ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES LAND AND PROPERTY MINING AND MINERAL PROCESSING MINERAL ESTATES WASTE RESOURCE MANAGEMENT

### wardell-armstrong.com



### **RECYCLE IT GLOBAL (RIG) SCORRIER LIMITED**

PARC-AN-CHY WASTE FACILITY

SITE CONDITION REPORT

SEPTEMBER 2024





DATE ISSUED:	SEPTEMBER 2024
JOB NUMBER:	NT16913
REPORT NUMBER:	0003
VERSION:	V1.0
STATUS:	FINAL

### **RECYCLE IT GLOBAL (RIG) SCORRIER LIMITED**

PARC-AN-CHY WASTE FACILITY

SITE CONDITION REPORT

SEPTEMBER 2024

### **PREPARED BY:**

Arabella Sharrock Principal Waste Permitting Consultant

**REVIEWED BY:** 

Dominiqua Drakeford-Allen Asso

Associate Director

D Drahford - Men

APPROVED BY:

Alison Cook

Technical Director

Aluson Sat

This report has been prepared by Wardell Armstrong LLP with all reasonable skill, care and diligence, within the terms of the Contract with the Client. The report is confidential to the Client and Wardell Armstrong LLP accepts no responsibility of whatever nature to third parties to whom this report may be made known.

No part of this document may be reproduced without the prior written approval of Wardell Armstrong LLP.



Wardell Armstrong is the trading name of Wardell Armstrong LLP, Registered in England No. OC307138.

Registered office: Sir Henry Doulton House, Forge Lane, Etruria, Stoke-on-Trent, ST1 5BD, United Kingdom

UK Offices: Stoke-on-Trent, Birmingham, Bolton, Bristol, Bury St Edmunds, Cardiff, Carlisle, Edinburgh, Glasgow, Leeds, London, Newcastle upon Tyne and Truro. International Offices: Almaty

ENERGY AND CLIMATE CHANGE ENVIRONMENT AND SUSTAINABILITY INFRASTRUCTURE AND UTILITIES LAND AND PROPERTY MINING AND MINERAL PROCESSING MINERAL ESTATES WASTE RESOURCE MANAGEMENT



### CONTENTS

1	INTRODUCTION1
2	SITE CONDITION REPORT

### **APPENDICIES**

Appendix 1 Envirocheck Report

### DRAWINGS TITLE

NT16773-001	General Arrangement Plan
1110773-001	General Analigement Plan

### SCALE

1:500 @ A1



### 1 INTRODUCTION

- 1.1.1 This Site Condition Report has been prepared by Wardell Armstrong to support the application for an environmental permit variation on behalf of by RIG Scorrier Ltd for their site located at land adjacent to Parc-an-Chy Mine, Treskerby Road, Scorrier, Cornwall, TR16 5AU.
- 1.1.2 The site currently operates under an extant permit (permit reference EPR/DP3892HD). There are no proposed changes to the extant permit boundary as part of this variation.
- 1.1.3 This report contains information to establish the baseline conditions of the ground, both from a geological perspective and contamination setting.
- 1.1.4 This report has been prepared in line with the H5 Guidance and template published by the Environment Agency. Sections one through seven will be completed throughout the life of the permit and sections eight through 10 will be completed at permit surrender.



### 2 SITE CONDITION REPORT

### SITE DETAILS

Name of the applicant	Recycle It Global (RIG) Scorrier Limited
	(Company no. 12799595)
Activity address	Land adjacent to Parc-an-Chy Mine, Treskerby
	Road, Scorrier, Cornwall, TR16 5AU
National grid reference	SW 72185 43281
Dates for Site Condition Report at permit	Prepared 02/09/2024 as part of environmental
application	permit variation (EPR/DP3892/HD)
Document references for site plans	NT16773-001 General Arrangement Plan
(including location and boundaries)	



CONDITION OF THE LAND AT PERMIT ISSUE		
<ul> <li>Environmental setting including:</li> <li>geology</li> <li>hydrogeology</li> <li>surface waters</li> </ul>	<b>Site Setting</b> The site is located within a predominantly rural area with the surrounding land use comprising agricultural fields to the east, south and west. To the north of the site is an area of deciduous woodland. The Village of St Day is located to the southeast of the site and the town of Redruth 2.4km to the west. The Site location is shown on Figure 1 below.	
	Figure 1 – Site Location Map	
	Geology Bedrock geology comprises Porth Towan Formation – Metamudstone and metasandstone; metamorphic bedrock formed during the Devonian period. The predominant lithology of the Porth Towan Formation is grey and grey-green slates, however the centre of the formation is dominated by thinly bedded mediumto fine-grained sandstone and siltstone. Towards the base and top of the formation lie proximal thin coarse-grained sandstone with turbiditic features. The beds within the formation are typically 2m in thickness.	
	The south-east corner of the site (including the landfill located to the south of the site WML20523) is underlain predominantly by bedrock of the Carnmenellis Granite Intrusion and is Late-Carboniferous to early-Permian in age. The granite was the	



