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RIG SCORRIER LIMITED

PARC-AN-CHY WASTE FACILITY

DUST EMISSIONS MANAGEMENT PLAN

JUNE 2024

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DUST EMISSIONS MANAGEMENT PLAN

JUNE 2024

PREPARED BY:

Jack Piercy Mineral Surveyor



REVIEWED BY:

Dominiqua Drakeford-Allen
Principal Waste and Resources Consultant



APPROVED BY:

Alison Cook Technical Director



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DRAWINGS

Drawing No.	Drawing Title	Scale
NT16545-001	Receptor Plan	1:17,000 @ A3

1 DUST EMISSIONS MANAGEMENT PLAN

1.1.1 RIG Scorrier Limited (“RIG”) have commissioned Wardell Armstrong to prepare this Dust and Emissions Management Plan for their waste management facility in Scorrier, Redruth.

1.1.2 The Site currently operates under an environmental permit (permit reference EPR/DP3892HD), as a waste transfer station accepting non-hazardous wastes suitable for treatment to produce soils, soil substitutes and aggregates. RIG’s intention is to vary the permit to increase the throughput from the current limit of 75,000 tonnes per year to 350,000 tonnes per year and install a state-of-the-art wash plant designed to treat a wide range of soils, stones and aggregate wastes. In addition, there will be a small secure asbestos waste storage compound installed on the Site.

1.1.3 The Site is located on the land adjacent to Parc-an-Chy Mine just off Treskerby Road in Scorrier, Redruth. The Site is located approximately 1.5 km south of Scorrier town and 2.4 km northeast of Redruth town centre. The full Site address is Recycle It Global Scorrier, Scorrier, Redruth, TR16 5AU. The National Grid Reference (NGR) for the Site is SW 72185 43281.

1.1.4 The purpose of this Dust Emissions Management Plan (DEMP) is to set out the potential sources of dust emissions from the on-site activities, describe the mitigation and control measures which will be in place to ensure that the activities will be undertaken whilst ensuring dust, mud and other particulate debris are controlled, removed and prevented where possible. The aim of this DEMP is to ensure there are no adverse releases of dust during the operation of the facility.

1.1.5 This DEMP considers the day-to-day operations and all foreseeable circumstances of the facility’s undertakings (e.g. adverse meteorological conditions) which may exacerbate dusty conditions at the Site. This DEMP includes:

- Consideration and identification of all activities capable of generating dust at the Site including a Conceptual Source-Pathway-Receptor Model;
- Identification of all sensitive receptors located nearby which have the potential to be impacted by dust emissions should no control measures be implemented; and
- Site and activity specific mitigation measures.

1.1.6 The DEMP has been prepared in line with the following Guidance:

- Environment Agency – Control and Monitor Emissions for your Environmental Permit; and
- Institute of Air Quality Management, 2014. Guidance on the Assessment of Dust from Demolition and Construction.

2 SENSITIVE RECEPTORS

- 2.1.1 The Site is located in a predominantly rural area with the closed Parc-An-Chy Landfill located to the south of the site, which is part of RIG's portfolio of waste Sites.
- 2.1.2 Woodland is adjacent to the north and east of the site. Parts of this woodland are designated as priority habitat deciduous woodland, the closest point being 20m from the Site. Further to the northeast is an area of protected habitat wood pasture and parkland, 275m from the Site.
- 2.1.3 A recreational paintball centre is located to the north-west of the Site.
- 2.1.4 The nearest residential receptors are located on Treskerby Road, approximately 280m to the west of the Site.
- 2.1.5 Table 2.1 below lists the potentially sensitive receptors within 500m of the Site boundary. Dust entrained in the atmosphere will often deposit within 100m of the source. The IAQM guidance document recognises dust can deposit up to 350m (specified in Construction Guidance) and 400m (specified in the Quarry Guidance). By 500m, it is expected any airborne dust will have dispersed and deposited before arriving at the sensitive receptor.
- 2.1.6 Drawing NT16545-001 provides a receptor plan for the Site, showing sensitive receptors within 2km of the Site boundary.
- 2.1.7 The Site is not located within an existing Air Quality Management Area (AQMA), nor within 2km of an AQMA for PM10.

