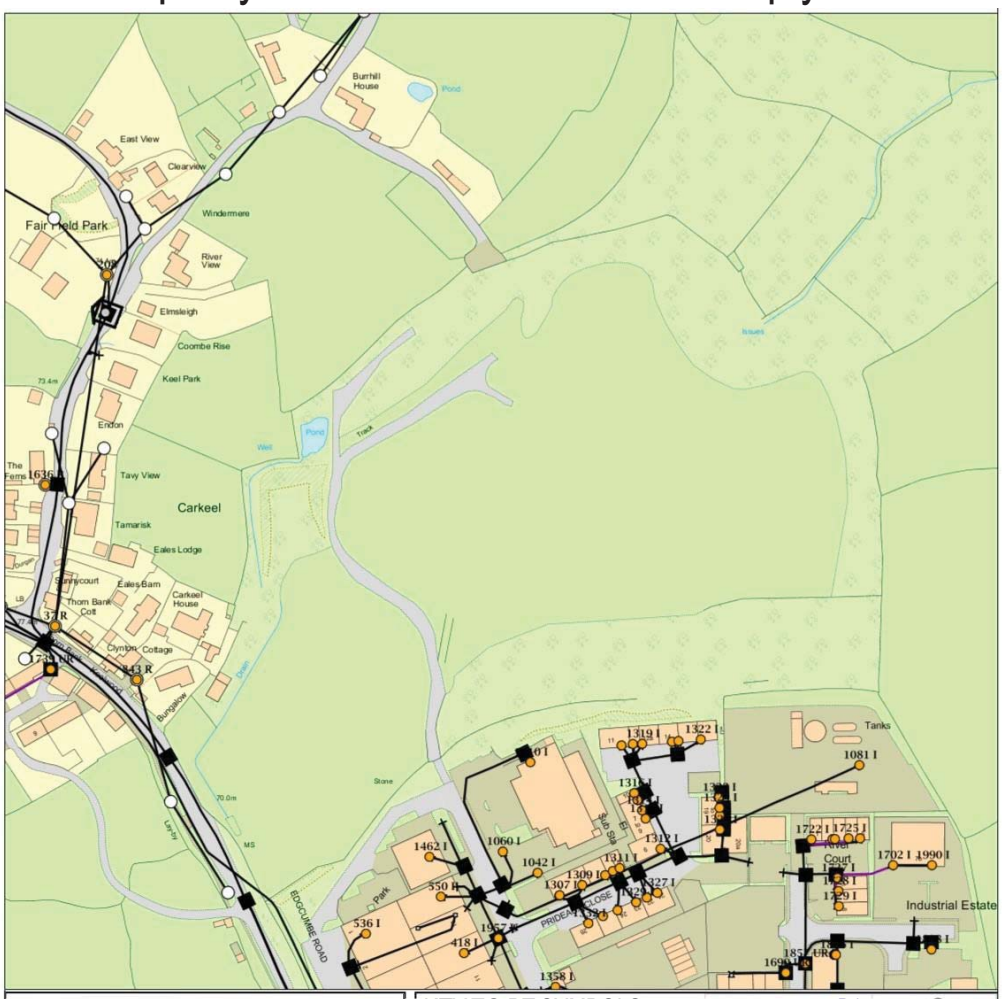
Ground Mounted Transformer

GCE00692

geoconsulting engineering ltd

Telecoms: BT Open Reach

Maps by email Plant Information Reply



IMPORTANT WARNING

Information regarding the location of BT apparatus is given for your assistance and is intended for general guidance only. No guarantee is given of its accuracy
It should not be relied upon in the event of excavations or other works being made near to BT apparatus which may exist

at various depths and may deviate from the marked route.

openreach BT

CLICK BEFORE YOU DIG
FOR PROFESSIONAL FREE ON SITE ASSISTANCE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS INCLUDING LOCATE AND MARKING SERVICE
email cbyd@openreach.co.uk
ADVANCE NOTICE REQUIRED
(office HOURS: Monday - Friday 08.00 to 17.00)
www.openreach.co.uk/cbyd