CONDITION OF THE LAND AT PERMIT ISSUE		
	main focus for the mining in the area for its Cassiterite (tin ore), Wolframite and	
	copper. Scorrier and the site lie within the Gwennap Mining District World Heritage	
	Site.	
	There are no superficial deposits present at the site, there are head deposits in the	
	local area comprising clay, silt sand and gravel however these are discontinuous and	
	sparce in the vicinity of the site.	
	Groundwater Vulnerability and Hydrogeology	
	The site is located on a Secondary A bedrock aquifer which comprises permeable	
	layers that may support local water supplies, and may form an important source of	
	base flow to rivers. The aquifer is fed via local yields from secondary fractures and	
	is multi-layered.	
	The site is not located within a Source Protection Zone (SPZ).	
	Soils	
	The soil scape at the site is classified as Freely draining acid loamy soils over rock.	
	Surface Waters and Flooding	
	There are no surface water features on site and limited surface water features	
	within close proximity to the site. There is a small drainage/spring fed network	
	~228m south of the site linking a number of small surface water bodies.	
	There are also several springs to the east of the site located in the Unit Wood.	
	The site is located within a Flood Zone 1 and has a low probability of flooding from	
	rivers and the sea.	
Pollution history including:	The site is located on top of the Park An Chy Landfill which was regulated under	
	Waste Management Licence WMI 20523. An extract of drawing P-CHY-01 LOCATION	
<ul> <li>nollution incidents that may</li> </ul>	taken from the 1994 permit shows the landfill boundary as shown on the left-hand	
have affected land	side in Figure 2 below. The right-hand side of Figure 2 shows the permit boundary.	
• historical land-uses and	(EPR/DP3892HD) overlain with the landfill boundary	
associated contaminants		
<ul> <li>any visual/olfactory evidence of existing contamination</li> </ul>		
<ul> <li>evidence of damage to</li> </ul>		
pollution prevention		
measures		



CONDITION OF THE LAND AT PER	MIT ISSUE	
	Figure2- Extents of Landfilling and Current Site Boundary	
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and	In 1976 T.H. Douce & Sons Ltd. commenced works on the land as a tipper haulage company. They operated a small landfill site disposing of inert wastes and in 1993 were issued a waste management licence for landfilling. Landfiling operations took place in three phases:	
verification reports (where available)	<ul> <li>Phase1. Creation of a safe area from the collapsed former mining landscape (1993-1997),</li> <li>Phase2. Levelling of the site for the current operational Waste Transfer Station (WTS) (1997-1999) and</li> </ul>	
	• Phase 3. Earth bund creation on agricultural land on the western boundary (2000-2005).	



### CONDITION OF THE LAND AT PERMIT ISSUE A Waste Transfer Station became operational in 1999 after being granted planning permission and being issued a further waste management licence (WML No: 20016). It is this licence which the current permit pertains to (EPR/ DP3892HD) Recycle it Global (RIG) acquired the site on 18<sup>th</sup> September 2023 and formed the legal entity RIG Scorrier Ltd, and environmental permit EPR/DP3892HD was transferred from Andrew Ward Douce to RIG Scorrier Ltd on 04/04/2024. Baseline soil and groundwater Baseline data for the site is not available, due to the site being located on a landfill. reference data Quarterly returns should have been submitted by the previous operator to the Environment Agency in relation to the site and may provide some detail. However, it is unknown whether the previous operator has retained these records and they have not been made available for this assessment. Supporting information BGS Onshore Geoindex used for local Geology at 1:50,000 and 1:625,000 • scales. Scanned Hydrogeology maps from BGS. Digimap Edina used for Historical Ordnance Survey plans and Environmental particulars. UK.gov website used for flooding risk assessment. RIG Scorrier Ltd supporting documents. https://flood-map-for-planning.service.gov.uk/flood-zoneresults?polygon=[[172139,43416],[172166,43420],[172282,43328],[17228 0,43310],[172238,43247],[172252,43190],[172162,43180],[172115,43192] ,[172139,43416]]&center=[172198,43300]&location=TR16%25205AU



3.0 PERMITTED ACTIVITIES	
Permitted activities	See Table 2.1 below
Non-permitted activities undertaken	There will be storage of raw materials associated with the proposed changes on site, for example diesel to be used to operate site plant and equipment. Additionally flocculant will be required to be used in the process to aid the settlement of solids in the wash plant process. Flocculant will be stored in containers on impermeable surfacing. Diesel will be stored in a tank with the outer container bund having 110% capacity of the inner container. Greases lubricating and hydraulic oils will be stored on impermeable surfacing in drums with drip tray.
Document references for:	Drawing number NT16545-001 shows the site layout; including
	drainage provisions, the wash plant and waste storage areas.
• plan showing activity layout; and	The Environmental Risk Assessment for the proposed Activities at the
• environmental risk assessment.	site is provided in the Habitats, Amenity and Accident Risk
	Assessment document which has been prepared and submitted as part of the environmental permit variation application.
	The management of fugitive dust emissions is described in the Dust Emissions Management Plan.
	The operations carried out on site including waste acceptance
	procedures and site management are described in the Operating
	Techniques document.



Table 2.1 Permitted Site Activities				
Listed Activities				
Listed Activity (EPR 2016)	Activity Description	Waste Framework Directive		
		Classification		
Section 5.3 Part A(1) (A) (ii)	Recovery of hazardous waste with	R3 Recycling/reclamation or		
Disposal or recovery of hazardous	a capacity exceeding 1,000 tonnes	organic substances which are not		
waste with a capacity exceeding	per day involving physico-	used as solvents (including		
10 tonnes per day involving	chemical treatment	composting and transformation		
physico-chemical treatment		processes).		
		<b>R5</b> Recycling/reclamation of other		
		inorganic materials		
Section 5.6 Part A(1) (a)	Temporary storage of up to 1,000	R13 Storage of waste pending any		
Temporary storage of hazardous	tonnes at any one time of	of the operations number R1 to		
waste with a total capacity	hazardous waste pending	<b>R12</b> (excluding temporary storage,		
exceeding 50 tonnes pending any	treatment for recovery	pending collection, on the Site		
of the activities listed in Section	where the waste is produced)			
5.3	5.3			
	Directly Associated Activities			
Processed soil storage	Storage of soil and aggregates post	treatment		
Process water treatment and	nt and Storage of hazardous soil washing water, reuse within the wash plant,			
storage	and removal off Site for recovery or	disposal.		
Surface water collection and	Collection and storage of surface wa	ater including reuse within the wash		
storage	plant and removal off Site for recov	ery or disposal		
Storage and use of raw materials	Storage and use of raw materials including materials used to operate			
	Site plant and plant maintenance			
	Waste Operations			
Waste Activity	Activity Description	Waste Framework Directive		
		Classification		
Treatment of non-hazardous and	Physico-chemical treatment	R3 Recycling/reclamation or		
inert waste for the purpose of	(sorting, separation, screening,	organic substances which are not		
producing soils and aggregates	washing)	used as solvents (including		
		composting and transformation		
		processes).		
		<b>R5</b> Recycling/reclamation of other		
		inorganic materials		