Table 2.1: Sensitive Receptors Located within 500m of the Site Boundary

Receptor	Receptor Type	Location (NGR)	Distance and Direction from Site
Decidious Woodland Priority Habitat	Habitat		20m E
Properties on Treskerby Road	Residential	SW 7175 4343	250m W
Woodland and Parkland Priority Habitat	Habitat		275m NE
Well House	Residential	SW 7265 4329	389m E
Fourburrow Yard	Residential	SW 7263 4330	445m E
Four Barrow House	Residential	SW 7276 4331	474m E
Fourburrow Cottage	Residential	SW 7265 4320	485m E
Woodfield House	Residential	SW 7270 4353	489m NE
Scorrier and Bryher House	Residential	SW 7252 4378	498m NE
Scorrier House Workshops	Commercial	SW 7237 4371	477m NNE
Tank Trax Activity Centre (including paintballing)	Commercial	SW 7190 4362	448 NNW
Treskerby Farm Pond	Surface Water	SW 7184 4303	392m SW

2.1.8 There are two European Protected Sites within 2km of the Site, Wheal Gorland (1,085m southeast) and West Cornwall Bryophyte SSSI (1,675m to the east). The impact of dust on both Wheal Gorland and West Cornwall Bryophyte SSSI Sites is considered to be negligible given the proximity to the waste facility, as they are over 1 km it is highly unlikely that any dust arising at the Site will travel this far. In addition, the Wheal Gorland SSSI is a geologically designated site, in which the risk from dust would have no adverse impact.

2.2 Prevailing Conditions

2.2.1 A review of long term average wind direction data available from the Met Office at the nearest available location to the Site, Plymouth Mount Batten, indicates the prevailing wind direction is from the southwest.

2.2.2 Figure 1a below, from the Met Office report, provides a wind rose summarising this data. Figure 1b shows the wind rose available on Willy Weather website for Scorrier, and shows annual data over a five year average.

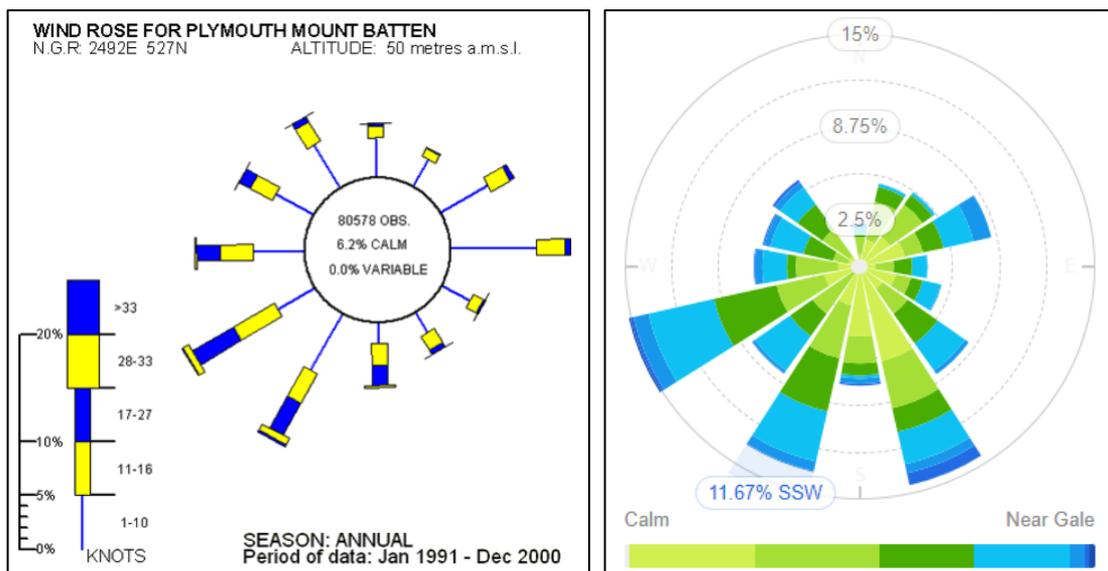


Figure 1a (left) Wind Rose for Plymouth Mount Batten, from Met Office WebSite¹

Figure 1b (right) Wind Rose showing annual (5 year average) wind direction and wind strength²

