DUST MANAGEMENT PLAN

Edgehill Quarry, Edgehill, Banbury, OX15 6DH

Boddington Demolition Limited

Version:	1.0	Date:	25 June 2024		
Doc. Ref:	043-007-H	Author(s):	IA Checked: BD		BDL
Client No:	043	Job No:	007		



Oaktree Environmental Ltd

Waste, Planning & Environmental Consultants



Oaktree Environmental Ltd, Lime House, 2 Road Two, Winsford, Cheshire, CW7 3QZ

Tel: 01606 558833 | Fax: 01606 861183 | E-Mail: sales@oaktree-environmental.co.uk | Web: www.oaktree-environmental.co.uk

REGISTERED IN THE UK | COMPANY NO. 4850754

Document History:

Version	Issue date	Author	Checked	Description
1.0	25/06/2024	IA	DY	Document issue

CONTENTS

DOCU	MENT HISTORY:	I
CONTE	NTS	II
LIST OF	F TABLES	IV
LIST OF	F APPENDICES:	V
1	INTRODUCTION	1
1.1	SITE HISTORY / BACKGROUND	1
1.2	SITE LOCATION	
1.3	FACILITY OVERVIEW	
1.4	POTENTIAL SOURCES OF DUST EMISSION	
	SENSITIVE RECEPTORS	
2.1	RECEPTOR PLAN	4
2.2	LIST OF RECEPTORS.	
2.3	OTHER DUST AND EMISSION SOURCES	
	SITE OPERATIONS	
3.1	WASTE DELIVERIES/REMOVALS	
3.2	MATERIAL WITH DUST POTENTIAL	
3.3	OVERVIEW OF SITE OPERATIONS	
3.4	MOBILE PLANT AND EQUIPMENT	
3.5	Prevailing Meteorological Conditions	
4	DUST MANAGEMENT & CONTROL MEASURES	
4.1	RESPONSIBILITY FOR IMPLEMENTATION OF THE DMP	9
4.2	Sources of fugitive dust/emissions	9
4.3	CONTROL MEASURES (STAFF TRAINING/DAILY INSPECTIONS)	
4.4	Control measures (boundary/containment)	. 11
4.5	CONTROL MEASURES — SITE SURFACING	
4.6	CONTROL MEASURES — SITE SURFACES AND VEHICLE MOVEMENTS	. 12
4.7	CONTROL MEASURES – SITE SUPPRESSION	
4.8	CONTROL MEASURES — WATER SUPPLY	
4.9	CONTROL MEASURES – INFILLING	
_	CONTROL MEASURES – STORAGE OF WASTE	
	CONTROL MEASURES — VEHICLE MOVEMENTS AND PLANT	
	CONTROL MEASURES - LOADING AND UNLOADING VEHICLES	
4.13	CONTROL MEASURES – STANDARD PRACTICE / TRIGGERS	. 16
5	DUST MANAGEMENT RISK ASSESSMENT MODEL	17
5.1	FUNDAMENTAL CONSIDERATIONS	. 17
5.2	Pathway	. 17
5.3	Consequences	. 17
5.4	EFFECTS OF CONSEQUENCES	
5.5	RISK ESTIMATION AND EVALUATION (PROBABILITY/FREQUENCY OF OCCURRENCE OF HAZARD)	. 18
5.6	RISK ASSESSMENT OUTCOME (COMBINATION OF PROBABILITY & CONSEQUENCE)	
5.7	RISK ASSESSMENT TABLE	. 20
6	MONITORING AND CONTINGENCY MEASURES	32

6.1	Monitoring and recording	32
7	ACCIDENTS AND EMERGENCIES (CONTINGENCY MEASURES)	35
7.1	ACCIDENT AND EMERGENCY	35
7.2	STAFF SHORTAGES	35
7.3	INCLEMENT WEATHER CONDITIONS	35
7.4	OPERATIONAL FAILURE	37
7.5	Unauthorised people entering site	37
7.6	Breakdown in procedures	37
7.7	Liaison with N eighbours	38
8	ACTIONS WHEN COMPLAINTS ARE RECEIVED	39
8.1	COMPLAINTS PROCEDURE	39
8.2	COMPLAINTS RECORDING	

List of Tables

Table A – Distances to Selected, Representative Sensitive Locations	4
Table D – Consequences	
Table E – Potential effects	
Table F – Likelihood	18
Table G – Risk assessment outcome	19
Table H – Source, pathway, receptor, abatement tables	

List of Appendices:

Appendix I - Drawings

Drawing No. 043-007-01 – Permit Boundary Plan

Drawing No. 043-007-03 – Sensitive Receptors Plan

Appendix II - Complaints Recording Form

Appendix III - Dust Monitoring Form

1 <u>Introduction</u>

1.1 Site history / background

- 1.1.1 Oaktree Environmental Ltd have been instructed by Boddington Demolition Limited to prepare a Dust Management Plan (DMP) for their site situated at Edgehill Quarry, Edgehill, Banbury, OX15 6DH.
- 1.1.2 All references to the site in this DMP shall mean the permit boundary area, as shown by drawing no. 043-007-01.
- 1.1.3 This DMP will allow Boddington Demolition Limited to implement an action plan should the site operatives detect the presence of airbourne dust escaping beyond the site boundary, receive complaints from local business or residents and should the EA suspect dust emissions from the site during an inspection.
- 1.1.4 The DMP has been prepared in accordance with the EA guidance 'Control and monitor emissions for your environmental permit'.

1.2 <u>Site location</u>

- 1.2.1 The site is located at Edgehill Quarry, Edgehill, Banbury, OX15 6DH.
- 1.2.2 The site is not located within an Air Quality Management Area (AQMA) area.

1.3 <u>Facility overview</u>

- 1.3.1 The site consists of a former limestone quarry. Prior to the commencement of quarrying activities in the 1950s the site was underdeveloped. Quarrying activities have ceased, and quarry waste has been screened at the site since 2017.
- 1.3.2 Planning permission for the infilling of a redundant quarry with inert soils and clays to include a temporary soils and aggregates recycling and recovery facility and the restoration

of the quarry to provide 10 recreational Ecopods was issued by Warwickshire County Council on 23rd February 2022 (Planning Permission Reference SDC/20CM009).

- 1.3.3 The volume of waste material which will be imported in order to facilitate the consented restoration of the quarry and controlled by the Environmental Permit will be 350,000m³.
- 1.3.4 The works will be undertaken in accordance with a bespoke environmental permit for the use of waste in a deposit for a recovery operation (Construction, reclamation, restoration, or improvement of land other than by mobile plant). Processing of restoration materials, such as crushing and screening operations, will be undertaken within an adjacent area, subject to regulation under a separate permit. This DMP covers proposed operations under the recovery permit, which will include transfer of ready processed materials, infilling and associated restoration activities.
- 1.3.5 The main issues of dust could arise from, but not limited to the following:
 - i) Waste reception, tipping and infilling areas
 - ii) Manoeuvring of vehicles tracking dust
 - iii) Operation of plant
 - iv) Storage and loading areas comprising potentially 'dusty' wastes
- 1.3.6 In addition to this document, the site will also operate in accordance with a number of site-specific documents; namely an Environmental Management System (EMS) which may make reference to this DMP.
- 1.3.7 All relevant operational staff will be suitably trained to ensure they understand the purpose of this DMP and understand what actions need to be taken in event of a complaint. Training will be taken by the site manager, technically competent manager/s (TCM/s) or third-party Dust / Air Monitoring Consultant.