KEY TO BT SYMBOLS

Pole			
DP		Planned Pole	C:
Planned DP		JomtBox	
PCP		Change Of State	+
Planned PCP		Sph t Coupling	X
Built		Duct Tee	
Planned		Planned Box	Gil
Inferred		Manhole	00
Bu ldng	D	Planned Manhole	
Kiosk	®	Cabmet	Q
Hatchings		Planned cabmet	n

Othrr propo rd pla nt ishown usin 1dnahrd linrs
8T Symbols not lirrd above rnn a disrq ardrd.
Existirt IST Pla nt may not bfo rr:ordrd

Information valid at time of orwaration

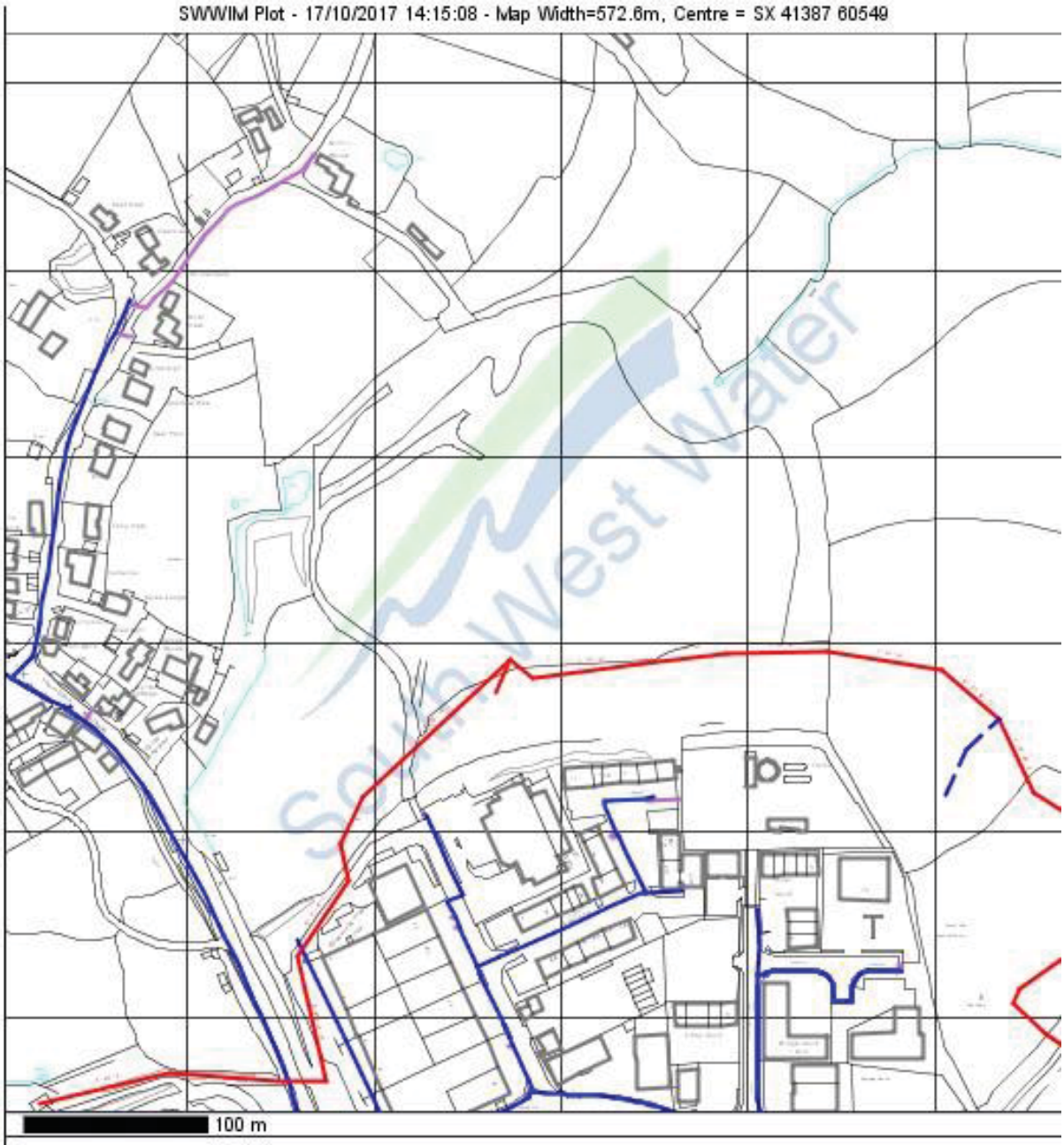
Reproduced from the Ordnance Survey map by BT by permission of Ordnance Survey on behalf of the Controller of Her Majesty's Stationary Office
(C) Crown Copyrghl British Telecommunrcations pic 100028040