2.2.3 Therefore the prevailing wind direction is considered to be from the south west.

2.3 Source-Pathway-Receptor Conceptual Model

2.3.1 A conceptual model has been developed to summarise the potential sources of dust, the nearby receptors and the pathway from the source to the receptor, and the control measures required to either break the pathway or prevent dust generation at source.

2.3.2 Table 2.2 below provides a conceptual source-pathway-receptor model identifying the likely dust risk to sensitive receptors.

¹ [south-west-england -climate-met-office.pdf \(metoffice.gov.uk\)](https://south-west-england-climate-met-office.pdf)

² <https://wind.willyweather.co.uk/sw/cornwall/scorrier.html>

Table 2.1: Source-Pathway-Receptor Conceptual Site Model

Source	Pathway	Receptor	Control Measure
Open air stockpiles of wastes	Airbourne Wind whipping of dusty materials	Local residents, nearby habitats	Minimising the stockpiling of material as far as possible Dampening of dry material with water
Vehicle Movements	Airborne Tracked out of the Site by vehicles	Local residents, nearby habitats	Maintain clean surfaces Dampening or sweeping of Site roads where necessary Cleaning vehicles as needed
Unloading/loading of materials	Airbourne Wind whipping of dusty materials	Local residents, nearby habitats	Maintaining minimum drop heights Dampening where necessary
Fugitive Emissions	Airbourne Wind whipping of dusty materials	Local residents, nearby habitats	Dampening where necessary Maintaining Site plant and equipment

3 POTENTIAL DUST SOURCES

- 3.1.1 The Site will handle and treat a variety of waste soils and aggregates to enable the recycling of aggregates to produce recycled aggregate products. The wastes which the Site will accept include soils, stones, aggregates
- 3.1.2 The waste will be physico-chemically treatment via washing through a wash plant. The treatment process is a wet process, and therefore the greatest risk of dust prior to treatment though the handling, movement and storage of the wastes.
- 3.1.3 Aggregate materials will be stockpiled and stored on Site. In addition, there will be a secure compound designated for the storage of wastes containing asbestos. This will be within two covered and sealed containers and all asbestos materials will arrive double bagged.
- 3.1.4 There are no point source emissions to air from any of the processes undertaken on Site; all water is recycled within the treatment process and the treatment process is enclosed. Any potential dust emissions generated by the activities will be fugitive in nature. There is a point source emission of wash waters associated with the washing of inert wastes which will emit to a ditch located to the south of the Site.
- 3.1.5 Emissions to air may arise from the following activities on Site:
- Vehicle movements, both in and outbound from trucks and movement from mobile plant;
 - Loading and unloading of materials from trucks and mobile plant;
 - Storage and stockpiles of waste, soils and aggregates;
 - Processing and treatment of waste soils in the soil washing facility in dry phase.

4 MITIGATION MEASURES

4.1 Introduction

4.1.1 RIG will implement a range of dust control measures on Site, to prevent and minimise fugitive dust emissions as far as possible. The remainder of this section outlines the dust control and suppression measures to be implemented.

