

Berkswell Quarry Extension

Environmental Permit Variation Application

Environmental Risk Assessment

H.D Ricketts Limited

February 2024

Prepared on Behalf of Tetra Tech Environment Planning Transport Limited.
Registered in England number: 03050297

Document Control

Document:	Environmental Risk Assessment
Project:	Berkswell Quarry Permit Variation
Client:	H.D Ricketts Limited
Job Number:	B031730
File Origin:	\\southampton14\Data\Projects\Cemex UK Operations (C05081)\B031730 (Berkswell Variation 2020)\Reports

Version:	1	Status:	Final to EA		
Date:	June 2022				
Prepared by:	Isabelle Mills	Checked by:	Alice Shaw	Approved by:	Andrew Bowker
Description of revision:					

Revision:	2	Status:	Final to EA		
Date:	February 2024				
Prepared by:	Gemma Allan	Checked by:	Andrew Bowker	Approved By:	Andrew Bowker
Description of revision: Updated to include NDM feedback from the EA. Table 2 and Appendix A updated. Table 3 inserted to consider the permits located adjacent to the site.					

Revision:		Status:			
Date:					
Prepared by:		Checked by:		Approved By:	

Description of revision:

TABLE OF CONTENTS

1.0	INTRODUCTION	1
2.0	ENVIRONMENTAL RISK ASSESSMENT.....	2

LIST OF TABLES

Table 1: Potential Pathways	3
Table 2: Location of Potential Receptors within 1km in relation to waste operations	4
Table 3: Permits Registered with the Proposed and Current Permit Area.....	6

DRAWINGS

BER/B031730/PER/01 - Site Location and Permit Boundary

BER/B031730/PER/02 – Proposed Extension Areas

BER/B031730/REC/02 - Receptor Plan

APPENDICES

Appendix A – Environmental Risk Assessment

Appendix B – Nature and Heritage Conservation Screen (EPR/BB3333RH/V004)

1.0 INTRODUCTION

1.1 REPORT CONTEXT

- 1.1.1 This document has been prepared by Tetra Tech on behalf of the Operator, H.D Ricketts Limited (H.D Ricketts) to support an environmental permit application for Berkswell Quarry (the site), Cornets End Lane, Meriden, Warwickshire, CV7 7LH.
- 1.1.2 H.D Ricketts currently hold a bespoke environmental permit (reference EPR/KB3203MT) to allow the importation of inert waste to infill the quarry void following mineral extraction at the site and restore the site to create agricultural land and broadleaf woodland.
- 1.1.3 H.D Ricketts seek to vary the Environmental Permit to extend the permit boundary into the extension area, located to the southeast of the southern section of the site and the north west of the northern section (as shown on Drawing Number BER/B031730/PER/02). Subsequently, H.D Ricketts seek to increase the quantity of waste permitted from 1,576,500 tonnes to 3,376,500 tonnes which will accommodate the extension areas, an increase of 1,800,000 tonnes (1 million m³).
- 1.1.4 In addition to the extension, Ricketts seek to add the following waste codes to the environmental permit: -
- 19 12 09 – Minerals (for example sand, stones); and,
 - 19 12 12 – Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11.
- 1.1.5 This Environmental Risk Assessment is limited to a qualitative assessment of the potential risks to the environment and human health specifically related to the proposed changes at the site. This report will identify any significant risk and demonstrate that the risk of pollution will be acceptable by taking the appropriate measures to manage the risk.

2.0 ENVIRONMENTAL RISK ASSESSMENT

2.1 METHODOLOGY

2.1.1 This report has been prepared following the Environment Agency's (EA) Risk Assessment guidance. It specifically relates to the potential risks associated with the following risk types: -

- Odour;
- Noise and vibration;
- Fugitive emissions; and,
- Accidents and incidents.

2.1.2 This risk assessment addresses the above, and is based on the following methodology:-

- Identification of potential sources of risk;
- Identification of all potential receptors to risk; and,
- Risk assessment of each risk type.

2.1.3 The ERA is a tool used to identify the pollutant linkage i.e. source – pathway – receptor. For most risks, the atmosphere is the main pathway and will always exist. Therefore, the ERA deals primarily with the sources and receptors. The ERA is provided in Appendix A of this document and is summarised below.

2.1.4 A 'Nature and Heritage Conservation Screen' (EPR/BB3333RH/V004), was requested from the EA. The screen determines the presence of any site of nature and heritage conservation, or protected species or habitats that may be impacted by the proposal. A copy of the results is in Appendix B of this document.

2.1.5 The results of the screen identified four sites which are detailed in Table 2 below.

2.2 SOURCES

2.2.1 The potential sources of risks have been considered for each risk type, as provided in Appendix A of this document, and summarised below: -

Odour

- Waste materials.

Noise and vibration

- Engine noise from vehicles;
- Use of reverse vehicle warnings; and,
- Use of plant and machinery.

Fugitive emissions

- Particulate matter i.e., dust;
- Scavenging birds, pests and vermin;
- Mud; and,
- Litter.