openreach up business BT

BT Ref : JYF11527N
Map Reference : (centre) SX413526055
Easting/Northing : (centre) 241352,60
Issued: 16/08/2016 11:52:55

WARNING: IF PLANNED WORKS FALL INSIDE HATCHED AREA IT IS ESSENTIAL BEFORE PROCEEDING THAT YOU CONTACT THE NATIONAL NOTICE HANDLING CENTRE. PLEASE SEND E-MAIL TO: nnhc@openreach.co.uk

Water: South West Water



SOUTH WEST WATER

Reproduced from the Ordnance Survey map by South West Water lid.by pennission Ordnance Survey on behalf of the Controller of Her lvbjest y's Stationery Office. III Crown copyright South West Water lid. Ucence number: 100018191

tl!!! Ordnance Survey"

THE INFORMATION CONTAINED WITHN THIS MAP SHOULD NOT BE USED FOR ANY PURPOSE OTHER THAN AS A GENERAL GUIDE TO THE LOCATION OF EXISTING SER'vICES.

PLEASE REFER TO WATER AND SEWER LEGENDS FOR CONFRMATION OF ASSET DETAILS.

GCE00692/EPv3/4/21

Appendix D – Site Condition Report

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Environmental Permit Variation Application

Eales Farm Landfill, Eales Farm, Saltash

Site Condition Report

Report: GCE00692/2020/SCR

March 2020

1.0 SITE DETAILS	
Name of the applicant	Tamar Valley Projects Ltd
Activity address	Eales Farm Landfill, Tamar View Industrial Estate near to Saltash, Cornwall, PL12 6PG
National grid reference	241393E 60569N

Document reference and dates for Site Condition Report at permit application and surrender	GCE00692/2020/SCR – March 2020

Document references for site plans (including location and boundaries)	GCE00692-A-Fig1 GCE00692-A-Fig2 GCE00692-2019-GI-Hole Location Plan

Note:
In Part A of the application form you must give us details of the site's location and provide us with a site plan. We need a detailed site plan (or plans) showing:

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
- Locations of receptors, sources of emissions/releases, and monitoring points.
- Site drainage.
- Site surfacing.

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.

2.0 Condition of the land at permit issue	
Environmental setting including: • geology • hydrogeology • surface waters	A ground investigation was carried out in April 2016 by John Grimes Partnership and another two by GCEL in August 2016and February 2020. Local geology is inert waste (typically clayey gravels and gravelly clays) over mudstone of Torpoint Formation. Aquifer status – Secondary A A stream flows into pond in north-west corner of site. Ditch follows from pond along the north boundary joining culvert outlet which cuts through rough centre of site.
Pollution history including: • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures	One Pollution Incident to Controlled Waters recorded on the site on March 1995. The incident was due to a leakage of 'Chemicals – Pesticides'. The incident was a Category 3 – Minor incident. The site was previously an inert landfill, accepting waste from 1970s to 2000's. Some variation in waste with occasional outliers of elevated arsenic and but no significant contamination sources encountered in either investigation. Ground gas monitoring carried out across the site has identified some methane and carbon dioxide concentrations in MBH7A and just west of site in MBH2A and BH13 suggesting some gas production from the historic waste on site. Little to no flow has been detected across the site. Elevated levels of ammoniacal nitrogen and manganese have been identified in groundwater samples in MBH2A (just west of site). These high levels are thought to be related to