4.2 Site Management and Site Inspections

4.2.1 The Facility Manager (or another appointed member of personnel) shall carry out as minimum weekly visual inspection of the working areas of the Site and outside the entrance. The visual inspection shall consider, as a minimum, the following:

- Current dust generating activities (upon identifying dust generation, additional mitigation will be employed as necessary);
- Access route to ensure mud and debris is not being tracked out of the Site onto the surrounding roads/tracks (Treskerby Road, A3047);
- Ensuring employees are carrying out the actions outlined in this DEMP; and

4.2.2 The results of the visual inspection shall be recorded in an Environmental Logbook which will be kept on Site at all times. The logbook will be made available to the Environment Agency upon request. The Logbook can be adapted for all visual inspections required and a specific 'dust inspection sheet' will be completed and included.

4.2.3 Information which should be recorded in the Logbook includes the date, time, signature of inspector, meteorological conditions and the results of the visual checks and actions taken if necessary, and any information relating to dust management implemented that differs from day-to-day operation.

4.2.4 During operational hours, an awareness of meteorological conditions will be maintained. Prolonged dry periods and moderate to high winds can increase dust generation which may then become airborne and be carried on the prevailing winds. Dust management will be adjusted to suit the prevailing conditions.

4.2.5 Contact details for emergency third party contractors (e.g. road sweeper hire, mobile water bowser hire) will be set out in the Logbook, ensuring additional measures can be put in place quickly where required.

4.2.6 In the event of equipment failure that is vital to the dust suppression, replacement equipment will be sourced promptly, and maintained on Site until such time that the equipment is repaired or replaced.

4.2.7 There will be a Site wide speed limit set at 10 mph for all waste delivery and aggregate collection vehicles.

4.3 Waste Storage

4.3.1 Stockpiles shall be compacted, shaped where possible and dampened periodically to ensure the risk of dust generation and transportation from the materials bays is low.

4.3.2 Where possible, stockpiles will also be orientated to be sympathetic to prevailing wind conditions, again minimising surface exposure to strong gusts and wind whipping.

4.3.3 Asbestos and hazardous wastes will be stored within separately designated sheltered compounds, preventing wind ingress and potential wind whipping of particulate matter.

4.4 Waste and Material Loading and Unloading

4.4.1 Wherever possible, loading and unloading of wastes and processed materials will take place in sheltered areas of the Site and around stockpiles to prevent the entrainment of dust in the wind.

4.4.2 Drop heights will be minimised where possible and consideration given to postponing material loading and unloading under excessively windy conditions to minimise generation of dust emissions.

4.4.3 Material will be placed as soon as possible under any conditions to ensure minimal dust mobilisation, with double handling of materials minimised where possible and avoiding any temporary storage as much as is possible.

4.4.4 Where temporary stockpiles are required for on-site activities, materials will be shaped to be stable to avoid undue generation of dusty emissions.

4.4.5 In the event that any stockpiles are identified as generating dust sources, alternative measures will be reviewed to find a solution to reduce or suppress generation of dust material arising.

4.5 Waste Soils Treatment

4.5.1 Once the waste feedstock has been fed into the wash plant, the washing treatment stages will be enclosed and will require the addition of water to the process, resulting

in minimal generation of dusty material to be emitted from the process. Wastes from the process will be in the form of wash waters and a sludge which is then pressed into a compacted filter cake. These outputs are not expected to generate fugitive emissions of dust.

4.5.2 The processed aggregates will be stored in product bays at the north of the Site, awaiting dispatch. The bays are designated according to the product type and as far as possible the material within each bay will be stored 0.5m below the top of the bay walls to prevent wind whipping.

4.6 Water Suppression

4.6.1 The Site is supplied by a mains water supply which will be utilised where required for dust suppression. Water will be supplied via a hose/bowser where required to dampen down stockpiles, haul routes, access routes and the processing areas.

4.6.2 Dampening activities may be required during unloading and movement to storage areas. Visual inspections shall inform when and whether these dampening activities are required.

4.6.3 Stockpiles will be dampened as and when necessary to reduce dust generation.

4.6.4 Continuous water suppression across the Site is not deemed to be necessary due to the low risk identified. Suppression should be used as and when dust is visually seen in the airflow.