Accidents

- Fire;
- Leaks and spillages;
- Flooding; and,
- Unauthorised access.

2.3 PATHWAYS

The pathways have been identified for each risk type as shown in **Table 1**: -

Table 1: Potential Pathways

Risk Type	Pathway
Odour	Atmosphere
Noise and vibration	Atmosphere
Fugitive emissions	Atmosphere
Accidents	Atmosphere
	Surface water run-off
	Infiltration
	Percolation

2.4 RECEPTORS

2.4.1 Receptors within 1km of the proposed application boundary, including those identified in the Nature and Heritage Screen (EPR/BB3333RH/V004), have been listed in **Error! Reference source not found.** and are shown on the Receptor Plan (Drawing Number BER/B031730/REC/02). The main pathway for the identified sources will be the atmosphere and as such, atmospheric conditions can affect dispersion rates and hence potential risk. As a result, the location of each receptor in relation to the site may influence the potential impact of the risk, as summarised in Table 2.

Table 2: Location of Potential Receptors within 1km in relation to waste operations

ID	Receptor	Direction from Operational Area	Minimum Distance from permit boundary (m)
Designated ecological habitats e.g. Ramsars, SAC, SPA, SSSI			
1	Berkswell Marsh	SW	85
2	River Blythe	W	775
3	Marsh Lane Nature Reserve	W	635
Local Wildlife Sites (LWS)			
4	Berkswell Marsh Meadow	SW	Adjacent
5	Mercote Mill Pool	S/W	Adjacent
6	Patrick Farm Meadow	W	695
Migratory route for protected species (as identified in the nature and heritage screen EPR/ EPR/KB3203MT)			
7	Brown Trout	W	420
8	European eel	W	420
9	European eel migratory route	W	420
10	Bullhead	W	420
11	'Code 2' species	W	420
Commercial and Industrial Premises			
12	Freeland Horticulture	-	On Site
13	L Lynch Plant Hire and Haulage	N	Adjacent
14	G R Mowing and Farm & Industrial Cladding	N	175
15	Kingswood Homes (Property Developer)	NW	575
16	Touchwood Building Contractors & Regional Driving Assessment Centre	NW	740
17	Commercial and Industrial Properties North of Cornets End Ln	N	50
18	Farm & Industrial Cladding Ltd	N	140
19	Industrial and Commercial premises on Marsh Lane	W	565
20	Industrial and Commercial premises on the A452	S	635
21	Meriden Road Industrial and Commercial premises	E	825
22	Keeper Cottage Business Park	SE	525
Listed Buildings			
23	Hornbrook Farmhouse (Grade II)	N	200
24	Barn at Hornbrook Farm (Grade II)	N	190
25	Mercote Mill Farmhouse (Grade II)	S	80
26	Holloway Farmhouse (Grade II)	E	720
27	Packhorse Bridge over River Blythe (Grade II*)	SW	950
Domestic Dwellings			
28	Park Farm House	E	Adjacent

29	Marcote Cottage	S	250
30	Marsh Cottage	SW	270
31	Keepers Cottage Property	E	515
32	Bibury House	SW	590
33	Properties on Bradnocks Marsh Lane	SW	700
34	Properties Southeast of site (off Home Farm)	SE	790
35	Properties South of A452	S	760
36	Properties off Marsh Lane	W	745
37	Property off Cornets End Ln	E	305
Highway or Major Roads			
38	Cornets End Lane	N	Adjacent
39	Kenliworth Road (A452)	W	310
Railways Infrastructure			
40	Railway Line	SW	745
Priority Habitats			
41	Priority Habitat Inventory – Deciduous Woodland Cornets End Ln	W	Within site boundary
42	Priority Habitat Inventory – Deciduous Woodland (Coronation Spinney)	S	Within site boundary
43	Priority Habitat Inventory – Deciduous Woodland (Mill Covert)	W	Adjacent
44	Priority Habitat Inventory – Deciduous Woodland	W	Adjacent
45	Priority Habitat Inventory – Deciduous Woodland (Sixteen Acre Wood)	S	Adjacent
46	Priority Habitat Inventory – Deciduous Woodland	E	30
47	Priority Habitat Inventory – Deciduous Woodland (Cornets End Ln)	N	60
48	Priority Habitat Inventory – Deciduous Woodland (The Bogs)	SE	2240
49	Priority Habitat Inventory – Deciduous Woodland (N of Hornbrook Farm)	N	398
50	Priority Habitat Inventory – Deciduous Woodland (N Warwickshire Golf Course)	N	595
51	Priority Habitat Inventory – Deciduous Woodland (Kenilworth Rd)	S	640
52	Priority Habitat Inventory – Deciduous Woodland (Meriden Rd W)	NW	736
53	Priority Habitat Inventory – Deciduous Woodland	E	350
54	Priority Habitat Inventory – Deciduous Woodland (Garden Wood)	SE	790
55	Priority Habitat Inventory – Deciduous Woodland (Corry Farm)	W	535
56	Priority Habitat Inventory – Deciduous Woodland (Marsh Ln)	W	911
57	Priority Habitat Inventory – Deciduous Woodland (NW)	NW	700
Ancient Woodland			
58	Ancient Replanted Woodland	S	Adjacent
59	Ancient Replanted Woodland	E	385
60	Ancient and Semi-Natural Woodland (Garden Wood)	SE	730
61	Ancient and Semi-Natural Woodland	W	995
62	Ancient and Semi-Natural Woodland (The Somers)	N	950
Sensitive Land Uses e.g. Farmland, allotments, commercial fish farms			
63	Park Farm	E	Adjacent
64	Mercote Mill Farm	S	70
65	Hornbrook Farm	N	155
66	Cornets End Farm	NE	165
67	Marsh Farm	W	320
68	Corry Farm	W	550
69	Patrick Farm	NW	755
70	Holloway Farm	E	735
Nearest Surface Water Features e.g. Rivers and Streams			
71	Ponds on existing quarry site	-	Within boundary
72	Stream	S	Adjacent
73	Stream	NW	Adjacent
74	Stream	SW	95
75	Ponds to the east of the River Blythe	W	650