1.4 <u>Potential Sources of Dust Emission</u>

1.4.1 Emissions of dust may arise as a result of the following activities:

- Storage of materials in external stockpiles;
- Unloading, loading and transfer of materials within the site;
- Surface stripping
- Infilling and final restoration works.
- Haulage of materials to and from site.

Sensitive receptors

2.1 Receptor Plan

2.1.1 A sensitive receptors plan (SRP) has been produced to accompany this DMP and is shown in Appendix I referenced as on Drawing No. 043-007-03. The receptors highlighted are those which are considered to be at risk by dust and dust particles generated by the site. The SRP also details the prevailing wind direction.

2.2 <u>List of receptors</u>

2.2.1 The receptors listed from the receptor plan are also shown in the table below with approximate distances to these receptors also shown.

Table A – Distances to Selected, Representative Sensitive Locations

Boundary/ Direction	Receptor	Approximate distance from site (m)
Surrounding	Surrounding Residential, Industrial and commercial receptors	<10
East	White Bottom Farm	10
Northwest	Priority Habitat (Deciduous Woodland)	40
South	National Trust – Upton House and Gardens	900
Northwest	Village of Ratley comprising residential, commercial and industrial receptors	900

2.2.2 Other receptors not shown in the above table are illustrated on Drawing No. 043-007-03.

2.3 Other dust and emission sources

2.3.1 A search has been undertaken of the EA's Public Register and Google Earth satellite imagery.

This has identified various farming operations in the local are which may have the potential to generate dust which should therefore be given consideration when investigating issues.

3 <u>Site operations</u>

3.1 Waste deliveries/removals

- 3.1.1 Waste will arrive and depart at/from the site primarily consisting of Boddington Demolition Limited's own vehicles/contracts and all loads are either sheeted or contained upon delivery and removal.
- 3.1.2 Any third-party deliveries to the site will be advised that any potentially dusty loads be suitably sheeted. If the customer has the capability to wet down potentially dusty loads, they will be asked to do this. If a customer is unable to place a dust sheet on a vehicle or wet a load they will be prohibited from loading/unloading until suitable containment has been provided. In more extreme cases customers may be asked to leave the site immediately.

3.2 Material with dust potential

- 3.2.1 The following common materials which will be present on the site have the potential to create dust will be:
 - 17 01 07 mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
 - 17 05 04 soil and stones other than those mentioned in 17 05 03
 - 17 09 04 mixed construction and demolition wastes other than those mentioned in 17
 09 01, 17 09 02 and 17 09 03
 - 19 12 09 minerals (for example sand, stones)
 - 19 12 12 other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11
 - 20 02 02 soil and stones
- 3.2.2 Please refer to the Risk Assessment Tables outlined in Section 5.7 and the control measures outlined in Section 4 for details of the handling procedures and mitigation measures in place for wastes stored at the site.

3.3 Overview of site operations

- 3.3.1 Wastes utilised for the recovery operations will already have been accepted and processed at the adjacent permitted treatment facility which is covered under a Standard Rules Permit (SR2010 No.12). Once materials have been put through the treatment process at the adjacent facility, they are either securely stored in dedicated stockpiles or utilised in the recovery process, therefore no processing is expected to be undertaken.
- 3.3.2 During periods of high winds (>30mph) stockpile heights are reduced.
- 3.3.3 Continuous visual monitoring will be undertaken by site staff to ensure compliance with the EP.
- 3.3.4 A quarantine area will be made available at the site in the form of a container, this will be utilised to quarantine waste/loads which cannot be utilised as part of the recovery operations.

3.4 Mobile plant and equipment

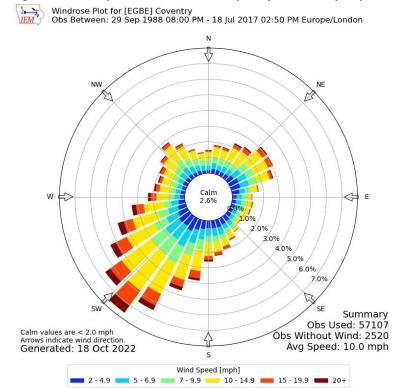
- 3.4.1 All mobile and fixed plant on site including vehicles in the fleet are subject to annual manufacturer maintenance to ensure proper working order in the form of service contracts.
- 3.4.2 Site management will undertake or delegate additional preventative maintenance checks on a more frequent basis i.e. daily, before, during and 1 hour at the end of each working day using a checklist similar to that in Appendix II to ensure the following:
 - Machinery is mechanically sound for use and no presence of black fumes or trailing liquids visible prior to use or following shutoff of plant/equipment.
 - All plant engines and/or generators will be powered-down and completely shut off prior to cessation of operations on any given day.
 - Plant which is not in use for any extended period is stored at least 6 metres from waste.
 - All plant and equipment vehicles are fitted with fire extinguishers in the cab. Rubber strips are not considered appropriate as they are usually removed via uneven and bumpy ground.

- Dust from processing operations on site can settle throughout the working day onto
 plant, plant exhausts and engine parts so a fire-watch will be implemented after
 cessation of works and equipment powered down for 1 hour each day to remove any
 dust/fluff using brushes, hoses etc. Any build of dust/fluff will be removed from the
 equipment and deposited into a container to await removal from site and site
 management informed.
- 3.4.3 A 'no-idling' policy is in place which ensures that engines are switched off when vehicles or plant are not in use. This policy will ensure that tail pipe emissions are significantly reduced.

3.5 Prevailing Meteorological Conditions

- 3.5.1 Coventry Airport meteorological station (EGBE) is located approximately 27km to the north of the site. Fig 1 below details the wind rose which shows the prevailing wind speed and direction, based on observations at Coventry Airport. It is considered that this met station provides a representative indication of prevailing wind direction at the site.
- 3.5.2 As is indicated, the predominant wind direction is from the south-west, with much less frequent winds arising from other directions. This is generally the norm for most parts of the UK. Regardless of the wind direction, the site will implement the control measures detailed throughout Section 4 of this DMP to ensure that potential dust is controlled and contained at the site during all meteorological scenarios.

Figure 1 - Wind Speed and Direction Frequency at Coventry Airport



4 <u>Dust management & control measures</u>

4.1 Responsibility for implementation of the DMP

- 4.1.1 The site manager and TCM (site management) will be responsible for the implementation of the DMP. Deputy site managers and senior plant operatives will also be identified in order to support the site manager. Full job roles at the site are clearly demonstrated in the operator's Environmental Management System.
- 4.1.2 Site management will ensure the DMP is reviewed annually or sooner in the event of complaints/dust issues; whichever is the soonest, with any amendments or alterations put in place as soon as reasonably possible.
- 4.1.3 The above staff with the aid of Oaktree Environmental Ltd (if required) will be responsible in providing training to relevant operational staff to ensure they are deemed competent and understand the contents of this DMP. Staff will undergo re-fresher every 12 months or in the event of a dust complaint / issue or the implementation of operational changes.