4.0 Changes to the activity	
Have there been any changes to the activity boundary?	There are no proposed changes to the permit boundary.
Have there been any changes to the permitted activities?	This application seeks to vary the permitted activities. The tonnage is proposed to increase to 350,000 tonnes per year, with up to 10,000 tonnes of waste to be stored on Site at any one time. Of the 10,000 tonne storage capacity, it is expected that up to 1,000 tonnes of hazardous waste will be stored at any one time.
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	<ul> <li>'Relevant hazardous substances' (Article 3(18) and Article 22(2), first subparagraph) are those substances or mixtures defined within Article 3 of Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures (CLP Regulation) which, as a result of their hazardousness, mobility, persistence and biodegradability (as well as other characteristics), are capable of contaminating soil or groundwater and are used, produced and/or released by the installation.</li> <li>Article 1 (3) states "Waste as defined in Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste is not a substance, mixture or article within the meaning of Article 2 of this Regulation." So these regulations do not apply to waste.</li> </ul>
	Relevant Hazardous Substances which will be stored on Site comprise of raw materials, as detailed in Section 4 of the BAT Assessment submitted with the permit application. These raw materials comprise of diesel, greases and lubricating oils all used for operation and maintenance of site plant. Deisel, greases and oils have always been stored on Site to supply and maintain plant and equipment. RIG are seeking to install a purpose designed 12,800 litre diesel tank, which has a level sensor on impermeable surfacing with bunding. Greases and oils will also be stored on a drip tray. Because diesel will be stored in a properly bunded tank and in compliance with the oil storage regulations and tertiary containment is provided by the impermeable kerbing we believe that the likelihood of emissions to the ground are extremely low and baseline data is not required.



4.0 Changes to the activity	
	"European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions" sets out guidance for the production of baseline reports.
	Before carrying out base line monitoring operators should identify the relevant hazardous substances on site and "identify which of the relevant hazardous substances represent a potential pollution risk at the site <b>based on the likelihood of releases</b> of such substances occurring."
	It clarifies that not all sites required baseline data saying: "Where it is clear that the hazardous substances used, produced or released at the installation are incapable of causing contamination of soil and groundwater a baseline report does not need to be produced."

### 5.0 Measures taken to protect land

The proposed activities are highly unlikely to pose any risk of increasing levels of contaminants or adversely affect the groundwater below the site given that:

- The majority of wastes accepted on site are non-hazardous or inert and as such unlikely to contain levels of contaminants of concern that would leach and infiltrate/percolate the soil and groundwater beneath the site.
- Up to 1,000 tonnes of hazardous waste will also be stored on site at any one time. The site drainage infrastructure has been upgraded to comprise a fully sealed and contained system. Hazardous waste will be stored in bays inside a three sided covered shed. The covered hazardous waste storage bays will prevent ingress of rainwater and have impermeable flooring with falls to a sealed drainage system. A sleeping policeman/speed bump will be installed at the open aperture of the bays to ensure bunding around the entire area.
- Asbestos will be accepted for storage only, and will be stored securely in the asbestos storage compound. Asbestos will be bagged and stored within lidded containers.
- The Activities will take place on a concrete hardstanding apron, newly installed at the site. This would in the event of any leaching from waste soils, act as a barrier to break any pathway of transmission to sensitive receptors, such as the groundwater beneath site.



6.0 Pollution incidents that may have had an impact on land, and their remediation		
None Reported	d	
Checklist supporting information	of	<ul> <li>Records of pollution incidents that may have impacted on land</li> <li>Records of their investigation and remediation</li> </ul>



### **APPENDIX 1**

**Envirocheck Report** 

### Geology 1:50,000 Maps Legends

#### Artificial Ground and Landslip

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	WGR	Worked Ground (Undivided)	Void	Holocene - Holocene
$\square$	MGR	Made Ground (Undivided)	Artificial Deposit	Holocene - Holocene

### Superficial Geology

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	ALV	Alluvium	Clay, Silt, Sand and Gravel	Flandrian - Flandrian
	HEAD	Head	Clay, Silt, Sand and Gravel	Quaternary - Quaternary

### **Bedrock and Faults**

Map Colour	Lex Code	Rock Name	Rock Type	Min and Max Age
	UDP	Unnamed Dyke, Permian	Felsite	Permian - Permian
	CAIN	Carnmenellis Intrusion	Granite	Permian - Carboniferous
	MRSL	Mylor Slate Formation	Hornfelsed Slate and Hornfelsed Siltstone	Famennian - Frasnian
	POAN	Porthtowan Formation	Metamudstone and Metasandstone	Frasnian - Eifelian
	POAN	Porthtowan Formation	Mudstone and Sandstone	Frasnian - Eifelian
		Faults		

### Envirocheck

LANDMARK INFORMATION GROUP\*

### Geology 1:50,000 Maps

This report contains geological map extracts taken from the BGS Digital Geological map of Great Britain at 1:50,000 scale and is designed for users carrying out preliminary site assessments who require geological maps for the area around the site. This mapping may be more up to date than previously published paper maps. The various geological lavers - artificial and landslip deposits. superficial

The various geological layers - artificial and landslip deposits, superficial geology and solid (bedrock) geology are displayed in separate maps, but superimposed on the final 'Combined Surface Geology' map. All map legends feature on this page. Not all layers have complete nationwide coverage, so availability of data for relevant map sheets is indicated below.