76	River Blythe	W	920
77	Ponds	N	370
78	A452 Roundabout Ponds	N	605
79	Hampton Lane Ponds	N	785
80	Stream	NE	380
81	Cornets End Ln Stream	N	100
82	Ponds	E	110
83	Ponds off Marsh Lane	W	615

Groundwater (sensitivity)

According to the Multi Agency Geographic Information for the Countryside (MAGIC) website, the site is not located within a groundwater sources protection zone. However, the site is located over a Secondary A (bedrock) and Secondary B (superficial) aquifer. The superficial deposits comprise sand and gravel which will be removed as part of the mineral extraction activities that's authorised under planning permission.

2.4.2 In addition to the receptors mentioned in Table 2 there are 3 permits registered within the wider Berkswell Quarry site. Two of these permits are adjacent to the west of the H.D Rickets (EPR/KB3203MT) permit boundary site and the third partially falls within the proposed northern extension area. As such, these permits can be considered potential receptors and as such are listed in the Table below.

Table 3: Permits Registered with the Proposed and Current Permit Area

Permit Number	Permit Holder	Activity	Grid Reference
EPR/LB3007MN	CEMEX UK MATERIALS LIMITED	S0908 No 8: Management of inert or extractive waste at mine	SP2270080800 (Proposed Extension Area)
EPR/DB3508MA	BERKSWELL RECYCLING LIMITED	A22: Composting Facility	SP2289080540 (Adjacent to Current Area)
EPR/BB3709CC	BERKSWELL RECYCLING LIMITED	A16: Physical Treatment Facility	SP2289380547 (Adjacent to Current Area)

2.4.3 The permit held by H.D Rickets (EPR/KB3203MT) authorises the importation of waste to infill the quarry void following mineral extraction. Whilst the permits referenced in Table 3 can be deemed potential receptors, it is acknowledged that these activities work in conjunction with the wider Berkswell quarry site. Consequentially, these sites should not be at an increased environmental risk as a result of the infilling activities. It is also acknowledged that due to these operations being separately permitted that they will each have their own management systems in place to manage environmental risk.

2.4.4 Further details regarding the permits in Table 3 can be found within the Environmental Setting and Site Design document provided as Appendix D.

2.5 RISK ASSESSMENT

2.5.1 The ERA (Appendix A) looks at each specific hazard identified and assesses the likelihood of those hazards impacting on the receptors. This is achieved by fulfilling the following objectives: -

- Identify the location and nature of each hazard; Identify the specific receptors potentially at risk and assess the sensitivity of each receptor;
- Provide a qualitative assessment of the risk posed to each sensitive receptor;
- Identify management and monitoring techniques; and,
- Provide recommendations for more detailed assessments where necessary.

2.6 SUMMARY OF ERA

2.6.1 The ERA (Appendix A) indicates that the proposed changes will have no significant impacts in terms of odour, noise and vibration, and fugitive emissions, and the likelihood of accidents is minimal.