4.7 Road Surfaces and Cleanliness

4.7.1 The concrete surfaces present on Site shall be maintained and kept in good repair.

4.7.2 The access route shall be monitored weekly or as required by Site personnel and be kept in a clean state and deposits of mud and dust shall be removed.

4.8 General Mitigation and Maintenance

4.8.1 The following general measures shall be implemented at the Site:

- Laden vehicles will be sheeted prior to entering and leaving the Site;
- Drop heights from loading/unloading activities will be minimised. This applies to inbound/outbound vehicles and mobile plant;
- Plant, equipment and seals will be checked regularly to ensure they are in full working order, defective equipment which may give rise to fugitive emissions will be repaired or replaced as soon as possible;

- Plant and machinery shall not be left running unnecessarily;
- Dry sweeping of large areas will be avoided.

4.9 Complaints

- 4.9.1 In the event that any complaints are received, details of the complaint will be recorded in the Environmental Logbook and potential sources or occurrences on Site will be investigated. Records of all complaints and remedial action taken shall be recorded in the Logbook.
- 4.9.2 The results of the complaint investigation and the measures taken to resolve the complaint will be made available to the Environment Agency upon request.
- 4.9.3 Additional mitigation will be employed as and when necessary to resolve the complaint(s).
- 4.9.4 Any complaints received will be recorded and investigated in accordance with Recycle It Global's Environmental Management System and working procedures. Outcomes will be reviewed by Site management and fed into Site management plans such as this DEMP, as appropriate to ensure ongoing improvement to minimising risks from the activities on Site.

4.10 Distribution and Training

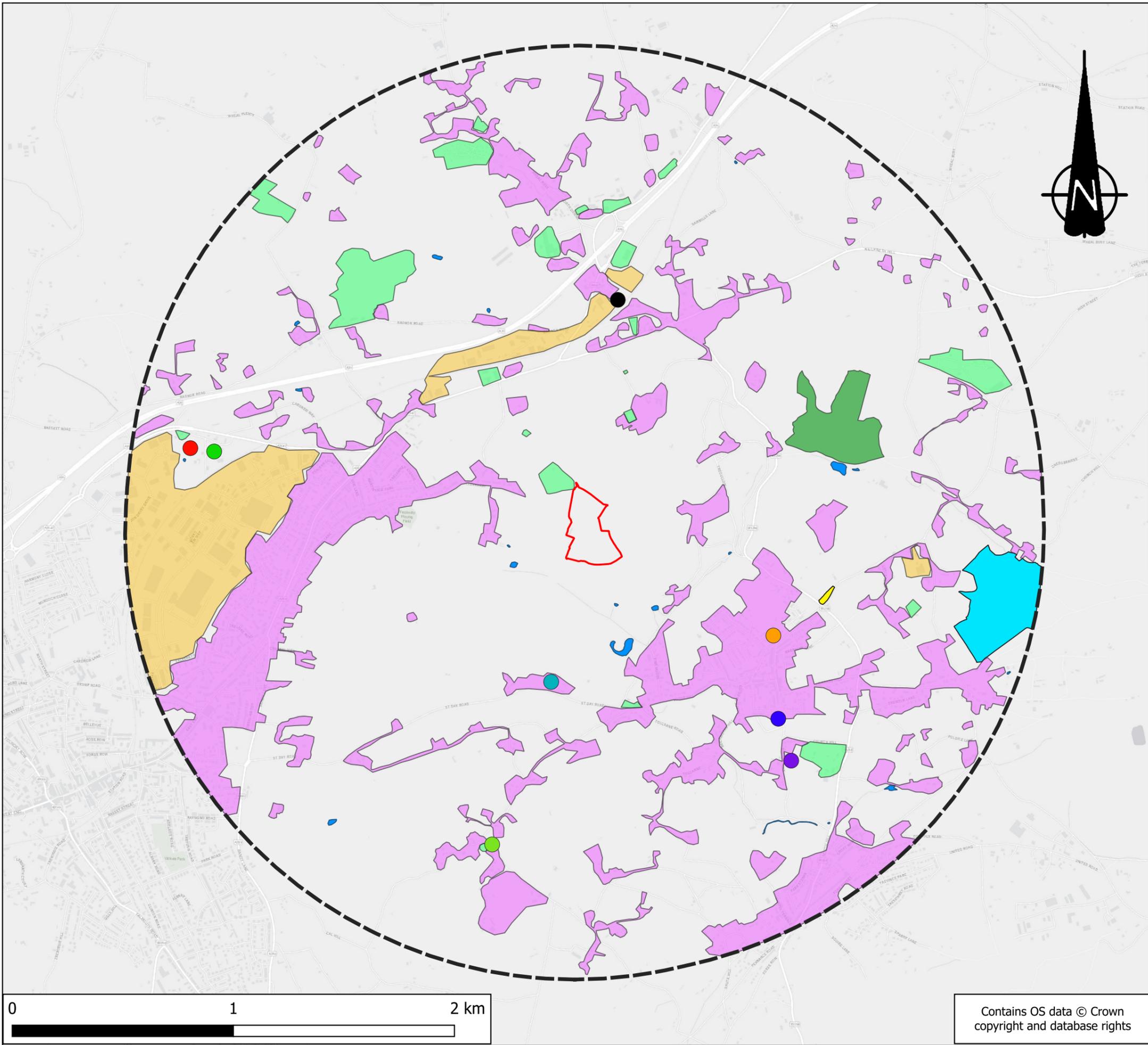
- 4.10.1 A physical copy of the DEMP will be kept on Site at all times and made available to employees. A digital copy will also be held at the head office. The DEMP shall be made available to the Environment Agency upon request.
- 4.10.2 The Site manager will ensure each employee and subcontractor at and/or arriving to the Site are familiar with the control measures and procedures outlined in this plan and are aware of their individual role in reducing dust emissions.
- 4.10.3 Personal protective equipment shall be provided as necessary for employees and visitors.
- 4.10.4 Upon arrival at the Site and/or beginning of employment the employee will be trained to carry out the mitigation actions required of their role. The training will make the employee aware of the wider dust management controls active at the Site. Suitable training may include a Site-specific toolbox talk and annual refresher sessions.

