



Section 3: Landfill and Other Waste Sites	On-site	0-50m	51-250	251-500	501-1000	1000- 1500
3.1 Landfill Sites						
3.1.1 Environment Agency/Natural Resources Wales Registered Landfill Sites	0	1	0	0	0	Not searched
3.1.2 Environment Agency/Natural Resources Wales Historic Landfill Sites	0	0	0	1	2	2
3.1.3 BGS/DoE Landfill Site Survey	0	0	0	0	1	0
3.1.4 Records of Landfills in Local Authority and Historical Mapping Records	0	0	0	2	0	1
3.2 Landfill and Other Waste Sites Findings						
3.2.1 Operational and Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	1	Not searched	Not searched
3.2.2 Environment Agency/Natural Resources Wales Licensed Waste Sites	0	0	2	3	5	1
Castion A.	Que eit	_	0.50	F1 2F	0 0	
Section 4: Current Land Use	Un-site	9	0-50m	51-25	0 2	51-500
4.1 Current Industrial Sites Data	0		2	9	No	ot searched
4.2 Records of Petrol and Fuel Sites	0		0	0		1
4.3 National Grid Underground Electricity Cables	0		0	0		0
4.4 National Grid Gas Transmission Pipelines	0		0	0		0
Section 5: Geology						
5.1 Records of Artificial Ground and Made Ground present beneath the study site			None io	dentified		
5.2 Records of Superficial Ground and Drift Geology present beneath the study site			Iden	tified		
5.3 For records of Bedrock and Solid Geology beneath the study site see the detailed findings section.						
Section 6: Hydrogeology and Hydrology			0-5	00m		
6.1 Records of Strata Classification in the Superficial Geology within 500m of the study site			Iden	tified		
6.2 Records of Strata Classification in the Bedrock Geology within 500m of the study site			Iden	itified		
	On-site	0-50m	51-250	251-500	501-1000	1000- 2000
6.3 Groundwater Abstraction Licences (within 2000m of the study site)	0	0	0	4	0	0
6.4 Surface Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	4
6.5 Potable Water Abstraction Licences (within 2000m of the study site)	0	0	0	0	0	0
6.6 Source Protection Zones (within 500m of the study site)	0	0	0	0	Not searched	Not searched
6.7 Source Protection Zones within Confined Aquifer	0	0	0	0	Not searched	Not searched
6.8 Groundwater Vulnerability and Soil Leaching Potential (within 500m of the study site)	1	0	1	0	Not searched	Not searched





0-500m

Section 6: Hydrogeology and Hydrology

	On-site	0-50m	51-250	251-500	501-1000	1000- 1500
6.9 Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site	No	No	No	No	No	Yes
6.10 Ordnance Survey MasterMap Water Network entries within 500m of the site	4	2	4	12	Not searched	Not searched
6.11 Surface water features within 250m of the study site	Yes	No	Yes	Not searched	Not searched	Not searched

Section 7: Flooding

7.1 Enviroment Agency Zone 2 floodplains within 250m of the study site	Identified
7.2 Environment Agency/Natural Resources Wales Zone 3 floodplains within 250m of the study site	Identified
7.3 Risk of flooding from Rivers and the Sea (RoFRaS) rating for the study site	High
7.4 Flood Defences within 250m of the study site	None identified
7.5 Areas benefiting from Flood Defences within 250m of the study site	None identified
7.6 Areas used for Flood Storage within 250m of the study site	None identified
7.7 Maximum BGS Groundwater Flooding susceptibility within 50m of the study site	Potential at Surface
7.8 BGS confidence rating for the Groundwater Flooding susceptibility areas	High

Section 8: Designated Environmentally Sensitive Sites	On-site	0-50m	51-250	251-500	501-1000	1000- 2000
8.1 Records of Sites of Special Scientific Interest (SSSI)	0	1	0	2	1	2
8.2 Records of National Nature Reserves (NNR)	0	0	0	0	0	0
8.3 Records of Special Areas of Conservation (SAC)	0	0	0	0	0	0
8.4 Records of Special Protection Areas (SPA)	0	0	0	0	0	0
8.5 Records of Ramsar sites	0	0	0	0	0	0
8.6 Records of Ancient Woodlands	0	0	0	0	0	1
8.7 Records of Local Nature Reserves (LNR)	0	0	0	4	0	0
8.8 Records of World Heritage Sites	0	0	0	0	0	0
8.9 Records of Environmentally Sensitive Areas	0	0	0	0	0	0