	the septic tanks associated to the residential buildings off-site and mineralisation in the local geology respectively. See figure GCE00692-2019-GI-Hole Location Plan for borehole locations. See ESSD report (attached as part of this application) for further details.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	See comments above.
Baseline soil and groundwater reference data	See Ground Investigation report GCE00692/R3 included as part of this permit variation application..
Supporting information	• Source information identifying environmental setting and pollution incidents • Historical Ordnance Survey plans • Site reconnaissance • Historical investigation reports • Baseline soil and groundwater reference data

3.0 Permitted activities	
Permitted activities	Deposit of inert waste material
Non-permitted activities undertaken	None
Document references for: • plan showing activity layout; and • environmental risk assessment.	See attached GCE00692-A-Fig5 within report GCE00692/2020/ESSD See attached GCE00692 H1 ERA

Note:

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.

4.0 Changes to the activity	
Have there been any changes to the activity boundary?	If yes, provide a plan showing the changes to the activity boundary.
Have there been any changes to the permitted activities?	If yes, provide a description of the changes to the permitted activities
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	If yes, list of them
Checklist of supporting information	• Plan showing any changes to the boundary (where relevant) • Description of the changes to the permitted activities (where relevant) • List of 'dangerous substances' used/produced by the permitted activities that were not identified in the Application Site Condition Report (where relevant)

5.0 Measures taken to protect land	
Use records that you collected during the life of the permit to summarise whether pollution prevention measures worked. If you can't, you need to collect land and/or groundwater data to assess whether the land has deteriorated.	
Checklist of supporting information	• Inspection records and summary of findings of inspections for all pollution prevention measures • Records of maintenance, repair and replacement of pollution prevention measures

6.0 Pollution incidents that may have had an impact on land, and their remediation	
Summarise any pollution incidents that may have damaged the land. Describe how you investigated and remedied each one. If you can't, you need to collect land and /or groundwater reference data to assess whether the land has deteriorated while you've been there.	
Checklist of supporting information	• Records of pollution incidents that may have impacted on land • Records of their investigation and remediation

7.0 Soil gas and water quality monitoring (where undertaken)	
See report GCE00692/R3 submitted as part of this permit variation application.	
Checklist of supporting information	• Description of soil gas and/or water monitoring undertaken • Monitoring results (including graphs)

8.0 Decommissioning and removal of pollution risk	
Describe how the site was decommissioned. Demonstrate that all sources of pollution risk have been removed. Describe whether the decommissioning had any impact on the land. Outline how you investigated and remedied this.	
Checklist of supporting information	• Site closure plan • List of potential sources of pollution risk • Investigation and remediation reports (where relevant)

9.0 Reference data and remediation (where relevant)	
Say whether you had to collect land and/or groundwater data. Or say that you didn't need to because the information from sections 3, 4, 5 and 6 of the Surrender Site Condition Report shows that the land has not deteriorated. If you did collect land and/or groundwater reference data, summarise what this entailed, and what your data found. Say whether the data shows that the condition of the land has deteriorated, or whether the land at the site is in a "satisfactory state". If it isn't, summarise what you did to remedy this. Confirm that the land is now in a "satisfactory state" at surrender.	
Checklist of supporting information	• Land and/or groundwater data collected at application (if collected) • Land and/or groundwater data collected at surrender (where needed) • Assessment of satisfactory state • Remediation and verification reports (where undertaken)

10.0 Statement of site condition
Using the information from sections 3 to 7, give a statement about the condition of the land at the site. This should confirm that: • the permitted activities have stopped • decommissioning is complete, and the pollution risk has been removed • the land is in a satisfactory condition.