4.1.1 Recovery operations

4.1.4 Recovery/infilling operations at the site will be undertaken in phases as detailed on the Drawing in Appendix I.

4.2 <u>Sources of fugitive dust/ emissions</u>

- 4.2.1 The main dust/emission sources which arise from site are detailed below:
 - Storage of materials in external stockpiles;
 - Unloading, loading and transfer of materials within the site;
 - Surface stripping
 - Infilling and final restoration works.
 - Haulage of materials to and from site

4.3 Control Measures (staff training/daily inspections)

- 4.3.1 Good housekeeping and site practices are vital to ensure that the impacts from fugitive dust and debris impacts are controlled. The site undertakes regular inspections throughout the day for the presence of dust/debris with corrective actions taking place upon discovery i.e. wetting down stockpiles/surfaces, using a road sweeper and reducing stockpile heights (if necessary). Operational staff are suitably trained in procedures to keep the levels of dust /debris to a minimum including prevention and mitigation. The visual inspections will be once-a-day minimum and more frequent during dry/windy/warm weather conditions (i.e. morning, afternoon and evening). The site supervisor will also make a formal visual inspection of dust emissions at least three times per day and record the results of monitoring in the site diary/record forms. Inspection points may vary on site so are not included in this DMP but will be upwind and downwind of the site.
- 4.3.2 The areas listed in Section 4.2 above will be continuously monitored throughout the working day and cleaned on a daily basis paying special attention to the machines where dust is more likely to build up.
- 4.3.3 An end of day inspection of plant/equipment/machinery will be implemented after cessation of works and any build-up of dust/fluff will be removed using on-site hoses and rags and deposited into a wheelie bin and comments noted in the daily inspection sheet.
- 4.3.4 The plant/machinery used at the site are mobile and can be manoeuvred to an alternative area of the site; this allows any areas that dust has accumulated beneath to undergo a rigorous clean.
- 4.3.5 The operator will complete a daily housekeeping checklist and dust monitoring form, both of which are detailed in appendix III.
- 4.3.6 The operator will avoid fugitive dust emissions by committing to the following housekeeping (inclusive of frequency):

- 1. Maintain a clean, well-organised site (Continuous)
- 2. Use suppression methods to dampen down potentially dusty wastes (Where required)
- 3. Clean equipment that has been in contact with dusty materials (Weekly)
- 4. Concrete floors (if applicable) designed with a slope towards drainage system and designed in a way that allows easy cleaning. (Inspected monthly)
- 5. Floors sealed (if applicable) to prevent absorption and adsorption of dust producing residues. (Inspected monthly)

4.4 Control measures (boundary/containment)

- 4.4.1 **Waste reception and storage areas** The waste reception and storage areas for material are predominantly located at the adjacent permitted facility. On occasion already processed material will be stored within the waste recovery permitted area in free-standing stockpiles. The boundary treatments i.e. bunding are considered to act as wind barriers to reduce the potential for dust escaping beyond the site. All stockpiles of waste on site will be monitored as part of daily visual inspections.
- 4.4.2 **Site Perimeter** The site perimeter comprises the following:
 - Screening bund along the southern boundary.
 - Northern, eastern and western boundaries comprise a mixture of fencing, hedges and trees.
- 4.4.3 The prevailing winds are predominantly from the southwest. The aforementioned bund along the southern perimeter will provide sufficient screening from the prevailing winds by acting as wind barriers to reduce wind whipping which will prevent dust from escaping beyond the site boundary.

4.5 <u>Control measures – site surfacing</u>

4.5.1 The inert & excavation waste and aggregate stockpiles will be situated on a hardstanding/stoney surface.

4.6 Control Measures – site surfaces and vehicle movements

- 4.6.1 The control measures implemented by site management to minimise the risk of dust and debris emissions from dusty site surfaces and vehicle movements include:
 - A permanent water supply will be made available on site during dry weather conditions to ensure that the dust suppression systems can function effectively.
 - All site surfaces used for the tracking and running of vehicles and/or plant and all stockpiles of wastes (if applicable) which have the potential to be dust-forming are inspected morning and pre-end of shift, six days per week to remove any build-up of debris.
 - The site also has access to a shovel and brushes in order to clean the site surface on a daily basis (end of each day).
 - Vehicle speed is restricted on-site. Signs are erected at relevant areas of the site, including the main access gates, to advise drivers of the speed limit. This will reduce the re-suspension of dust and particulate matter.
 - Exiting vehicles will leave the site and will avoid all areas where wastes are stored or stockpiled. All vehicles will be checked before they leave the site to ensure no mud/dust can stretch beyond the site access. All incoming/outgoing vehicle loads will be sheeted.
 - Any mud/dust deposited onto the public highways will be treated as an emergency and cleaned by operatives or by way of a road sweeper which would be hired-in if necessary.
 - Any dust/fluff cleared from mobile plant or other areas where dust/fluff could idle, the
 material will be deposited into one of various mobile wheelie bins which are located in
 several areas which do not restrict vehicle movements.
- 4.6.2 The site surfaces will be swept and cleared at the end of each day using the onsite shovel and brushes. The site can hire in a road sweeper which can be used during conditions when mud is being tracked onto the surrounding highways. The need for the road sweeper will be identified and actioned by the site manager during daily site inspections. The sweeper ensures that the site surface and haul road can cleared to prevent dust and mud being carried onto the surrounding highways. In the unlikely event that mud has been tracked off

site onto the surrounding highway, it will be treated as an emergency and a road sweeper will be hired in if necessary.

4.7 <u>Control Measures – site suppression</u>

- 4.7.1 **Bowser/hosepipes** The site will have access to a bowser and hosepipes; these can be utilised to dampen down surfaces and for suppression via spraying potentially dusty wastes. The bowser has a reach of approximately <10m and is mobile across the entire site to ensure full coverage. These suppression methods also ensure that all stockpiles at the site are controlled with moisture continuously to prevent the materials becoming friable. They will locally suppress dust at the site and provide full coverage of onsite stockpiles by spraying/dampening piles to reduce potential dust levels.
- 4.7.2 **Wheel wash Facility** The site benefits from a wheel cleaning facility within the adjacent permitted facility which will be used to clean the wheels and bodies of vehicles prior to them egressing from the site in line with the procedure detailed below.
- 4.7.3 Before exiting, all vehicles will be stopped and visually inspected by trained staff to reduce the risk of dust/mud/debris being tracked off-site. If the member of staff inspecting the vehicle is satisfied, the vehicle is suitable to egress and will be directed to the exit. If the vehicle is not suitable to egress, the staff member will instruct site operatives to use the wheel cleaning facility to wash down the wheels and bodies of vehicles. Following this, a final inspection will be carried out by the trained staff member before any vehicle can leave the site. If the vehicle still contains traces of mud and debris the process will be repeated until the vehicle is clear and the potential of mud being tracked onto roads is eliminated.
- 4.7.4 In the unlikely event that the wheel wash breaks down, hosepipes and brushes can be used in the interim if required. If the wheel wash was to be out of action for an extended period of time whilst repairs are being undertaken, the operator would seek to hire in a temporary wheel wash. Any repairs required will be initiated immediately by the site operator, however, it must be noted that the response time for repair works to be completed will be dependent on the availability of suitably licensed contractors.

- 4.7.5 Any water for suppression is taken from mains water and don't require the use of a pump.
- 4.7.6 Site management orders the use of suppression techniques and will be responsible for ensuring that all suppression techniques mentioned above are used appropriately and effectively to ensure potential dust levels are being reduced.
- 4.7.7 Spare parts for brushes and equipment will be kept at the site to ensure the functioning of these control measures and suppression techniques. Parts for equipment and plant will be routinely replaced in accordance with manufacturers recommendations.