9
Groundsure
LOCATION INTELLIGENCE



Section 8: Designated Environmentally Sensitive Sites	On-site 0-50m 51-250 251-500 501-1000 2000					1000- 2000
8.10 Records of Areas of Outstanding Natural Beauty (AONB)	0	0	0	0	0	2
8.11 Records of National Parks	0	0	0	0	0	0
8.12 Records of Nitrate Sensitive Areas	0	0	0	0	0	0
8.13 Records of Nitrate Vulnerable Zones	0	0	0	0	0	0
8.14 Records of Green Belt land	0	0	0	0	0	0
Section 9: Natural Hazards						
9.1 Maximum risk of natural ground subsidence			Lo	0W		
9.1.1 Maximum Shrink-Swell hazard rating identified on the study site	Very Low					
9.1.2 Maximum Landslides hazard rating identified on the study site	Low					
9.1.3 Maximum Soluble Rocks hazard rating identified on the study site	Low					
9.1.4 Maximum Compressible Ground hazard rating identified on the study site	Negligible					
9.1.5 Maximum Collapsible Rocks hazard rating identified on the study site	Very Low					
9.1.6 Maximum Running Sand hazard rating identified on the study site	Very Low					
9.2 Radon						
9.2.1 Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level?	The site is in a Radon Affected Area, as between 10 and 30% of properties are above the Action Level.					30% of
9.2.2 Is the property in an area where Radon Protection are required for new properties or extensions to existing ones as described in publication BR211 by the Building Research Establishment?	Full radon protective measures are necessary.					
Section 10: Mining						
10.1 Coal mining areas within 75m of the study site	None identified					
10.2 Non-Coal Mining areas within 50m of the study site boundary			Iden	tified		
10.3 Brine affected areas within 75m of the study site			None ic	lentified		





Using this report

The following report is designed by Environmental Consultants for Environmental Professionals bringing together the most up-to-date market leading environmental data. This report is provided under and subject to the Terms & Conditions agreed between Groundsure and the Client. The document contains the following sections:

1. Historical Industrial Sites

Provides information on past land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. Potentially Infilled Land features are also included. This search is conducted using radii of up to 500m.

2. Environmental Permits, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by Regulatory Authorities, and sites determined as Contaminated Land. This search is conducted using radii up to 500m.

3. Landfills and Other Waste Sites

Provides information on landfills and other waste sites that may pose a risk to the study site. This search is conducted using radii up to 1500m.

4. Current Land Uses

Provides information on current land uses that may pose a risk to the study site in terms of potential contamination from activities or processes. These searches are conducted using radii of up to 500m. This includes information on potentially contaminative industrial sites, petrol stations and fuel sites as well as high pressure gas pipelines and underground electricity transmission lines.

5. Geology

Provides information on artificial and superficial deposits and bedrock beneath the study site.

6. Hydrogeology and Hydrology

Provides information on productive strata within the bedrock and superficial geological layers, abstraction licences, Source Protection Zones (SPZs) and river quality. These searches are conducted using radii of up to 2000m.

7. Flooding

Provides information on river and coastal flooding, flood defences, flood storage areas and groundwater flood areas. This search is conducted using radii of up to 250m.

8. Designated Environmentally Sensitive Sites

Provides information on the Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR), Special Areas of Conservation (SAC), Special Protection Areas (SPA), Ramsar sites, Local Nature Reserves (LNR), Areas of Outstanding Natural Beauty (AONB), National Parks (NP), Environmentally Sensitive Areas, Nitrate Sensitive Areas, Nitrate Vulnerable Zones and World Heritage Sites and Scheduled Ancient Woodland. These searches are conducted using radii of up to 2000m.

9. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These factors include natural ground subsidence and radon..

10. Mining

Provides information on areas of coal and non-coal mining and brine affected areas.

11. Contacts

This section of the report provides contact points for statutory bodies and data providers that may be able to provide further information on issues raised within this report. Alternatively, Groundsure provide a free Technical Helpline (08444 159000) for further information and guidance.

Note: Maps

Only certain features are placed on the maps within the report. All features represented on maps found within this search are given an identification number. This number identifies the feature on the mapping and correlates it to the additional information provided below. This identification number precedes all other information and takes the following format -Id: 1, Id: 2, etc. Where numerous features on the same map are in such close proximity that the numbers would obscure each other a letter identifier is used instead to represent the features. (e.g. Three features which overlap may be given the identifier "A" on the map and would be identified separately as features 1A, 3A, 10A on the data tables provided).

Where a feature is reported in the data tables to a distance greater than the map area, it is noted in the data table as "Not Shown".

All distances given in this report are in Metres (m). Directions are given as compass headings such as N: North, E: East, NE: North East from the nearest point of the study site boundary.