GCE00692/EPv3/4/21

Appendix E – Environmental Risk Assessment H1

H1

Welcome to the H1 Software

Version 2.7.8 - January 2017

If you find the screen fonts in the H1Tool too small to read you can use the Windows zoom feature at any time to magnify the screen by holding down the 'Windows' key and '+' key. To cancel the feature hold down the 'Windows' key and 'Esc' key.

Introduction

This version of the tool accompanies the Horizontal Guidance Note H1 and the eleven supporting technical annexes.

Important Notes:

With the exception of Annex I (Landfill) and Annex J (Groundwater) this software tool can be used to complete risk assessments within the technical annexes which support H1. However, further information may need to be provided in the following areas:

- detailed assessment of fate and effects, where required
- decision-making trails for the comparison and ranking of options

This software provides a general structure for assessing costs and environmental impacts. You may need to decide the best way to apply this structure to fit the nature and pattern of your operation, in particular:

- where load is variable, such as seasonal or demand-led operations
- where a number of processes are conducted at the same time, such as integrated operations
- where a number of products are made, with possible differences in unit operations and release points employed
- where fugitive or potential emergency releases are of particular interest

Information in this database will be used to determine your EPR permit, therefore to get the most from this software tool, you should:

- read the H1 Overview document, to understand the basic principles, module structure and methods
- use the HELP boxes and refer to the H1 guidance as you progress to ensure that the data you input is representative and accurate
- use the comments boxes to clarify assumptions and data sources

This software will also output annual emissions data to an OPRA profile(s), which you can select on the Summary Tables page.

On line instructions on using this tool and on the H1 Methodology itself are available on Gov.UK (click here)

Facility Reference Information

Please complete the following information:

Company Name: Tamar Valley Projects Ltd

Location: Eales Farm Landfill, Tamar View Industrial Estate, Carkeel, Saltash, Cornwall, PL12 6PG

Permit Number:

If you have data already stored in a previous version of the H1 software you may import it by pressing the button to the right.

Import Utility

Please note that before the import can take place any data that already exists in this copy of the tool will be removed. Please also note that any 'Operating Mode' information you had entered in your Air and Water inventories will defer to the default of 100% on data import

NOTE ON MICROSOFT ACCESS SECURITY WARNING
Depending on your security settings, you may get a security notice appearing each time the import routine connects to a table in your source database. You need to click 'Open' on this message for the Import routine to be successful. There are 18 tables to connect to in total but if you place your cursor over the 'Open' button you will be able to repeatedly click your mouse to make this process execute quickly and without too much frustration. We apologise for this inconvenience but it is an aspect of Microsoft Security provisions that are beyond our control.

Step 1

Introduction to Step 1

Step 1: Describe the Scope and Options

The aim of this step is to:

- state the OBJECTIVES of the assessment

- in the case of ENVIRONMENTAL ASSESSMENT of the whole facility, describe the scope of the activities to be included in the assessment;

- in the case of OPTIONS APPRAISALS, identify candidate options for BAT by considering all relevant techniques to prevent and minimise pollution and the scope of activities covered by the techniques.

Depending on the reason for the assessment, you will need to complete different modules of the guidance. The software will automatically select the required modules according to the responses you enter.

NOTE: If you are going to complete more than one assessment or appraisal, make sure that you create a copy of the H1 file for each new assessment BEFORE you begin to input data. This is because Microsoft Access automatically saves changes to the current file you are using, rather than allowing you to save your changes at the end of your work.

TO CONTINUE WITH STEP 1, PRESS "NEXT".

Describe the Objectives

Depending on the reason for the assessment you will need to complete different parts of the tool.