4.8 Control measures – water supply

4.8.1 A permanent water supply will be made available on site during all weather conditions to ensure that the dust suppression can function effectively. All external water pipes will be lagged to prevent frost damage during winter months and the operator will set up a notification alert system with the Met Office in the event of a drought being imminent. This will enable the operator to source water in the short and long term and store in tanks prior to a potential water ban.

4.9 Control measures – infilling

- 4.9.1 Recovery/infilling operations at the site will be undertaken in phases as detailed on the Drawing in Appendix I.
- 4.9.2 During any infilling operations (which will be undertaken in phases) the materials/activities will be subject to water suppression to control potential dust emissions and prevent excessive drying.

4.10 Control Measures – storage of waste

4.10.1 The control measures implemented by site management to minimise the risk of dust and debris emissions from the continuing storage of wastes and the loading/unloading of these include:

- If required, stockpiles will be sprayed with water during periods of dry/windy weather to prevent excessive drying and dust formation.
- Drop heights will be kept to a minimum (i.e. 1 2m) to prevent dust emissions where adjustment permits.
- As standard, the removal of material from stockpiles will be carried out from the most sheltered location on the lee-side of free-standing stockpiles. Stockpiles will be prewetted and sprayed during loading and infilling operations.
- Stockpile separation is achieved at the site through visual inspections which are undertaken throughout the operational day, the inspections will involve a visual inspection of all stockpiles to ensure separation is present between piles to avoid crosscontamination of materials.
- 4.10.2 The areas subject to infilling have been subject to many periods of rainfall; the rain will have ensured that all finer particles have migrated vertically and become entrained within the material leaving coarser material on the surface which would be significantly less susceptible to wind-whipping. The face of the material will be managed by dampening it down to ensure that dust does not become airborne.

4.11 Control measures – vehicle movements and plant

- 4.11.1 All HGVs and plant are serviced by main agents under contract to ensure any particulate emission impact is reduced to an absolute minimum.
- 4.11.2 As discussed previously, a no idling policy is in place which ensures that engines are switched off when vehicles or plant are not in use. This policy will ensure that tail pipe emissions are significantly reduced.

4.12 <u>Control Measures - Loading and Unloading Vehicles</u>

4.12.1 The operator of the loading plant will direct vehicles to a position and location which reduces wind whipping of loaded material i.e. the lee side of the loading plant. Should the loading and unloading be carried out during periods of dry or windy weather or if the

material is considered finer/dusty material, stockpiles will be further dampened down prior to and during loading operations.

4.13 <u>Control measures – Standard practice / Triggers</u>

- 4.13.1 All site suppression, prevention and mitigation techniques are used throughout the day as standard practice to ensure dust is not generated at the site.
- 4.13.2 A road sweeper can be triggered for more frequent use (i.e. in windy/dry/warm weather) or in an emergency in the unlikely event that dust and mud escapes beyond the site boundary.

5 <u>Dust management risk assessment model</u>

5.1 Fundamental considerations

- 5.1.1 **Source/Hazard:** A property or situation that in particular circumstances could lead to harm.
- 5.1.2 **Consequences:** The adverse effects or harm as the result of realising a hazard which causes the quality of human health or the environment to be impaired in the short or long term.
- 5.1.3 **Risk:** A combination of the probability of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.

5.2 Pathway

- 5.2.1 Important in the assessment of a particular risk(s) and to inform the subsequent management of the risk(s) is the identification of the pathway(s) through which the risk may affect the identified receptor(s). The following are examples of pathways:
 - Air
 - Ground
 - Water
 - Direct contact / exposure

5.3 Consequences

5.3.1 The following table highlights the consequences of the hazard(s) identified and the abbreviations for each as used in the Risk Assessment Table 5.5 in Section 5.7.

Table B – Consequences

Abbreviation	Consequences
Α	MINOR INJURY
В	MAJOR INJURY
С	DEATH
D	AIR POLLUTION
Е	WATER POLLUTION
F	POLLUTION OF LAND

5.4 <u>Effects of consequences</u>

5.4.1 In order to quantify the level of risk and identify the appropriate management procedures, the potential effects must be considered, as outlined in the table below:

Table C - Potential effects

Abbreviation	Effect of Consequences	Management Required?
S	SEVERE	In all cases
Мо	MODERATE	In most cases
Mi	MILD	Occasionally
N	NEGLIGIBLE	No

5.4.2 Note: "Management" is the action required to reduce the risk of a hazard causing a problem on site. Contingency measures are procedures which are in place to reduce the consequences of a hazard.

5.5 Risk estimation and evaluation (probability/frequency of occurrence of hazard)

5.5.1 The following table allows the likelihood of an occurrence of an identified risk to be assessed:

Table D - Likelihood

	Probability	Evaluation
1	Very likely	Could occur during any working day
2	Likely	Could occur regularly
3	Possible	Event possible
4	Unlikely	Event very unlikely

5.6 Risk assessment outcome (combination of probability & consequence)

The following table shows the resultant risk of an identified hazard or potential situation.

This uses the hierarchy of both probability and consequence to assess the level of risk. The level of risk determines what level of management would be required in order to reduce the risk of occurrence and/or scale.

Table E - Risk assessment outcome

		Consequence							
		S	Мо	Mi	N				
1		High	High	Medium	Low				
bility	2	High	Medium	Low	Near-Zero				
Probab	3	Medium	Low	Near-Zero	N/A				
۵	4	Low	Near-Zero	N/A	N/A				

- 5.6.2 Where the risk assessment outcome is high, first-level management of the risk is essential, i.e. removal of hazard, implementation of major infrastructure/structural design measures to contain the risk/hazard and company policy changes to incorporate the management of the risk. All risk management measures must be supplemented with detailed induction training, spot training and tool-box talks to ensure all site staff and users are made fully aware of the risk/hazard, all potential consequences and necessary management and contingency procedures.
- 5.6.3 Where the risk assessment outcome is medium, the management of the risk should be tackled by management or delegates. If removal of the hazard is not possible, management will normally be met through implementing minor structural design measures or by imposing procedures for the prevention of occurrences which will be conveyed to all site staff through the appropriate training, including any contingency measures/procedures.
- 5.6.4 Where the risk assessment outcome is low, the management of the risk can be done wholly through appropriate training to site staff including any contingency measures/procedures.
- 5.6.5 Where the risk assessment outcome is near-zero, site staff should be made aware of the possibility of an occurrence and contingency measures should be readily available to all staff should they be required.

5.7 Risk assessment table

- 5.7.1 The following pages contain the site-specific risk assessment for the site with appropriate remedial actions, recommendations and comments included for each identified hazard, potential contaminant or situation.
- 5.7.2 The table also contains references to the appropriate section(s) of the site's EMS for additional management procedures.
- 5.7.3 As discussed in the section above, all situations which identify a risk from Low –High should be incorporated into the staff/visitor training schedule, where appropriate and acted on as required.
- 5.7.4 The table overleaf details the relevant pathways and receptors for each individual dust/emission source and relevant measures required to break these linkages. The control measures outlined in Section 4 will be included within these tables as well as additional specific measures.