#### Geology 1:50,000 Maps Coverage

Map ID:	1
Map Sheet No:	352
Map Name:	Falmouth
Map Date:	1990
Bedrock Geology:	Available
Superficial Geology:	Available
Artificial Geology:	Available
Faults:	Not Supplie
Landslip:	Available
Rock Segments:	Not Supplie

### Geology 1:50,000 Maps - Slice A



Order Number: 156621353\_1\_1 Customer Reference: ADouce National Grid Reference: 172170, 43270 Slice: А Site Area (Ha): Search Buffer (m): 2.83 1000 Site Details: Parc an Chy WTS, Scorrier Estates, REDRUTH, TR16 5AU Tel: Fax: Web: 0844 844 9952 0844 844 9951 Landmark www.envirocheck.co.uk INFORMATION

v15.0 11-Feb-2018



## Envirocheck

LANDMARK INFORMATION GROUP

### Artificial Ground and Landslip

Artificial ground is a term used by BGS for those areas where the ground surface has been significantly modified by human activity. Information about previously developed ground is especially important, as it is often engineering conditions and unstable ground.

#### Artificial ground includes:

- Made ground man-made deposits such as embankments and spoil heaps on the natural ground surface. - Worked ground - areas where the ground has been cut away such as
- quarries and road cuttings.
- Infilled ground areas where the ground has been cut away then wholly or partially backfilled.

Landscaped ground - areas where the surface has been reshaped.
Disturbed ground - areas of ill-defined shallow or near surface mineral workings where it is impracticable to map made and worked ground separately.

Mass movement (landslip) deposits on BGS geological maps are primarily superficial deposits that have moved down slope under gravity to form landslips. These affect bedrock, other superficial deposits and artificial ground. The dataset also includes foundered strata, where the ground has collapsed due to subsidence.

### Artificial Ground and Landslip Map - Slice A



#### **Order Details:** Order Number: 156621353 1 1 Customer Reference: ADouce National Grid Reference: 172170, 43270 Slice: A 2.83 Site Area (Ha): Search Buffer (m): 1000 Site Details: Parc an Chy WTS, Scorrier Estates, REDRUTH, TR16 5AU Tel: Fax: 0844 844 9952 Landmark 0844 844 9951

v15.0 11-Feb-2018

www.envirocheck.co.uk



# Envirocheck®

#### **Superficial Geology**

Superficial Deposits are the youngest geological deposits formed during the most recent period of geological time, the Quaternary, which extends back about 1.8 million years from the present.

They rest on older deposits or rocks referred to as Bedrock. This dataset contains Superficial deposits that are of natural origin and 'in place'. Other superficial strata may be held in the Mass Movement dataset where they have been moved, or in the Artificial Ground dataset where they are of man-made origin.

Most of these Superficial deposits are unconsolidated sediments such as gravel, sand, silt and clay, and onshore they form relatively thin, often discontinuous patches or larger spreads.

Superficial Geology Map - Slice A



Order Details: Order Number: Customer Reference: National Grid Reference: Slice: Site Area (Ha): Search Buffer (m):	1566213 ADouce 172170, A 2.83 1000	53_1_1 43270		
Site Details: Parc an Chy WTS, Scorrier	Estates, RI	EDRUTH	ł, TR16 5AU	
	ć	Tel: Fax: Web:	0844 844 9952 0844 844 9951 www.envirocheck.co.uk	
v15.0 11-Feb-2018			Page 3	



# Envirocheck

LANDMARK INFORMATION GROUP\*

#### **Bedrock and Faults**

Bedrock geology is a term used for the main mass of rocks forming the Earth and are present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

The bedrock has formed over vast lengths of geological time ranging from ancient and highly altered rocks of the Proterozoic, some 2500 million years ago, or older, up to the relatively young Pliocene, 1.8 million years ago.

The bedrock geology includes many lithologies, often classified into three types based on origin: igneous, metamorphic and sedimentary.

The BGS Faults and Rock Segments dataset includes geological faults (e.g. normal, thrust), and thin beds mapped as lines (e.g. coal seam, gypsum bed). Some of these are linked to other particular 1:50,000 Geology datasets, for example, coal seams are part of the bedrock sequence, most faults and mineral veins primarily affect the bedrock but cut across the strata and post date its deposition.





Order Details: Order Number: Customer Reference: National Grid Reference: Slice: Site Area (Ha): Search Buffer (m):	156621353 ADouce 172170, 43 A 2.83 1000	_1_1 270		
Site Details: Parc an Chy WTS, Scorrier B	Estates, RED	RUTH	, TR16 5AU	
Landmark		Tel: Fax: Web:	0844 844 9952 0844 844 9951 www.envirocheck.co.	uk
v15.0 11-Feb-2018				Page 4 of



### Envirocheck

LANDMARK INFORMATION GROUP\*

### **Combined Surface Geology**

The Combined Surface Geology map combines all the previous maps into one combined geological overview of your site.

Please consult the legends to the previous maps to interpret the Combined "Surface Geology" map.

#### Additional Information

More information on 1:50,000 Geological mapping and explanations of rock classifications can be found on the BGS website. Using the LEX Codes in this report, further descriptions of rock types can be obtained by interrogating the 'BGS Lexicon of Named Rock Units'. This database can be accessed by following the 'Information and Data' link on the BGS website.