DRAWINGS

BER/B031730/PER/01 - Site Location and Permit Boundary

BER/B031730/PER/02 – Proposed Extension Areas

BER/B031730/REC/02 – Receptor Plan

APPENDICES

APPENDIX A – ENVIRONMENTAL RISK ASSESSMENT

Table A1: Odour Risk Assessment and Management Plan

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence.
Odour from received wastes.	<p>Occupiers of domestic dwellings identified in Table 2.</p> <p>Commercial and industrial users in Table 2 above.</p> <p>Permitted Activities identified in Table 3.</p>	Atmosphere	<p>It is proposed that the site will continue to use the waste types that are permitted under the current Environmental Permit (EPR/KB3203MT) for the proposed restoration works. These waste types are not putrescible and therefore will not biodegrade to produce offensive odours. As such, the risk of odour is not expected to increase.</p> <p>In addition to the waste codes that are listed in the Environmental Permit, H.D Ricketts are also seeking to accept waste codes 19 12 09 and 19 12 12 to the site.</p> <p>The proposed waste types (19 12 09 and 19 12 12) will solely derive from the adjacent aggregate recycling facility that is located to the north of the site. The aggregate recycling facility is regulated under a standard rules environmental permit that allows the treatment of waste to produce soil, soil substitutes and aggregates (SR2010 No12). Although the standard rules allows a variety of waste codes to be accepted and treated, only the following waste codes will be accepted at the aggregate treatment facility:-</p> <ul style="list-style-type: none"> • 17 01 01 – Concrete; • 17 01 02 – Bricks; • 17 01 03 – Tiles and Ceramics; • 17 01 07 – Mixtures of concrete, bricks, tiles and ceramics and other than those mentioned in 17 01 06; 	Unlikely due to the nature of the proposed waste types and the measures in place.	Odour annoyance.	Not significant due to the management techniques employed.

		<ul style="list-style-type: none"> • 17 05 04 – Soil and stones other than those mentioned in 17 05 03 (excluding topsoil, peat and soil and stones from contaminated sites); and, • 20 02 02 – Soil and stones (excluding topsoil and peat). <p>These waste streams are considered to have a low odour potential and therefore any waste that is generated from the treatment of these wastes will also have a low odour potential.</p> <p>The aggregate recycling facility is subject to strict waste acceptance procedures to minimise the risk of non-compliant wastes being accepted. Furthermore, the recovery operation at the site is also subject to strict waste acceptance procedures which will continue to be undertaken as a result of this variation. As such, it is considered that the risk of non-compliant wastes to be accepted is considered to be low.</p> <p>All site operatives will be vigilant with regard to identifying non-compliant wastes.</p> <p>Any non-conformances of odour issues will be reported to the Site Manager.</p> <p>Permits, EPR/LB3007MN, EPR/DB3508MA and EPR/BB3709CC will experience minimal impacts regarding odorous emissions. This is due to the inert nature of waste accepted on site and thus it is unlikely for the site to receive any wastes of a putrescible nature. It is further acknowledged that these sites will have individual management plans with regard to odorous emissions.</p>			
--	--	--	--	--	--

Table A2: Noise Risk Assessment and Management Plan

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence.
Vehicle movements on site and haul roads	Occupiers of domestic dwellings identified in Table 2. Commercial and industrial users in Table 2 above. Permitted Activities identified in Table 3.	Atmosphere	<p>Loads will only be delivered to the site during the hours stipulated in the planning permission.</p> <p>All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer's requirements. This will minimise the risk of mechanical failure which may result in increased noise emissions.</p> <p>All equipment and vehicles, when not in regular use, are required to be switched off. This will continue to be undertaken as a result of this variation.</p> <p>The Site Manager will be responsible for ensuring the above measures are implemented.</p> <p>All noise generating activities are monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.</p> <p>It is noted that Permits, EPR/LB3007MN, EPR/DB3508MA and EPR/BB3709CC will experience minimal impacts regarding noise. This is due to them being separate operations and having been established as a result of the original quarry on site. Therefore, it is unlikely that the infilling operations shall result in an increase to noise and vibration in the area when compared to both the quarrying activity and the noise produced by the individual activities permitted. It is further</p>	Intermittent during operating hours	Intermittent noise and vibration disturbance.	Not significant due to management techniques employed.

			acknowledged that these sites will have individual management plans with regard to noise.			
Noise from reversing vehicle warnings	Occupiers of domestic dwellings identified in Table 2. Commercial and industrial users in Table 2 above. Permitted Activities identified in Table 3	Atmosphere	<p>All noise and vibration generating activities are confined to the operating hours permitted in the planning permission, except for emergency repairs.</p> <p>All vehicles will utilise low level reversing signals where possible. In addition, traffic management is currently employed on site to ensure that vehicle reversing is minimised. This will continue to be implemented as a result of this variation.</p> <p>All noise generating activities are monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.</p> <p>It is also noted that Permits, EPR/LB3007MN, EPR/DB3508MA and EPR/BB3709CC will experience minimal impacts regarding noise. This is due to them being separate operations and having been established as a result of the original quarry on site. Therefore, it is unlikely that the infilling operations shall result in an increase to noise and vibration in the area when compared to both the quarrying activity and the noise produced by the individual activities permitted. It is further acknowledged that these sites will have individual management plans with regard to noise.</p>	Intermittent during operating hours.	Intermittent noise and vibration disturbance.	Not significant due to management techniques employed.
Noise from the loading/unloading of wastes	Occupiers of domestic dwellings identified in Table 2. Commercial and industrial users in Table 2 above. Permitted Activities identified in Table 3	Atmosphere	<p>All noise and vibration generating activities are confined to the operating hours permitted in the planning permission, except for emergency repairs.</p> <p>The loading/unloading of wastes are undertaken in a controlled manner to keep noise/vibration to a minimum. This will continue to be undertaken as a result of this variation.</p> <p>Drop heights will be minimized as much as practicable to reduce the generation of noise.</p> <p>All noise generating activities are monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.</p>	Intermittent during operating hours	Intermittent noise and vibration disturbance.	Not significant due to management techniques employed.