SEE TABLES OVERLEAF

Table F – Source, pathway, receptor, abatement tables

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments	Assessment Outcome following action /recommendation
Dust / Particulates	Unsheeted vehicles accessing/ egressing to/from the site	Air	Site personnel / visitors Surrounding site users / occupiers Surface water Flora & fauna Residential receptors Surrounding businesses	Air Pollution Water Pollution	Moderate	3	Low	Management will ensure that all site vehicles operated by Boddington Demolition Limited are adequately sheeted before accessing and leaving the site. The site will ensure the surrounding highways are maintained in good state of repair to prevent unnecessary dust being generated. Speed limits will be restricted. Any mud/dust deposited onto the public highway will be treated as an emergency and cleaned by operatives or by way of a road sweeper (hired in) should management observe significant dust build up or generation along the access road.	Very Low - Negligible
Dust / Particulates	Vehicles depositing waste into relevant storage/ reception areas	Air	Site personnel / visitors Surrounding site users / occupiers Surface water Flora & fauna Residential receptors Surrounding businesses	Air Pollution Water Pollution	Moderate	2	Medium	Drop heights will be kept to a minimum to prevent dust emissions. Dust suppression methods and mitigation in place. The operator will avoid doubling handling of waste and may directly load from vehicle directly into the relevant storage area.	Low

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments	Assessment Outcome following action /recommendation
Dust / Particulates	Wastes accepted on site	Air	Site personnel / visitors Surrounding site users / occupiers Surface water Flora & fauna Residential receptors Surrounding businesses	Air Pollution Water Pollution	Moderate	2	Medium	Drop heights for the unloading/loading of wastes will be kept to a minimum to prevent dust emissions i.e. 1m – 2m maximum above the hopper or ground. Additional visual assessment / monitoring will be onsite and undertaken around the site perimeter in order to ensure dust is not escaping beyond the site.	Low – Very low
Dust / Particulates	Storage of wastes	Air	Site personnel / visitors Surrounding site users / occupiers Surface water Flora & fauna Residential receptors Surrounding businesses	Air Pollution Water Pollution	Moderate	2	Medium	Drop heights will be kept to a minimum to prevent dust emissions. Stockpiles will be sprayed with water to prevent excessive drying and dust formation. Dust suppression methods and mitigation in place.	Low – Very low

Hazard / Potential Contaminant or Situation	Source(s)	Pathway	Receptor(s)	Consequences	Effect	Probability	Assessment Outcome	Remedial Action/ Recommendations/ Comments	Assessment Outcome following action /recommendation
Dust / particulates	Prolonged periods of dry/warm or windy weather conditions	Air	Site personnel / visitors Surrounding site users / occupiers Surface water Flora & fauna Residential receptors Surrounding businesses	Air Pollution Water Pollution	Moderate	2	Medium	Additional visual assessment / monitoring will be onsite and undertaken around the site perimeter in order to ensure dust is not escaping beyond the site. Dust suppression methods and mitigation in place.	Low
Dust / particulates	Infilling / recovery operations	Air	Site personnel / visitors Surrounding site users / occupiers Surface water Flora & fauna Residential receptors Surrounding businesses	Air Pollution Water Pollution	Moderate	2	Medium	Additional visual assessment / monitoring will be onsite and undertaken around the site perimeter in order to ensure dust is not escaping beyond the site. During any infilling operations (which will be undertaken in phases) the materials/activities will be subject to water suppression to control potential dust emissions and prevent excessive drying. Dust suppression methods and mitigation in place.	Low

6

6.1 Monitoring and recording

- 6.1.1 Visual assessment – Site management and site operatives will make visual inspections of dust emissions around the entire site and perimeter at the beginning, middle and end of the working day. Results of visual inspections will be recorded on the daily inspection forms. Additional monitoring may be carried out during times of dry/windy weather conditions or should trained operatives observe significant levels of dust. The monitoring will be carried out while the site is operational, should it be observed that dust is being emitted from the site, notes will made as to the amount, direction and source of the dust. Site Management will review all feedback from the monitoring/inspections on a weekly basis (unless a complaint has occurred which will be dealt with in accordance with Section 8 of this DMP) and take the required action to mitigate the issue to ensure it doesn't happen again. If dust is detected, site management and operatives will act immediately by dousing the problematic area, covering it with tarpaulin (if practical) and using a mechanical sweeper which would be hired in if necessary. The locations of monitoring points have not been shown as the location as these will vary throughout the lifetime of the operation and as each phased is progressed. Additionally, the locations may vary, depending on weather conditions.
- 6.1.2 In the event of dust being visible off-site, operations will reduce and contingency measures will be put in place until the situation abates. If, after the reduction of operations and implementation of contingency measures, excessive dust beyond the site boundary is still observed, then the operation should cease until the problem is fully rectified.
- 6.1.3 The operator will obtain prior notifications from the Met Office in advance of problematic weather conditions including high wind speeds and direction, droughts, etc. to see whether the dust suppression techniques need to be increased ahead of these events to reduce the likelihood of complaints.
- 6.1.4 The operator will carry out an inspection of the site and site perimeter at the beginning, middle and end of the working day to pick up if any dust or mud is present beyond the site

boundary. The site undertakes the following proactive measures to ensure that dust does not escape the site prior to cessation of works i.e. reduce stockpile heights during dry/windy weather periods, dampening of wastes and general housekeeping (refer to housekeeping section)

- 6.1.5 If any dust is present at the end, middle or start of the day then the site will implement further reactive measures i.e. sourcing the road sweeper, reducing stockpiles heights further, using tarpaulin (if practical) or further dampening down of stockpiles.
- Out-of-hours monitoring will not be regularly required as it is deemed that the processing and loading of the material is likely to give rise to the highest levels of dust emission, as part of the recovery operations, the site will not be seeking to undertake treatment activities as these are undertaken on the adjacent permitted facility which is covered by an SR2010 No.12. Should it become apparent out-of-hours that stockpiles are giving rise to dust which will be evident as part of visual inspections, site management will then make a decision on whether additional out-of-hours monitoring is required i.e. due to stockpiles giving rise to dust that escapes beyond the boundary, site management will take the reactive measures detailed above in section 6.1.5.
- 6.1.7 The results of monitoring exercises and any remedial action taken will be entered into the site diary, inspection forms or logbook which is available for the EA to inspect upon request. The name of the employee undertaking the inspection will be recorded in the site diary / inspection form for each day of operation.
- 6.1.8 Should the monitoring conclude that a certain activity is giving rise to dust which is migrating offsite, steps will be made to reduce the impact of this activity. These may include (but are not limited to): reduction of stockpile size, increased dust suppression systems and suspension of the work until high wind speeds have abated.
- 6.1.9 The site supervisor will be suitably trained to carry out these duties. Further information regarding training and technical competence is provided within the site's EMS.

6.1.10 Site management will also be required to make a note of any unavoidable events such as bad weather in the site diary, rather than just actual complaints received. This will ensure that if complaints are received retrospectively from either the local authority or directly, any circumstances which led to that complaint as a result of elements outside of the operator's control would be able to be attributed (or, at least, in part) to the cause of the complaint.

7 <u>Accidents and Emergencies (Contingency Measures)</u>

7.1 <u>Accident and emergency</u>

- 7.1.1 In the event of a serious accident or emergency, operations will be suspended where necessary to allow action to be taken safely. If necessary, all staff on site will be evacuated.
- 7.1.2 The scenarios below detail all other accidents and emergencies that may potentially occur at the site.