#### Contact

British Geological Survey Kingsley Dunham Centre Keyworth Nottingham NG12 5GG Telephone: 0115 936 3143 Fax: 0115 936 3276 email: enquiries@bgs.ac.uk website: www.bgs.ac.uk

#### **Combined Geology Map - Slice A**



# Order Details: Order Number: 156621353\_1\_1 Customer Reference: ADouce National Grid Reference: 172170, 43270 Slice: A Site Area (Ha): 2.83 Search Buffer (m): 1000 Site Details: Parc an Chy WTS, Scorrier Estates, REDRUTH, TR16 5AU Vencommerker Tet: Parc an Chy WTS, Scorrier Estates, REDRUTH, TR16 5AU

v15.0 11-Feb-2018

Page 5 of 5



# **Envirocheck**<sup>®</sup> LANDMARK INFORMATION GROUP\*

### Site Sensitivity





### **Envirocheck**<sup>®</sup> LANDMARK INFORMATION GROUP\*

### Water and Hydrology

### General

🔼 Specified Site C Specified Buffer(s) X Bearing Reference Point

### Flood

Extreme Flooding from Rivers or Sea without Defences (Zone 2)

Flooding from Rivers or Sea without Defences (Zone 3)



Area Benefiting from Flood Defence

Flood Water Storage Areas

--- Flood Defence

### Contours (height in meters)







### **Order Details**

Order Number: Customer Ref: National Grid Reference: 172170, 43270 Slice: Site Area (Ha): Search Buffer (m):

156621353\_1\_1 ADouce Α 2.83 1000

### Site Details

Parc an Chy WTS, Scorrier Estates, REDRUTH, TR16 5AU



0844 844 9952 0844 844 9951 www.envirocheck.co.uk





### **Envirocheck**<sup>®</sup> LANDMARK INFORMATION GROUP\* Water and Hydrology General Specified Site Specified Buffer(s) X Bearing Reference Point 8 Map ID **Historic Flood** Channel Capacity Exceeded (no raised defences) Obstruction/Blockage - Culvert Obstruction/Blockage -Debris Screen Groundwater/High Water Table Operational Failure/ Breach of Defence Local Drainage/Surface Water Mechanical Failure Other Overtopping of Defences Obstruction/Blockage - Bridge

💋 Unknown

### **Historic Flood - Slice A** A24 A20

-A13-

Obstruction/Blockage - Channel

Contours (height in meters)

167.8

Historical Flood Liabilities

Standard Contour \_\_\_\_\_\_\_\_

Master Contour

Spot Height



-MLW- Mean Low Water

-MHV = Mean High Water

**Order Details** 

Order Number: Customer Ref: National Grid Reference: 172170, 43270 Slice: Site Area (Ha): Search Buffer (m):

156621353\_1\_1 ADouce Α 2.83 1000

### Site Details

Parc an Chy WTS, Scorrier Estates, REDRUTH, TR16 5AU





0844 844 9952 0844 844 9951 www.envirocheck.co.uk



Aerial	Photo	- Slice	Α
--------	-------	---------	---



### **Envirocheck**<sup>®</sup> LANDMARK INFORMATION GROUP\*

### Site Location

### General



Specified Buffer(s)

X Bearing Reference Point

### Site Location - Slice A



### **Order Details**

Order Number: Customer Ref: National Grid Reference: 172170, 43270 Slice: Site Area (Ha): Search Buffer (m):

156621353\_1\_1 ADouce Α 2.83 1000

### Site Details

Parc an Chy WTS, Scorrier Estates, REDRUTH, TR16 5AU



Tel: Fax: Web: 0844 844 9952 0844 844 9951 www.envirocheck.co.uk



### OS VectorMap<sup>®</sup> Local Colour Raster version

© Crown copyright 2011

COMMUNICATIONS (TRANSPOR	RT)	LANDFORMS	
Depicted roads are not necessarily rights of w	ay		
	Motorway	Ornament	
	Colorado de la colorada de la colora	Inland rock	
	Primary road		
	Main road ('A' road)	Boulders	
	Secondary road ('B' road)	Shingle	
	Minor road		
	Local street	-75-7515151515151515151	Cliff
	Private road with public access	111111111	Large slopes
	Pedestrianised street		Standard stones
			Giange a sope
	Multiple track railway	Mud	Sand
	<ul> <li>Single track railway or siding</li> </ul>		
	Narrow gauge railway	Gravel pit	Sand pit
	Road or rail tunnel	Refuse tio r	r slan hean
		Neiuse up c	a sed neet
SETTLEMENT			
		POINT & LINE FEA	TURES
Building	Important building		
			General line detail
Glasshouse			Overhead detail
<u>x x xi</u>			Telephone line
	Overhead building line		Electricity transmission line
		Pylon	Liberrowy adhamasion mic
VEGETATION		Trisegulation at	tion
LOCIMINA		E Thangulation sta	nion
	E. Surrey Sells	· · Point features (F	or example Snans, Posts)
Broad-leafed woodland	Coniferous woodland	4. Site of antiqu	ity
Mixed woodland	Orchard		
		COMMON ABBRE	VIATIONS
Shrub	Unimproved grass	CG	Cattle orid
		Chy.	Chimney
Heathland	Marsh	Coll	, College
		El Sub Sta	Electricity sub station
Reeds		FB	Footbridge
		FI Sk.	Flare stack
		FS.	Flagstaff
		GP	Guide post
WATER FEATURES		LC	Level crossing
		LIDY	Memorial
the second s		MHWA	Mean high water (spontis)
Water (surface or tidal)		MLW(s)	Mean low water (springs)
		Mon	Monument
	Water	MP, MS	Mile post or stone
	Mean high water	NTL	Normal tidal water
	meaningh meter	PH	Public House
	Mean low water	PO	Post office
Direction of flow arrows		Pol Sta	Police Station
Encount of new arrows		PW	Place of worship
Water point features (for exar	nple Wells, Springs)	Sch	School
		Sta	Station
		Tk.	Tank or track
HEIGHT		W	Well
neight			
Surface heights are in metres above mean set	a level		

, som Height

















### OS Explorer Map / 1:25 000 Scale Colour Raster

### **Customer Information**

Additional data sourced from third parties, including public sector information licensed under the Open Government Licence v1.0

Whilst we have endeavoured to ensure that the information in this product is accurate, we cannot guarantee that it is free from errors and omissions, in particular in relation to information sourced from third parties

Reproduction in whole or part by any means is prohibited without the prior written permission of Ordnance Survey

Ordnance Survey, the OS Symbol, OS and Explorer are registered trademarks of Ordnance Survey, the national mapping agency of Great Britain