Select the type of assessment:

◉ a)	to carry out an ENVIRONMENTAL ASSESSMENT of the releases resulting from the facility as a whole	Do Steps 1, 2 and 3 only
○ b)	to conduct a costs/benefits OPTIONS APPRAISAL to determine BAT or support the case for derogation under the Industrial Emission Directive.	Do Steps 1,2, 3 and 4 and continue with 5 and 6 if necessary

1.1 Briefly summarise the objectives and reason for the assessment in terms of the main environmental impacts or emissions to be controlled:

To assess the environmenal impact from all activities associated to an inert waste landfill facility at Eales Farm Landfill.

Scope of Environmental Assessment

List the activities included in the assessment

Number	Activity
1	Importation of inert waste
2	Storage of inert waste
3	Deposition and spreading of inert waste

Use the 'Add' button at the bottom left to create a new activity

Comments

Step 2

Introduction to Step 2

Step 2: Emissions Inventory

The aim of this Step is to produce an inventory of sources and releases of polluting substances from each option. This is used as the basis for the subsequent evaluation of environmental impacts.

For this Step you will require information on:

- release points and sources of emissions to air, water (inc. sewer) or land

- concentration and mass rate of released substances

- frequency and duration of releases and how these relate to long term and short term effects

IMPORTANT NOTES

- you may need to consider a suitable method for assessment of groups of pollutants, such as VOCs, heavy metals, uncharacterised liquid effluents, etc (see "Grouping air emissions" in Annex F).

TO CONTINUE WITH STEP 2, PRESS "NEXT".

Receiving Water Body(s)

Please define the Final Discharge Locations for Releases to Water

Are there any discharges to surface waters? Yes

Use the 'Add' button below to list all final discharge points.
For discharges to sewer, this should be the point where the sewage works discharges to a surface water

N.B. For Riverine discharges (River, Upper Estuary) you only need enter the River description and flow once. Further details of individual releases can be entered on the next page. For discharges to TRaC waters, seperate Discharge Locations must be added for each release point that has a different mixing zone

Number	Description	Final Discharge Category	Freshwater Q95 flow rate
1	Unnamed Stream	R	River Flow (m3/s): 1.5

Water Discharge/Release Details and Flow Data

Please define your Release Points for Releases to Water

Number	Description	Location or Grid Reference	Activity or Activities	Final Discharge Point		Discharge via Sewer?	Mean Effluent Flow Rate* m3/s	Max Effluent Flow Rate* m3/s
1	Containment Pond 1	SX413606	Collection of surface run off into river	1	Unnamed Stream	No	0.0475	0.0950
2	Containment Pond 2	SX414605	Collection of surface run off into river	1	Unnamed Stream	No	0.0450	0.0900

Comments

* When operating

Energy Consumption

Please list all Energy Sources and Annual Consumption

Select energy sources by Clicking on 'Add' and using the pull-down list.

Number	Energy Sources		Delivered MWh/yr	Conversion Factor	Primary MWh/yr	CO2 Factor	CO2 tonne/yr
1	Electricity from public supply	indirect emissions	5	2.40	12	0.17	2
2	Heavy Fuel Oil	direct emissions	250	1.00	250	0.26	65

Comments

Raw Materials

Please list all Raw Materials Consumed:

Number	Material	Annual Consumption	Units
1	Non-potable Water	25	cubic m/year
2	Potable water	10	cubic m/year
3	Lubricating/hydraulic oils	0.02	cubic m/year
4	Vehicle engine coolant	0.005	cubic m/year
5	Site vehicle fuel oils	5	cubic m/year

Comments

Step 3

Introduction to Step 3

Step 3: Quantify Impacts

The aim of this Step is to quantify the effects on the environment of the releases listed in the inventory in Step 2. The guidance provides methods for assessing the eight main environmental considerations of most relevance to the EPR regime. Your releases may not result in effects to all eight of these considerations, and this tool allows you to screen out any that are not relevant.

The emissions you entered in Step 2 are automatically brought forward for assessment into each environmental consideration that is relevant for that type of release (e.g. a release may have more than one type of effect).