			<p>It is also noted that Permits, EPR/LB3007MN, EPR/DB3508MA and EPR/BB3709CC will experience minimal impacts regarding noise. This is due to them being separate operations and having been established as a result of the original quarry on site. Therefore, it is unlikely that the infilling operations shall result in an increase to noise and vibration in the area when compared to both the quarrying activity and the noise produced by the individual activities permitted. It is further acknowledged that these sites will have their own management plans with regard to noise.</p>			
Noise from plant and machinery	<p>Occupiers of domestic dwellings identified in Table 2.</p> <p>Commercial and industrial users in Table 2 above.</p> <p>Permitted Activities identified in Table 3.</p>	Atmosphere	<p>All noise and vibration generating activities are confined to the operating hours permitted in the planning permission, except for emergency repairs.</p> <p>All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer's requirements. This will minimise the risk of mechanical failure which may result in increased noise emissions.</p> <p>In addition, all plant and machinery will be inspected on a daily basis prior to use. The purpose of this inspection is to identify any signs of defects that may affect the integrity and operational efficiency of the plant. In the event that a defect is identified on any item of plant or equipment, the use of the plant/equipment will be suspended until the necessary remedial works have been undertaken.</p> <p>All equipment and vehicles, when not in regular use, will be switched off.</p> <p>All noise generating activities are monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.</p> <p>It is further noted that Permits, EPR/LB3007MN, EPR/DB3508MA and EPR/BB3709CC will experience minimal impacts regarding noise and vibration. This is due to them being separate waste operations and having been established as a result of the original quarry on site. Therefore, it is unlikely that the infilling operations shall result in an increase to noise and vibration in the area when compared to</p>	Intermittent during operating hours	Intermittent noise and vibration disturbance.	Not significant to management techniques employed.

			the quarrying activity. It is further acknowledged that these sites will have their own management plans with regard to noise and vibration resulting from their own activities.			
--	--	--	--	--	--	--

Table A3: Fugitive Emissions Risk Assessment and Management Plan

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Hazard	Receptor	Pathway	Hazard
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What has the potential to cause harm?
To Air						
Dust emissions generated from vehicles movements	<p>Occupiers of domestic dwellings identified in Table 2.</p> <p>Commercial and industrial users in Table 2 above.</p> <p>Surrounding farmland identified in Table 2.</p> <p>Protected habitats identified in Table 2.</p> <p>Statutory ecological sites identified in Table 2.</p> <p>Permitted Activities</p>	Atmosphere	<p>Vehicles delivering waste to the site will be covered or sheeted to prevent the generation of dust whilst the waste is in transit. Vehicle speeds will be limited on site and the access road to 10mph to prevent suspension and entrainment of dust. Clear signage is established on the site to reinforce the speed limit.</p> <p>The Site Manager undertakes a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the Site Manager.</p> <p>The use of modern plant and regular maintenance shall continue to be practiced to reduce dust emissions.</p> <p>Vehicle speeds are limited on site and access roads to prevent re-suspension and entrainment of dust.</p> <p>If necessary, a road sweeper will be contracted to clean the site access road and Cornets End Lane where vehicles exit the site.</p> <p>Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.</p> <p>Permits, EPR/LB3007MN, EPR/DB3508MA and EPR/BB3709CC will experience minimal impacts regarding dust emissions. Therefore, it is unlikely that the infilling operations shall increase dust emissions in the area when</p>	<p>Dust could potentially reach the nearby dwellings, commercial and industrial properties and designated sites and priority habitats when a strong wind blows in their direction. Management actions should prevent this happening.</p>	<p>Local nuisance</p> <p>Potential respiratory health risk to public and staff.</p> <p>Smothering.</p>	<p>Not significant due to management techniques employed.</p>