7.2 Staff shortages

7.2.1 In the event of unforeseen staff shortages arising from illness, suspension or no-shows, the operator will make a judgement whether to reduce operations. The operator will then seek further employment within a timely manner to ensure the site can continue to operate at its required capacity.

7.3 <u>Inclement weather conditions</u>

- 7.3.1 The site will subscribe to the Met Office to receive updated weather alerts for the following weather conditions which could cause a potential on or off-site dust complaint:
 - High winds >30mph
 - Dust escaping beyond the site boundary
 - Droughts or periods of hot weather exceeding 3 major dry days which could lead to water shortages, hosepipe bans and excessive dust.
- 7.3.2 The site will implement the following preventative measures to avoid serious dust pollution:

HIGH WINDS (>30mph)

- There will be reduced sorting, processing or treatment of any wastes which are likely to be blown around during conditions of high wind; high winds would be where it is evident where dust is escaping beyond the site.
- Vehicles leaving the site will be sheeted to comply with the requirements of the Duty of Care legislation.
- Stockpiles stored at the site (if applicable) will be subject to suppression detailed within Section 4. The boundary also comprises bunding along the southern perimeter which acts as a wind barrier from prevailing winds.
- In the event of extreme winds, the site will deploy the above measures and may be forced to close operations until conditions have improved.

DROUGHTS/WARM, DRY WEATHER

- In extreme cases such as a hosepipe ban or water shortage, the site will ensure there is additional water available i.e. tanks which can be used to ensure suppression techniques can still function. In the unlikely event that additional water supply cannot be provided, the site may temporarily cease operations until dust levels have been reduced.
- The site will contact the water company in the event of a drought/dry weather emergency to see if additional water can be supplied to the facility.
- Should dust become a major concern then the operator will dampen or cover piles using tarpaulin until conditions or dust suppression techniques are considered effective.

FLOODING

 The site is located within a Flood Zone 1 and is therefore at lowest risk of flooding, therefore it is not considered to be a risk in terms of dust emissions. In the event that a flood occurs at the site and results in the failure of plant and machinery, please refer to Section 7.4 which details the actions undertaken in this scenario.

7.4 **Operational failure**

7.4.1 The manager will be contacted by staff in the event of any operational failure such as the breakdown of plant, suppression systems or equipment and will decide whether operations are to continue or be suspended prior to corrective action being taken. The operator would source a back-up generator as soon as practicably possible. Serious operational failures, which result in the closure of the site, will be recorded in the site diary. It is likely that, in the event of any recorded failure in mobile/loading plant, the manufacturers' engineers work in relevant locations in the UK and will be contacted to ensure alternative parts can be sourced and the item fixed in a timely manner. It is also worth noting that the operator also has access to multiple items of similar plant and will use these in the interim whilst any repairs are undertaken.

7.5 <u>Unauthorised people entering site</u>

- 7.5.1 The site benefits from a mixture of bunding, fencing and access gates to prevent unauthorised access at the site. Site security is inspected on a daily basis and any defects which impair the effectiveness of the security infrastructure will be repaired as soon as practicably possible (i.e. dependent on availability of contractors). All repairs will be notified on the site diary/daily inspections forms.
- 7.5.2 The waste materials on site are predominantly non-combustible and therefore arson is unlikely to present an issue at the site. However, in the extremely unlikely event that unauthorised access leads to arson, the operator will contact the police and emergency services (i.e. FRS) to agree a course of action.

7.6 Breakdown in procedures

- 7.6.1 Site management is responsible for ensuring that all management plans are adhered to.

 Training will be provided to all site operatives to ensure that they are aware of the requirements for each site-specific management plan.
- 7.6.2 The operator has clearly defined and documented roles and responsibilities for all staff to ensure that all management measures and procedures are continuously implemented. This

- ensures that management procedures continue to be implemented by alternative site staff in the event of an unexpected absence or staff shortage.
- 7.6.3 All site staff will be trained in the contingency procedures detailed within this document.
- 7.6.4 The operator will review all management procedures and management systems on an annual basis or more frequently in the event of incident or substantiated complaints relating to dust emissions.
- 7.6.5 In the unlikely event that procedures breakdown, site management will review procedures and management systems in detail and implement further training of site staff to rectify the issue and minimise the risk of the incident reoccurring

7.7 <u>Liaison with Neighbours</u>

- 7.7.1 In the extreme event of significant but temporary dust issues during normal operations, neighbours will be contacted to advise them of the situation and the action being taken. The EA will also be notified.
- 7.7.2 An open-door policy will be encouraged by the operator to enable any complaints from neighbouring premises (if received) to be dealt with immediately. The complainant will then be supplied with remedial actions taken and any procedures or measures put in place by the operator to reduce or ideally eradicate the likelihood of a subsequent complaint.
- 7.7.3 If any dust complaints are received, the complaint will be assigned to an operative familiar with the site's operation who will complete a 'complaints and events log', detailed individually on the complaints form (in Appendix II), both of which will be kept for inspection on request by the EA. Details of information to be completed are: dates, nature of complaint, weather conditions at the time of the complaint, investigation details, action taken and a signature (as a minimum). Dust complaints will be investigated and responded to within 24 hours or sooner and suitably reviewed by the site manager who is ultimately responsible.

8 Actions when complaints are received

8.1 Complaints procedure

- 8.1.1 If any dust complaints are received, the relevant operator will complete a 'complaints and events log' and detailed individually on the complaints form (in Appendix II), both of which will be kept for inspection on request by the EA. Details of information to be completed are dates, nature of complaint, weather conditions at the time of the complaint, investigation details, action taken and a signature (as a minimum).
- 8.1.2 The operator would also be required to make a note of any unavoidable events plant/equipment malfunctions in the site diary, rather than just actual complaints received. This will ensure that if complaints are received retrospectively from either the Council/EA or directly, any circumstances which led to that complaint as a result of elements outside of the operator's control would be able to be attributed to the cause of the complaint.
- 8.1.3 If the source cannot be ascertained with 100% confidence, the site manager, compliance manager or TCM will either suspend or reduce the likely dust/particulate-generating activities.
- 8.1.4 If the source is within the site's control, the site manager, compliance manager or TCM will take appropriate action in terms of dust/particulate abatement, to ensure that the alarm is not re-activated. This may take the form of the following:
 - a) Investigating the source of the dust/particulates to prevent a re-occurrence.
 - b) Suspending operations which are not being conducted using best-practice controls.
 - c) Additional use of the dust abatement measures.
 - d) Logging findings of a c in the site diary / complaints form and also in the reporting template within the EP.
 - e) Report actions to the complainants and/or EA
- 8.1.5 There is no threshold for complaints, once the site receives any complaint it will be reviewed, and the site will act accordingly. If the source is within the site's control, the site

manager, compliance manager or TCM will take appropriate action in terms of abatement to ensure that the issue/nuisance is controlled and won't happen again.

8.1.6 If following the above complaints are still being received, the site will cease operations until the issues have been rectified.