This part of the tool allows you to screen out any releases that are insignificant, and to identify those releases where further, detailed assessment of the potential environmental impact may be required.

IMPORTANT NOTE

This software tool only completes part of the requirements for Step 3, as described above. Depending upon the degree of risk to the environment presented by the releases, the operator may need to do further, detailed assessment of the potential effects using methodologies that are not provided here. This information should be submitted separately, as indicated within this part of the tool.

TO CONTINUE WITH STEP 3, PRESS "NEXT".

Identify Relevant Impacts

Identify any environmental impacts that are not relevant to this assessment by deselecting from the list below:

Releases in Part 2?			Justification for omission
No	☑	Air	
No	☑	Deposition from Air to Land	
Yes	☑	Water	
No	☑	Waste	
No	☑	Visual	
No	☑	Ozone Creation	
No	☑	Global Warming	

If you have deselected an environmental impact as not relevant to this assessment,
no further assessment of this impact will be carried out

Local Environmental Quality

Describe the Quality of the Environment:

Provide a brief description of the main local factors that may influence the importance of the impact of emissions in the surrounding environment

Air Quality

Are there any Environmental Quality Standards relating to substances released from the activities, which may be at risk due to additional contribution from the activity ? (Environmental Quality Standards for air and water are described in EPR Technical Guidance Notes)	No
Are there any Local Air Quality Management Plans applicable to releases from the activity?	No

Water Quality & Resources

Are there any Environmental Quality Standards relating to substances released from the activities, which may be at risk due to additional contribution from the activity?	No
Are proposals to abstract water satisfactory in order to obtain an abstraction licence?	No
Is the activity located in a groundwater vulnerable zone (for activities with direct releases to land only)?	No

Proximity to Sensitive Receptors

Is public annoyance likely to be an issue for noise, odour or plume visibility ?	No
Are there any wildlife habitats, eg Special Areas of Conservation,or Special Protection Areas, likely to be affected by releases from the activity? (Description of requirements of Habitats Directive is provided in EPR Technical Guidance Notes)	No

Air Impact Modelling Assessment

See guidelines in H1 Annex F section entitled "Decide if you need detailed air modelling.

Describe here the justification for whether detailed modelling is, or is not required for any of the releases. Refer to the quidelines in H1 Annex F	No point source releases envisaged
Describe source of background information:	Previous ground investigations
Document Reference of detailed modelling work:	n/a

Water Impact Modelling Assessment

See guidelines in H1 Annex D and respond to the following

Describe here the justification for whether detailed modelling is, or is not required for any of the releases. Refer to the quidelines in H1 Annex D.	No point source releases are envisaged
Describe source of background information:	Previous ground investigations and current monitoring data
Describe location of detailed modelling work:	N/a

Summary of Environmental Assessment

You have now completed all of the steps in this software for the environmental assessment. This will provide you with:

- an inventory of all emissions sources and substances emitted from your activities
- an information trail of how the impacts of these emissions have been assessed
- a summary of the impacts

You now need to use this information to confirm whether the emissions are acceptable, i.e. that they do not cause significant pollution to occur, by responding below:

Do any of the emissions exceed any of the folllowing

Statutory Emission limit values:	No	If yes, identify the substances concerned and improvements that are needed to at least meet the statutory requirement
Environmental Quality Standards (air and water):	No	If yes, identify the substances concerned, the contribution from the activities and investigate whether further detailed fate and effect modelling and/or pollution controls are needed. Ensure that the relevant EQS reference conditions are applied.
Environmental Assessment Levels:	No	If yes, identify the substances concerned, the contribution from the activities and investigate whether further detailed fate and effect modelling and/or pollution controls are needed.

Use the box below to provide further information on any of the above to which you have responded 'Yes':

Finally, print all of the information and submit with your application. Remember to include any supplementary information and reports that you have had made reference to during the assessment procedure.