### Communications

### ROADS AND PATHS Not n

Not necessarily rights of way

Service area

EAL on A KIRAL

7

Junction number

Ett of Audit in	Motorway
A35	Dual carriageway
ASO	Main road
E \$174	Secondary road
	Narrow road with passing places
	Road under construction
	Road generally more than 4 m wide
	Road generally less than 4 m wide
	Other road, drive or track, fenced and unfenced
	Gradient: steeper than 20\% (1 in 5); $14\%$ (1 in 7) to 20% (1 in 5)
Ferry	Ferry; Ferry P - passenger only
<i>r 4</i>	Dath

### RAILWAYS

Multiple track Single track

ck gauge

Light rapid transit system (LRTS) and station

Road over; road under; level crossing

9

### PUBLIC RIGHTS OF WAY (Rights of way are not shown on maps of Scotland)

in the second second	Exclast
	Bridleway
+++++	Byway open to all traffic
*****	Restricted byway (not for use by mechanically propelled vehicles)

Public rights of way shown on this map have been taken from local authority definitive maps and later amendments.

Rights of way are liable to change and may not be clearly defined on the ground. Please check with the relevant local authority for the latest information The representation on this map of any other road, track or path is no evidence of the existence of a right of way

### OTHER PUBLIC ACCESS

• Other routes with public access (not normally shown in urban areas) The exact nature of the rights on these routes and the existence of any restrictions may be checked with the local highway authority. Alignments are based on the best information available

	+ 1	National Trail / 🚯 L	ong Distance Route		-	<b>Recreational Route</b>
-	inimite-	Permissive footpath	Footpaths and bridle landowners have pe	ways a	along v public	vhich use
-		Permissive bridleway	but which are not rig The agreement may	be with	way. hdrawn	τ.
*		Traffic-free cycle route				
1	National co	vole network	National c	ycle ne	twork	

### Scotland

In Scotland, everyone has access rights in law over most land and inland water, provided access is exercised responsibly. This includes walking, cycling, horse-riding and water access, for recreational and educational purposes, and for crossing land or water. Access rights do not apply to motorised activities, hunting, shooting or fishing, nor if your dog is not under proper control. The Scottish Outdoor Access Code is the reference point for responsible behaviour, and can be obtained at www.outdooraccess-scotland.com or by phoning your local Scottish Natural Heritage office. \*Land Reform (Scotland) Act 2003



National Trust for Scotland, always open / limited opening - observe local signs

Forestry Commission Land / Woodland Trust Land

### England & Scotland



Finng and test ranges in the area. Dangerl Observe warning notices Champs de tir et d'essai. Dangerl Se conformer aux avertissements Schiess und Erprobungsgelände. Gefahrl Warnschilder beachten Visit www.access.mod.uk for information

### ACCESS LAND

### England

Portrayal of access land on this map is intended as a guide to land which is normally available for access on foot, for example access land created under the Countryside and Rights of Way Act 2000, and land managed by the National Trust, Forestry Commission and Woodland Trust. Access for other activities may also exist. Some restrictions will apply; some land will be excluded from open access rights. The depiction of rights of access does not imply or express any warranty as to its accuracy or completeness. Observe local signs and follow the Countryside Code.

Visit www.countrysideaccess.gov.uk for up-to-date information

Access land boundary and tint



antilian

Station, open to passengers; siding,

Cutting; tunnel; embankment

Access land in woodland area

Access information point



Access permitted within managed controls for example, local byelaws Visit www.access.mod.uk for information

July 2012 © Crown copyright 2012. All rights reserved

Gen	eral Information	1	BOUNDARIES
		7	National
VECETA	TION	Anna and a first first	County (England)
VEGETA	Conference trace	South Orthout	Unitary Authority (UA), Metropolitan District (Met Dist), London Borough (LB) or District (Scotland & Wales are solely Unitary Authorities)
1 . I K	Collina das trees	Scrub Crickard	Civil Parish (CP) (England) or Community (C) (Wales)
V 0	Non-coniferous trees	Bracken, heath or rough grassiand	National Park boundary
	Coppice	Marsh, reeds or saltings	HEIGHTS AND NATURAL FEATURES
GENER	AL FEATURES	and the second second	52 - Ground survey height Air survey height Air survey height
4	Place of worship	Gravel pit Sand pit	Vertical face aliff
Current or to place of wor	schip i with tower ship i with spire, minaret or dome	Other pit Landfill site or	Contours may be at
	Building; important building	and the second and th	5 or 10 metres
1998	Glasshouse	BP/BS Boundary post/stone	vertical interval
*	Youth hostel	CG Cattle grid	Loose rock Boulders Outcrop Scree
	Bunkhouse/camping barn/other hostel	CH Glubhouse	Water Mid Fand and & chicale
	Bus or coach station	MP:MS Milenost: milestone	Water Mud Sand, sand & sningle
A A A	Lighthouse; disused lighthouse; beacon	Mon Monument	
T	Triangulation pillar; mast	PO Post office	ARCHAEOLOGICAL AND HISTORICAL INFORMATION
×	Windmill with or without sails	Pol Sta Police station	1
* *	Wind supported to be a	Sch School	The Site of antiquity VILLA Homan
1 1	wind pump; wind turbine	TH Town hall	<ul> <li>Non-Homan</li> <li>Velble earthwork</li> </ul>
pylon pole	Electricity transmission line	NTL Normal tidal limit	<ul> <li>visible earlieb lightings for England and the</li> </ul>
Intra a supervision a supervis	Slopes	W, Spr Well; spring	Royal Commissions on the Ancient and Historical Monuments for Scotland and Wales