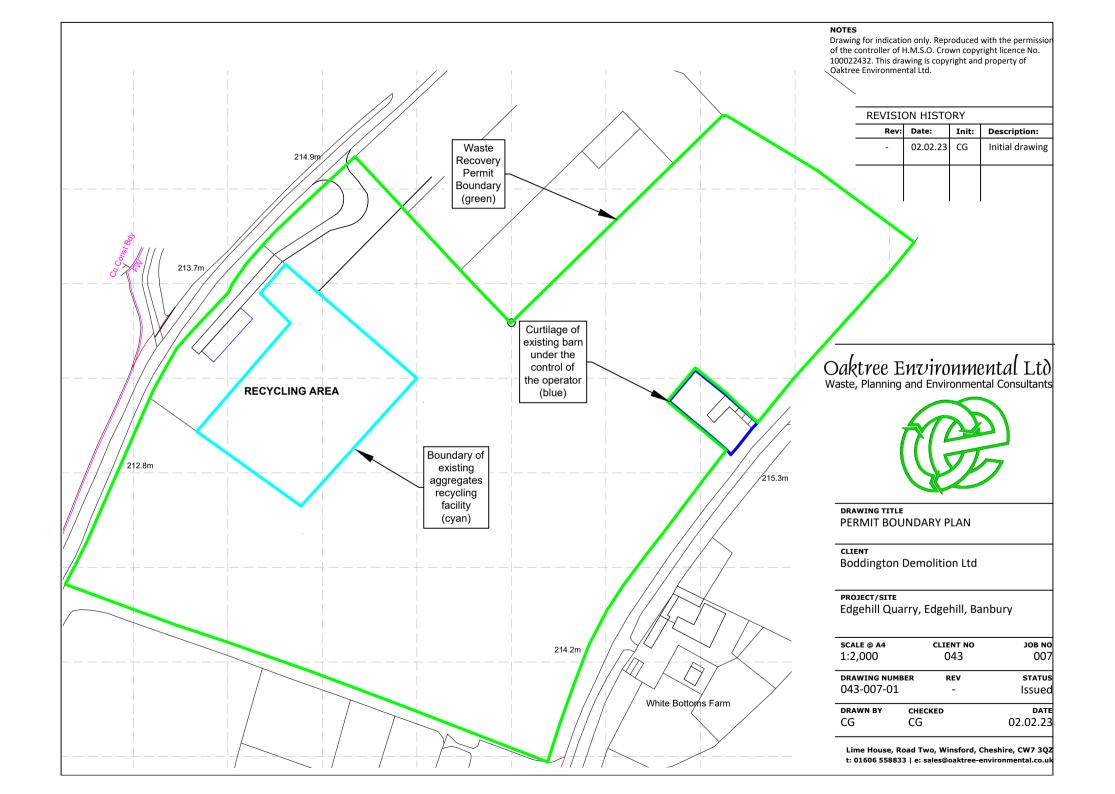
8.2 Complaints recording

- 8.2.1 Any complaints received in relation to dust will be recorded on the form shown in Appendix II by the person in receipt of the complaint:
- 8.2.2 The following details as a minimum will be completed on the form.
 - a) The name, address and telephone number of the caller will be requested.
 - b) Each complaint will be given a reference number.
 - c) The caller will be asked to give details of:
 - the nature of the complaint;
 - the time;
 - how long it lasted;
 - how often it occurs;
 - is this the first time the problem has been noticed; and,
 - what prompted them to complain.
 - d) The person completing the form will then, if possible, make a note of:
 - the weather conditions at the time of the problem (rain snow fog etc.)
 - strength and direction of the wind; and,
 - the activity on the installation at the time the noise, dust or odour was detected,
 particularly anything unusual.
 - e) The reason for the complaint will be investigated and a note of the findings added to the report.

- f) The caller will then be contacted with an explanation of the source of the complaint if identified and the action taken to prevent a recurrence of the problem in future.
- g) If the caller is unhappy about the outcome or unwilling to identify themselves the caller will be referred to the appropriate department of the EA or Local Council.
- h) Following any complaint, the complaints procedure will be reviewed to see if any changes are required or if new procedures need to be put in place.

Appendix I

Drawings

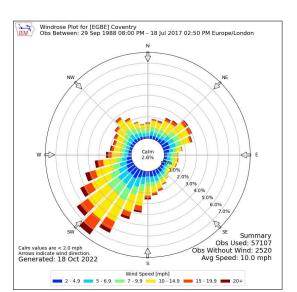


Permit boundary Main River Class A roads

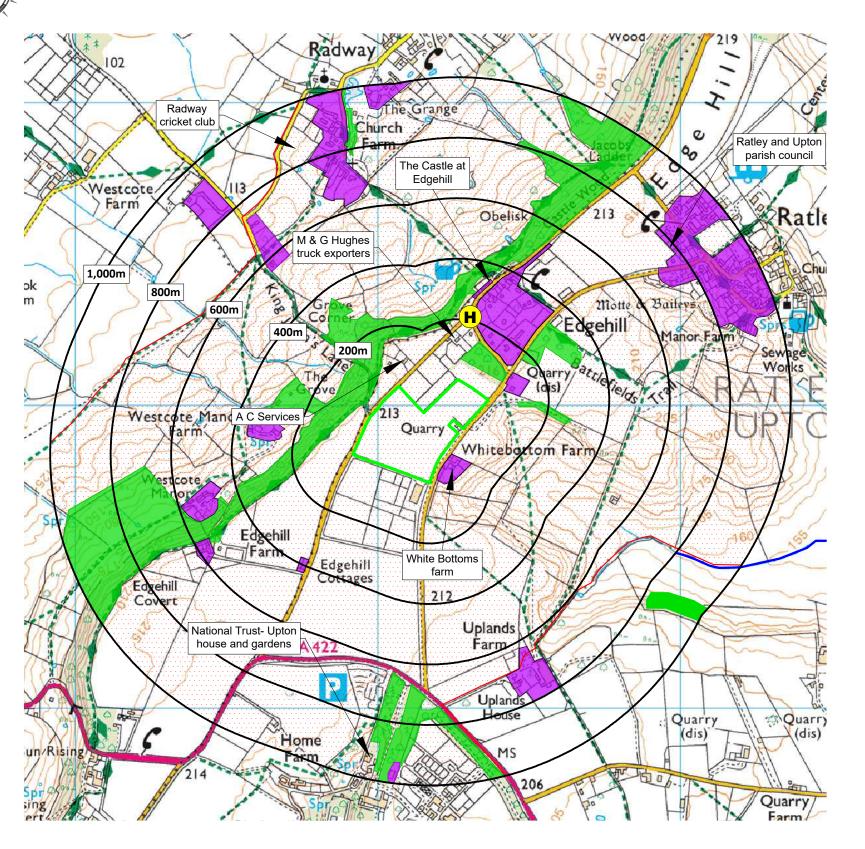
Class A roads
Class B roads
Class C roads
Surface water body (river / stream / pond / pool / lake)
Workplaces (includes agriculture industry, commerce and retail)
Residential receptor blocks (may also include small retail/leisure)

Nearest fire hydrant
Railway line
Woodland areas
Priority habitat (Deciduous Woodland)

Area of outstanding natural beauty



Compass Wind Rose for (EGBE) Coventry Period 1988-2017 - source: Iowa State University



NOTES

- 1. Boundaries are shown indicatively.
- Wind rose data shows the prevailing wind direction to be Southerly.

Drawing for indication only. Reproduced with the permission of the controller of H.M.S.O. Crown copyright licence No. 100022432. This drawing is copyright and property of Oaktree Environmental Ltd.