	identified in Table 3.		compared to both the quarrying activity and individual permitted operations. It is further acknowledged that these sites will have their own management plans with regard to dust emissions.			
Dust emissions generated from the loading/unloading of wastes	Occupiers of domestic dwellings identified in Table 2. Commercial and industrial users in Table 2 above. Surrounding farmland identified in Table 2. Protected habitats identified in Table 2. Statutory ecological sites identified in Table 2. Permitted Activities identified in Table 3.	Atmosphere	<p>The loading/unloading of wastes would be undertaken in a controlled manner to keep dust emissions to a minimum. Extra care would be taken with the deposit of waste during periods of prolonged dry weather or high winds.</p> <p>The Site Manager undertakes a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the Site Manager.</p> <p>Drop heights would be minimised as much as practicable to reduce the generation of dust from loading/unloading activities.</p> <p>Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.</p> <p>Permits, EPR/LB3007MN, EPR/DB3508MA and EPR/BB3709CC will experience minimal impacts regarding dust emissions. This is due to them being separate waste operations and having been established as a result of the original quarry on site. Therefore, it is unlikely that the infilling operations shall increase dust emissions in the area when compared to both the quarrying activity and individual permitted operations. It is further acknowledged that these sites will have individual management plans with regard to dust emissions.</p>	Dust could potentially reach the nearby dwellings, commercial and industrial properties and designated sites and priority habitats when a strong wind blows in their direction. Management actions should prevent this happening.	Local nuisance Potential respiratory health risk to public and staff. Smothering.	Not significant due to management techniques employed.
To Water						
Contaminated rainwater run-off	Groundwater Surface water features	Direct surface water run-off from site	Wastes accepted at the site are strictly inert as classified under the Landfill Directive (1999/31/EC) and Council Decision (2003/33/EC) of 19th December 2002 'establishing criteria and procedures for the acceptance of waste landfills'. As part of the proposal, H.D Ricketts will continue to accept	Unlikely due to the nature of waste types and measures in place.	Contamination of groundwater and surface water bodies.	Not significant due to inert nature of waste types

	<p>identified in Table 2.</p> <p>Permitted Activities identified in Table 3.</p>	<p>Infiltration</p> <p>Percolation</p>	<p>the waste types that are listed in the current Environmental Permit and will continue to employ strict waste acceptance procedures to minimise the risk of non-compliant wastes being accepted at the site.</p> <p>In addition to the waste codes that are listed in the Environmental Permit, H.D Ricketts are also seeking to accept waste codes 19 12 09 and 19 12 12 to the site.</p> <p>The proposed waste types (19 12 09 and 19 12 12) will solely derive from the adjacent aggregate recycling facility that is located to the north of the site. The aggregate recycling facility is regulated under a standard rules environmental permit that allows the treatment of waste to produce soil, soil substitutes and aggregates (SR2010 No12). Although the standard rules allows a variety of waste codes to be accepted and treated, only the following waste codes will be accepted at the aggregate treatment facility:-</p> <ul style="list-style-type: none"> • 17 01 01 – Concrete; • 17 01 02 – Bricks; • 17 01 03 – Tiles and Ceramics; • 17 01 07 – Mixtures of concrete, bricks, tiles and ceramics and other than those mentioned in 17 01 06; • 17 05 04 – Soil and stones other than those mentioned in 17 05 03 (excluding topsoil, peat and soil and stones from contaminated sites); and, • 20 02 02 – Soil and stones (excluding topsoil and peat). <p>To ensure that only the above wastes are accepted, the operator employs strict waste acceptance procedures to minimise the risk of non-compliant wastes being accepted at the aggregate recycling facility.</p> <p>As such, it is considered that any waste that may be generated and is considered for acceptance for the recovery operation will not be hazardous and will not result in an increased risk to contaminated rainwater run off.</p> <p>In addition, a Hydrogeological Risk Assessment (HRA) has been prepared to determine the risk that the proposal will pose</p>			<p>and management techniques employed.</p>
--	--	--	---	--	--	--

			<p>to underlying groundwater. A copy of the HRA is provided as Appendix F of the Environmental Permit Application.</p> <p>The mining waste permit (EPR/LB3007MN) which resides in the proposed extension area comprises stilling basins. These will eventually become part of the wider restoration scheme for Berkswell Quarry but are currently regulated under the conditions of the standard rules permit. These activities remain separate for the purpose of waste deposition. Consideration of the impact of the proposed extension on the water environment has been provided within the Hydrogeological Risk Assessment.</p>			
Pests/Scavenging birds						
Birds and pests	<p>Occupiers of domestic dwellings identified in Table 2.</p> <p>Commercial and industrial users in Table 2 above.</p> <p>Surrounding farmland identified in Table 2.</p> <p>Protected habitats identified in Table 2.</p> <p>Statutory ecological sites identified in Table 2.</p>	<p>Air</p> <p>Ground</p>	<p>It is proposed that the site will continue to use the waste types that are permitted under the current Environmental Permit (EPR/ KB3203MT) for the proposed restoration works. These waste types are not putrescible and therefore will not attract pests, vermin and/or scavenging birds</p> <p>In addition to the waste codes that are listed in the Environmental Permit, H.D Ricketts are also seeking to accept waste codes 19 12 09 and 19 12 12 to the site.</p> <p>The proposed waste types (19 12 09 and 19 12 12) will solely derive from the adjacent aggregate recycling facility that is located to the north of the site. The aggregate recycling facility is regulated under a standard rules environmental permit that allows the treatment of waste to produce soil, soil substitutes and aggregates (SR2010 No12). Although the standard rules allows a variety of waste codes to be accepted and treated, only the following waste codes will be accepted at the aggregate treatment facility:-</p> <ul style="list-style-type: none"> • 17 01 01 – Concrete; • 17 01 02 – Bricks; • 17 01 03 – Tiles and Ceramics; • 17 01 07 – Mixtures of concrete, bricks, tiles and ceramics and other than those mentioned in 17 01 06; 	<p>Unlikely due to nature of waste types and measures in place.</p>	<p>Nuisance to local residents.</p> <p>Predation of species.</p>	<p>Not significant due to inert nature of waste types and management techniques employed.</p>