### Selected Tourist and Leisure Information

RENSE	IGNEMENTS TOURISME ET LOISIRS SÉLECTIONNÉS	AUSGEWA	AHLTE INFORMATIONEN ZU TO	URISTIK UND F	REIZEITGESTALTUNG
P Par	Parking / Park & Ride, all year/seasonal Parking / Parking et navette, ouvert toute l'année/en saison Parkplatz / Park & Ride, ganzjährig/saisonal		Waiks/trails Promenades Wanderwege	*	Nature reserve Réserve naturelle Naturschutzgebiet
8 2	Information centre, all year/seasonal Office de tourisme, ouvert toute l'année/en saison Informationsbüro, ganzjährig/saisonal	1	Cycle trail Piste cyclable Radfahrweg	3	Fishing Pêche Angeln
V	Visitor centre Centre pour visiteurs Besucherzentrum		Mountain bike trail Chemin pour VTT Mountainbike-Strecke	*	Other tourist feature Autre site intéressant Sonstige Sehenswürdigkeit
	Forestry Commission visitor centre Commission Forestiëre: Centre de visiteurs Staatsforst Besucherzentrum	66	Cycle hire Location de vélos Fahrradverleih	+	Cathedral/Abbey Cathédrale/Abbaye Kathedrale/Abtei
PC	Public convenience Toilettes Öffentliche Toilette	U	Horse riding Equitation Reitstall	圇	Museum Musée Museum
	Telephone, public/roadside assistance/emergency Téléphone, public/borne d'appel d'urgence/urgence Telefon, öffentlich/Notrufsäule/Notruf	312	Viewpoint Point de vue Aussichtspunkt	-	Castle/fort Château/Fortification Burg/Festung
4.9	Camp site /caravan site Terrain de camping /Terrain pour caravanes Campingplatz /Wohnwagenplatz	×	Picnic site Emplacement de pique-nique Picknickplatz	#	Building of historic interest Bätiment d'intérêt historique Historisches Gebäude
1	Recreation/leisure/sports centre Centre de détente/loisirs/sports Erholungs-/Freizeit-/Sportzentrum	Ŵ	Country park Parc naturel Landschaftspark	RC	Heritage centre Centre d'héritage Heimatmuseum
٢	Golf course or links Terrain de golf Golfplatz	20	Garden/arboretum Jardin/Arboretum Garten/Baumgarten	2	National Trust
			And the fight to		

4

4

4



B

P

Theme/pleasure park Parc à thèmes/Parc d'agrément Vergnügungs-/Freizeitpark



Preserved railway Chemin de fer touristique Museumseisenbahn



Craft centre Centre artisanal Zentrum für Kunsthandwerk

July 2012 Crown copyright 2012. All rights reserved Jeux aquatiques Wassersport

Slipway Cale Helling

Boat trips Croisières en bateau Bootsfahrten

Boat hire Location de bateau Bootsverleih

English Heritage

Ġ.

Historic Scotland





Home » Our data » OpenGeoscience » BGS Lexicon of Named Rock Units » Result Details

# The BGS Lexicon of Named Rock Units — Result Details

### Porthtowan Formation

Computer Code:	POAN	Preferred Map Code:	Ptn					
Status Code:	Full	,						
Age range:	Age range: Eifelian Age (DI) — Frasnian Age (DR)							
Lithological Description:	jical Interbedded slaty mudstone, grey and grey-green, and sandstone. Subordinate sandstone beds are up to 2m thick, typical turbidites.							
Definition of Lower Boundary:	nition of Transition above Grampound Formation of Meadfoot Group.							
Definition of Upper Boundary:	Transition with Mylor Slate Format	ion.						
Thickness:	2.8km							
Geographical Limits:	Geographical West Cornwall. Limits:							
Parent Unit:	Gramscatho Group (GRO)							
Previous Name (s):	Gramscatho Beds (-2375)							
Alternative Name (s):	Iternative Name none recorded or not applicable s):							
Stratotypes:								
Type Section Coastal section, West Cornwall, north-eastwards from Hells Mouth.								
Reference(s):								
Hill. J B and MacCallister, D A, 1906. Memoir of the Geological Survey, Sheet 352 (England and Wales).								
Hendriks, E M L, 1937. Rock Succession and structure in South Cornwall, a revision. With notes on the central European facies and Variscan folding there present. Quarterly Journal of the Geological Society, London, Vol.93, 322-360.								
Hendriks, E M L, 1949. The Gramscatho Series. Transactions of the Royal Geological Society of Cornwall, Vol.18, 50-61.								
Leveridge, B E, Holder, M T and Goode, A J J, 1990. Geology of the country around Falmouth. Memoir of the British Geological Survey, Sheet 352 (England and Wales).								
Hendriks, E M L, 1931. The stratigraphy of South Cornwall Report of the British Association for 1930, 332 et seq.								

1:50K maps on which the lithostratigraphical unit is found, and map code used:

E352

• Another Query ?

### SITE CONDITION REPORT

### **Andrew Douce**

### **Parc-an-Chy Waste Transfer Station**

### **Inert Processing**

For full details, see H5 SCR guide for applicants v2.0 4 August 2008

**COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION** 

**DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7** 

AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION.

1.0 SITE DETAILS	
Name of the applicant	Andrew Douce
Activity address	Land adjacent to Parc-an-Chy Mine Scorrier Estates, Redruth, Cornwall TR16 5AU
National grid reference	NGR SW72178 43274
Document reference and dates for Site Condition Report at permit application and surrender	A waste management licence (No. 20016) for the current WTS was issued by the Environment Agency (EA) in December 1999
	variation to bespoke Permit March 2018
Document references for site plans (including location and boundaries)	See Appendix C of Management System