REVISION HISTORY

Rev:	Date:	Init:	Description:
_	30.01.23	JH	Initial drawing

Oaktree Environmental Ltd Waste, Planning and Environmental Consultants



DRAWING TITLE
RECEPTOR PLAN

CLIENT
Boddington Demolition Ltd

ROJECT/SITE

Scale Bar (1:12,500)

500 m

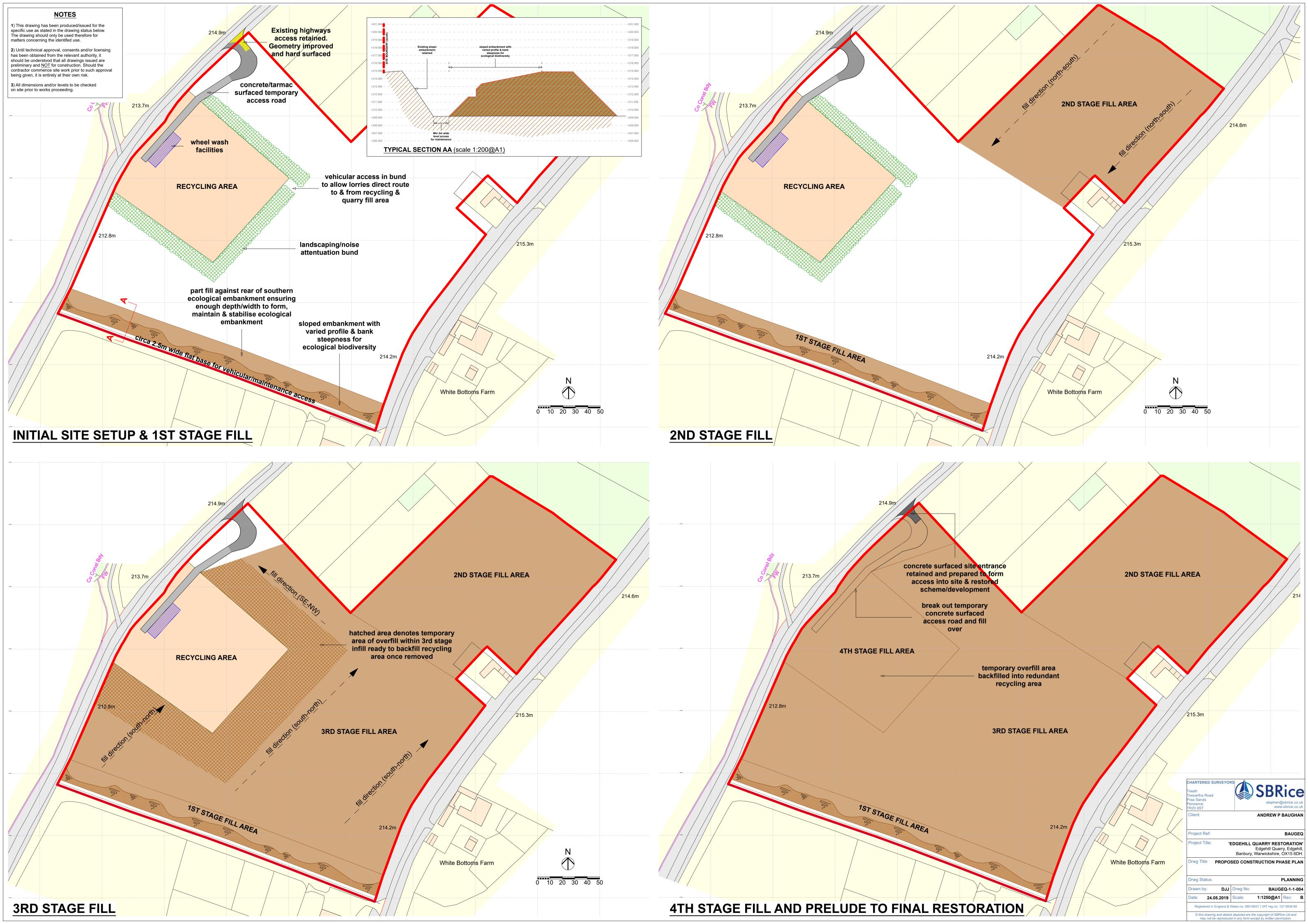
0 k m

1 k m

Edgehill Quarry, Edgehill, Banbury OX15 6DH

SCALE @ A3 1:12,500		1 ENT NO 043	јов но 007
043-007-03	ER	REV -	status Issued
DRAWN BY JH	CHECKED RS		дате 30.01.23

Lime House, Road Two, Winsford, Cheshire, CW7 3QZ t: 01606 558833 | e: sales@oaktree-environmental.co.uk



Appendix II

Complaints recording form

	Complaints Report Form
Date Recorded	Reference Number
Name and address of caller	
Telephone number of caller	
Time and Date of call	
Nature of complaint (noise, odour, dust, other) (date, time, duration)	
Weather at the time of complaint (rain, snow, fog, etc.)	
Wind (strength, direction)	
Any other complaints relating to this report	
Any other relevant information	
Potential reasons for complaint	
The operations being carried out on site at the time of the complaint	
	Follow Up
Actions taken	
Date of call back to complainant	
Summary of call back conversation	
	Recommendations
Change in procedures	
Changes to Written Management System	
Date changes implemented	
Form completed by	
Signed	

Appendix III

Dust monitoring form

Sheet

BODDINGTON DEMOLITION LIMITED HOUSEKEEPING CHECKLIST FORM **WEEK STARTING** DAY **TYPE OF INSPECTION** Т M T W S S SITE ENTRANCE/NOTICE BOARD **SECURITY - GATES** SECURITY - FENCING SITE ROADS (CLEAR FROM HAZARDS) IMPERMEABLE CONCRETE AREAS (INTEGRITY) DRAINAGE SYSTEM FOR CONCRETE PADS (IF APPLICABLE) WASTE CONTAINERS & BAY WALLS WASTE STORAGE INERT LIMITS WASTE STORAGE BIODEGRADABLE LIMITS CONTAINMENT OF REJECTED WASTE **NOISE LEVELS** FIRES (ANY INCIDENTS REPORTED) NO SMOKING SIGNS IN PLACE FUEL TANK/BUND LITTER (ON SITE AND OUTSIDE SITE BOUNDARY) DUST (VISUAL INSPECTIONS) RECORDS COMPLAINTS RECEIVED OTHER (SEE NOTES BELOW) INSPECTION CARRIED OUT BY NOTES/ACTION (CONTINUE ON A SEPARATE SHEET IF NECESSARY): **CHECKED BY SIGNATURE POSITION** DATE

of

Dust Monitoring

Weather	Date			
	Time			

Observation point

Key: No dust issue - N Dust escaping Y								
	Day	Mon	Tue	Wed	Thu	Fri	Sat	
Storage areas								
Site entrance gates								
Adjacent road network								
Site Perimeter								

Dust prevention

Key: Suppression on - Y Suppression off - N Maintenance being done - M									
	Day Mon Tue Wed Thu Fri Sat						Sat		
Suppression Systems (If applicable)									
Road Sweeper (Hired in when required)									

Completed by		
Monday		
Actions to take		
Completed by		
Tuesday		
Actions to take		
Completed by		
Wednesday		
Actions to take		
Completed by		
Thursday		
Actions to take		
Actions to take		
Completed by		
Friday		
Actions to take		
Completed by		
Completed by		
Saturday		
Actions to take		