	Permitted Activities identified in Table 3.		<ul style="list-style-type: none"> • 17 05 04 – Soil and stones other than those mentioned in 17 05 03 (excluding topsoil, peat and soil and stones from contaminated sites); and, • 20 02 02 – Soil and stones (excluding topsoil and peat). <p>These waste streams are considered to have a low potential to attract pests and scavenging birds and therefore any waste that is generated from the treatment of these wastes and is considered for the recovery operation will also have a low potential to attract pests and therefore there is not an increased risk to pests.</p> <p>The Site Manager will undertake regular reviews of pests and scavenging birds at the site. All site operatives will be vigilant and report any problems to the Site Manager.</p> <p>It is considered that the variation will not impact the risk of pests at Permits EPR/LB3007MN, EPR/DB3508MA and EPR/BB3709CC due to the inert nature of the site's operations, thus there is minimal risk of putrescible waste being accepted on site.</p>			
Mud						
Mud on local highways	Users of local highways	Tracked on vehicle wheels	<p>The site benefits from a wheel wash which is adjacent to the site entrance on the access road. This will be used by all outgoing vehicles and therefore minimise the risk of mud to develop.</p> <p>The amount of mud on local roads is monitored on a daily basis. All site operatives will be vigilant and report any problems to the Site Manager.</p> <p>In the event that mud is deposited on the access road and/or highway then a road sweeper will be employed if necessary.</p>	Unlikely due to measures in place.	Mud on roads is unsightly and can increase the likelihood of road traffic accidents.	Not significant due to management techniques employed.
Litter						
Wind blow litter	Occupiers of domestic dwellings identified in Table 2.	Air then deposition	It is proposed that the site will continue to use the waste types that are permitted under the current Environmental Permit (EPR/ KB3203MT) for the proposed restoration works. These waste types are not considered to represent a significant risk of litter.	Unlikely due to nature of waste and measures in place.	Local nuisance	Not significant due to nature of wastes and management

	<p>Commercial and industrial users in Table 2 above.</p> <p>Surrounding farmland identified in Table 2.</p> <p>Protected habitats identified in Table 2.</p> <p>Statutory ecological sites identified in Table 2.</p> <p>Permitted Activities identified in Table 3.</p>		<p>In addition to the waste codes that are listed in the Environmental Permit, H.D Ricketts are also seeking to accept waste codes 19 12 09 and 19 12 12 to the site.</p> <p>The proposed waste types (19 12 09 and 19 12 12) will solely derive from the adjacent aggregate recycling facility that is located to the north of the site. The aggregate recycling facility is regulated under a standard rules environmental permit that allows the treatment of waste to produce soil, soil substitutes and aggregates (SR2010 No12). Although the standard rules allows a variety of waste codes to be accepted and treated, only the following waste codes will be accepted at the aggregate treatment facility: -</p> <ul style="list-style-type: none"> • 17 01 01 – Concrete; • 17 01 02 – Bricks; • 17 01 03 – Tiles and Ceramics; • 17 01 07 – Mixtures of concrete, bricks, tiles and ceramics and other than those mentioned in 17 01 06; • 17 05 04 – Soil and stones other than those mentioned in 17 05 03 (excluding topsoil, peat and soil and stones from contaminated sites); and, • 20 02 02 – Soil and stones (excluding topsoil and peat). <p>These waste streams are considered to have a low litter potential and therefore any waste that is generated from the treatment of these wastes and is considered for the recovery operation will also have a low litter potential and therefore there is not an increased risk. Resultantly, it is likely that windblown litter does not pose an increased risk to Permits, EPR/LB3007MN, EPR/DB3508MA and EPR/BB3709CC.</p> <p>A vigilant watch for litter will continue to be undertaken by site operatives. In the unlikely event that litter is generated by the activity, the Site Supervisor will implement a litter collection as necessary.</p>			<p>techniques employed.</p>
--	--	--	---	--	--	-----------------------------