### 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	e land at permit issue
Environmental setting including:	Geology zones (Porthtowan Formation, mudstone and sandstone (POAN)),
<ul><li>geology</li><li>hydrogeology</li><li>surface waters</li></ul>	Interbedded slaty mudstone, grey and grey-green, and sandstone. Subordinate sandstone beds are up to 2m thick, typical turbidites.
	Groundwater is classified as a minor/secondary A aquifer
Pollution history including:	No pollution history/incidence documented
<ul> <li>pollution incidents that may have affected land</li> <li>historical land-</li> </ul>	

uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures	
Evidence of historic contamination, for example, historical situ investigation, assessment, remediation and verification reports (where available)	<ul> <li>Parc-an-Chy was originally a tungsten mine which closed after the end of the First World War: the old mine chimney is still present on the southern boundary to the site. The permit area lies within the Cornwall and West Devon Mining Landscape World Heritage Site. The surrounding landscape is a mosaic of agricultural land, mixed plantation, broadleaved semi-natural woodland and scrub vegetation.</li> <li>T.H. Douce &amp; Sons commenced business in 1976 as a tipper haulage company, which subsequently operated a small landfill site at Parcan-Chy as a means of disposing of inert wastes.</li> <li>A waste management licence for landfilling at the Parc-an-Chy site was first issued in 1993 (WML No. 20523). Operations were conducted in three Phases:</li> <li>Phase 1 (1993 to 1997): The southernmost section, making safe collapsed former mining area;</li> <li>Phase 3 2000 to 2005: creation of an earth bund on agricultural land on the western boundary to the WTS for visual and noise screening (restored to semi-improved grassland).</li> </ul>
Baseline soil and groundwater reference data	NONE - PERMIT ISSUED DECEMBER 1999 and no baseline data requested
Supporting information	<ul> <li>Source information identifying environmental setting and pollution incidents</li> <li>Historical Ordnance Survey plans</li> <li>Site reconnaissance</li> <li>Historical investigation / assessment / remediation / verification reports</li> <li>Baseline soil and groundwater reference data</li> </ul>

3.0 Permitted activities	
Permitted activities	A waste management licence (No. 20016) for the current WTS was issued by the Environment Agency (EA) in December 1999
	Variation to Bespoke Permit March 2018
Non-permitted activities undertaken	Storage and sale of primary aggregates
<ul> <li>Document references for:</li> <li>plan showing activity layout; and</li> <li>environmental risk assessment.</li> </ul>	See Appendix C_of Management System & Appendix I of Management Plan for 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 a	ctivity	
Have there been any boundary?	changes to the activity	Variation to Bespoke Permit March 2018 is to increase the permit boundary and the annual throughput and storage of waste, plus updating to LoW.
Have there been any activities?	changes to the permitted	No. Use of a crusher was not specified in the original permit: one has been in use at the site since the WML was first issued. Crusher has been added to the list of accepted processes
Have any 'dangerous su the Application Site Con produced as a result of t	No	
Checklist of supporting information	<ul> <li>Plan showing any changes</li> <li>Description of the change relevant)</li> <li>List of 'dangerous sul permitted activities that w Site Condition Report (who</li> </ul>	s to the boundary (where relevant) es to the permitted activities (where ostances' used/produced by the rere not identified in the Application ere relevant)

### 5.0 Measures taken to protect land

Only inert waste accepted and processed. Non-conformance waste stored in container. Fuel/lubricants etc. stored in bunded containers on drip trays in storage building. Site plant maintained regularly. Site enclosed by vegetated earth bunds functioning as SUDs.

Checklist	of	•	Inspection records and summary of findings of inspections for all pollution
supporting			prevention measures
information		•	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			
None recorded			
Checklist	of	•	Records of pollution incidents that may have impacted on land
supporting information		•	Records of their investigation and remediation

7.0 Soil gas and water quality monitoring (where undertaken)					
None required by permit					
Checklist of supporting information	<ul> <li>Description of soil gas and/or water monitoring undertaken</li> <li>Monitoring results (including graphs)</li> </ul>				

### 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	•	Site closure plan
supporting	•	List of potential sources of pollution risk
information	•	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	•	Land and/or groundwater data collected at application (if collected)
supporting		•	Land and/or groundwater data collected at surrender (where needed)
information		•	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.



DRAWINGS



### wardell-armstrong.com

### STOKE-ON-TRENT

Sir Henry Doulton House Forge Lane Etruria Stoke-on-Trent ST1 5BD Tel: +44 (0)1782 276 700

### BIRMINGHAM

Two Devon Way Longbridge Technology Park Longbridge Birmingham B31 2TS Tel: +44 (0)121 580 0909

#### BOLTON

Aspinall Way Middlebrook Bolton BL6 6SU Tel: +44 (0)1204 227 227

#### BRISTOL

Temple Studios Temple Gate Redcliffe Bristol BS1 6QA Tel: +44 (0)117 203 4477

### **BURY ST EDMUNDS**

Armstrong House Lamdin Road Bury St Edmunds Suffolk IP32 6NU Tel: +44 (0)1284 765 210

#### CARDIFF Tudor House 16 Cathedral Road Cardiff CF11 9LJ Tel: +44 (0)292 072 9191

CARLISLE Marconi Road Burgh Road Industrial Estate Carlisle Cumbria CA2 7NA Tel: +44 (0)1228 550 575

#### EDINBURGH Great Michael House 14 Links Place Edinburgh EH6 7EZ Tel: +44 (0)131 555 3311

GLASGOW 24 St Vincent Place Glasgow G1 2EU Tel: +44 (0)141 428 4499

#### **LEEDS** 36 Park Row Leeds LS1 5JL Tel: +44 (0)113 831 5533

### **LONDON** Third Floor

46 Chancery Lane London WC2A 1JE Tel: +44 (0)207 242 3243

### NEWCASTLE UPON TYNE

City Quadrant 11 Waterloo Square Newcastle upon Tyne NE1 4DP Tel: +44 (0)191 232 0943

### TRURO

Baldhu House Wheal Jane Earth Science Park Baldhu Truro TR3 6EH Tel: +44 (0)187 256 0738

### International office:

ALMATY 29/6 Satpaev Avenue Hyatt Regency Hotel Office Tower Almaty Kazakhstan 050040 Tel: +7(727) 334 1310