4.11 Review and Responsibility

4.11.1 The DEMP will be reviewed by the Site Manager annually. New versions of the DEMP will be issued as and when necessary, with mitigation and/or operational changes outlined. The version history shall be updated each time.

4.11.2 It is the responsibility of the Operator and the Site Manager to ensure the DEMP is enforced and that all employees are suitably trained. Failure to do so could result in adverse environmental conditions and enforcement by the Environment Agency.

DRAWINGS



Key

- Site Boundary
- 2km BOUNDARY OFFSET FROM SITE
- West Cornwall Bryophyte SSSI
- Wheal Gorland SSSI
- Commercial Receptors
- Industrial Receptors
- Residential Receptors
- Unity Wood
- Surface Water

- Community Receptors**
- Scorrer Methodist Church
- St Stephen's Church
- Treleigh Community Primary School
- Busveal Methodist Church
- St Day and Carharrack Community Primary School
- St Day Holy Trinity Churches
- St Day Methodist Church
- Trefula House Nursing Home

CLIENT

RECYCLE IT GLOBAL LIMITED

PROJECT

SCORRIER PERMIT VARIATION

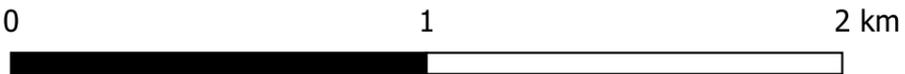
DRAWING TITLE

RECEPTOR PLAN

DRG No. NT16545-001	REV: A
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DRG SIZE: A3	SCALE: 1:17,000	DATE: March 2024
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DRAWN: JP	CHECKED BY: DDA	APPROVED BY: CR
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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

41-50 Futura Park
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