Table A4: Accident and Incident Risk Assessment and Management Plan

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence.
Fire or failure to contain firewater	<p>Groundwater</p> <p>Surface water features identified in Table 2.</p> <p>Occupiers of domestic dwellings identified in Table 2.</p> <p>Commercial and industrial users in Table 2 above.</p> <p>Surrounding farmland identified in Table 2.</p> <p>Protected habitats identified in Table 2.</p> <p>Statutory ecological sites</p>	<p>Atmosphere</p> <p>Surface water run-off</p>	<p>It is proposed that the site will continue to use the waste types that are permitted under the current Environmental Permit (EPR/ KB3203MT) for the proposed restoration works. These waste types are not considered to be combustible in nature and strict waste acceptance procedures will be implemented to minimise the risk of non-compliant wastes being accepted.</p> <p>In addition to the waste codes that are listed in the Environmental Permit, H.D Ricketts are also seeking to accept waste codes 19 12 09 and 19 12 12 to the site.</p> <p>The proposed waste types (19 12 09 and 19 12 12) will solely derive from the adjacent aggregate recycling facility that is located to the north of the site. The aggregate recycling facility is regulated under a standard rules environmental permit that allows the treatment of waste to produce soil, soil substitutes and aggregates (SR2010 No12). Although the standard rules allows a variety of waste codes to be accepted and treated, only the following waste codes will be accepted at the aggregate treatment facility: -</p> <ul style="list-style-type: none"> • 17 01 01 – Concrete; • 17 01 02 – Bricks; • 17 01 03 – Tiles and Ceramics; • 17 01 07 – Mixtures of concrete, bricks, tiles and ceramics and other than those mentioned in 17 01 06; 	Unlikely due to nature of waste types and measures in place.	<p>Local nuisance from smoke</p> <p>Contamination of local groundwater and surface water.</p> <p>Damage to infrastructure.</p>	Not significant due to management techniques employed.

	identified in Table 2.		<ul style="list-style-type: none"> • 17 05 04 – Soil and stones other than those mentioned in 17 05 03 (excluding topsoil, peat and soil and stones from contaminated sites); and, • 20 02 02 – Soil and stones (excluding topsoil and peat). <p>These waste streams are not considered to be combustible in nature and therefore any waste that is generated from the treatment of these wastes and is considered for the recovery operation will also be non-combustible and therefore there is not an increased risk.</p> <p>The operator will undertake regular maintenance of plant and equipment in accordance with the manufacturer's guidance. This will minimise the risk of mechanical failure which may result in fire.</p>			
Plant failure and breakdown	<p>Groundwater</p> <p>Surface water features identified in Table 2.</p> <p>Occupiers of domestic dwellings identified in Table 2.</p> <p>Commercial and industrial users in Table 2 above.</p> <p>Surrounding farmland identified in Table 2.</p>	<p>Atmosphere</p> <p>Percolation</p> <p>Surface water run-off</p>	<p>A programme of planned preventative maintenance of all plant and equipment is currently employed on site which ensures that all plant and equipment is subject to regular maintenance in accordance with the manufacturer's guidance. This will continue to be practiced as a result of this application.</p> <p>All plant and equipment will be switched off when not in regular use.</p>	Unlikely due to measures in place.	<p>Pollution of air</p> <p>Contamination to local groundwater and surface water.</p>	Not significant due to management techniques employed.

	Protected habitats identified in Table 2. Statutory ecological sites identified in Table 2.					
Leaks and spillages	Groundwater Surface water features identified in Table 2.	Percolation	<p>There are no proposed changes to the operational characteristics of the site and therefore it is considered that there is not an increased risk with regards to leaks and spillages.</p> <p>Regular maintenance will continue to be undertaken on all plant and equipment in accordance with the manufacturer's guidance. This will minimise the risk of mechanical failure which may result in leaks.</p> <p>Daily vehicle/plant checks will be undertaken to ensure any fuel/oil leaks etc. are repaired as soon as possible.</p> <p>Spill kits and training will be provided to staff.</p> <p>The Site Manager will be responsible for ensuring effective remediation and documenting any incident.</p>	Unlikely due to measures in place.	Contamination of local groundwater and/or surface water.	Not significant due to management techniques employed.
Flooding	Groundwater Surface water features identified in Table 2	Percolation	According to the 'Flood Map for Planning Service' website, the site is not situated within a flood risk zone and therefore the risk of flooding is expected to be low. However, in the unlikely event of significant flooding, operations may temporarily cease.	Unlikely due to measures in place.	Contamination to local groundwater and surface water.	Not significant due to management techniques employed.
Vandalism.	Groundwater. Surface water features identified in Table 2. Occupiers of domestic dwellings listed in Table 2 above.	Unauthorised entry to the site.	<p>The site will be surrounded by security fencing and site entrances are protected by lockable gates, which are kept locked outside of operating hours.</p> <p>The security fencing and gates will be inspected on a regular basis. Any identified damage to the fence or gates that could compromise the site security will be recorded and temporarily repaired as necessary before the end of that working day. Permanent repair or replacement will be undertaken as soon as practicable.</p>	Unlikely due to measures in place.	Release of polluting materials to air (smokes or fumes) water or land.	Not significant due to management techniques employed.

	<p>Commercial and industrial units users in Table 2 above.</p> <p>Priority Habitats listed in Table 2 above.</p> <p>Statutory ecological sites identified in Table 2.</p>		<p>There will be procedures in place which will require all visitors to the site to sign in on arrival and sign out on departure.</p>			
--	---	--	---	--	--	--

APPENDIX B – NATURE AND HERITAGE SCREEN EPR/BB3333RH/V004