1. Historical Land Use



Garages

Tanks





1. Historical Industrial Sites

1.1 Potentially Contaminative Uses identified from 1:10,000 scale Mapping

The systematic analysis of data extracted from standard 1:10,560 and 1:10,000 scale historical maps provides the following information:

Records of sites with a potentially contaminative past land use within 500m of the search boundary: 171

ID	Distance [m]	Direction	Use	Date
1BA	0	On Site	Cuttings	1914
2A	0	On Site	Cuttings	1950
3A	0	On Site	Cuttings	1846
4B	6	SE	Hospital	1950
5	9	SE	Unspecified Workhouse	1914
6B	10	SE	Hospital	1974
7A	16	NE	Cuttings	1974
8C	16	SE	Unspecified Tank	1950
9C	19	SE	Unspecified Tank	1914
10J	22	Ν	Unspecified Works	1974
11D	30	NW	Unspecified Ground Workings	1950
12BB	34	NW	Unspecified Ground Workings	1914
13BC	45	NE	Cuttings	1914
14D	48	NW	Unspecified Disused Quarry	1974
15E	57	W	Lime Works	1910
16E	57	W	Lime Works	1930
17E	57	W	Lime Works	1938
18F	57	W	Unspecified Quarry	1930
19F	57	W	Unspecified Quarry	1938
20BD	58	NW	Unspecified Ground Workings	1914
21BE	77	W	Unspecified Heap	1910
22G	105	W	Railway Sidings	1938
23G	105	W	Railway Sidings	1930
24BF	108	W	Unspecified Heap	1910
25BG	109	SW	Unspecified Ground Workings	1914
26H	119	NW	Unspecified Works	1950
271	144	NW	Lime Works	1950
28BH	165	N	Unspecified Ground Workings	1914
29H	167	NW	Limestone Quarry	1974
301	169	NW	Unspecified Quarry	1950



31	170	NW	Unspecified Pump	1846
32	184	N	Railway Sidings	1950
33BI	188	N	Unspecified Quarry	1930
34	189	N	Railway Sidings	1930
351	189	N	Macadam Works	1930
36	192	N	Railway Sidings	1910
371	192	N	Macadam Works	1910
38	192	N		1910
39K	202	\\/	Railway Sidings	1910
40	202	NE	Unspecified Works	1914
41	222	N	Limestone Quarry	1846
42K	226	W	Lime Works	1955
43B1	220	W	Unspecified Ground	1955
	225		Workings	1333
44BK	231	NE	Cuttings	1846
45	243	NE	Lime Works	1930
46G	244	W	Unspecified Ground Workings	1971
47	253	NE	Lime Works	1910
48L	255	NW	Unspecified Ground Workings	1930
49BL	255	NW	Unspecified Ground Workings	1910
50L	255	NW	Unspecified Ground Workings	1938
51BM	261	SW	Cuttings	1955
52	263	NE	Railway Sidings	1914
53	285	NW	Limestone Quarries	1846
54S	285	NW	Lime Works	1930
55BN	288	S	Unspecified Disused Quarry	1974
56	296	Ν	Lime Works	1974
57	299	NE	Railway Building	1914
58BO	308	NE	Unspecified Quarry	1910
59P	320	NW	Unspecified Heap	1910
60BP	320	NW	Unspecified Ground Workings	1910
61BQ	321	Ν	Limestone Quarry	1974
62	324	W	Railway Sidings	1955
63M	326	W	Lime Kiln	1846
64M	333	W	Lime Kiln	1846
65AW	336	S	Unspecified Quarry	1950
66N	336	NW	Unspecified Ground Workings	1938
67BR	337	S	Unspecified Quarry	1914
68	340	NE	Macadam Works	1910
69N	342	NW	Unspecified Heap	1930
70N	344	NW	Unspecified Ground Workings	1910



71	244		Liner effect Marks	1050
71	344		Deilwey Gidinge	1950
720	344	5	Aanway Sluings	1950
73AB	345	N VV	Asphalt Works	1955
74N	345		Unspecified Quarry	1930
750	350	5	Mineral Railway Sidings	1914
/6B1	350	NW	Unspecified Ground Workings	1910
77P	351	NW	Unspecified Heap	1910
78Q	352	Ν	Unspecified Pit	1930
79Q	354	Ν	Unspecified Old Quarry	1910
80Q	355	Ν	Unspecified Quarry	1950
81	365	NE	Railway Sidings	1910
82	388	NW	Lime Works	1955
83R	390	Ν	Unspecified Pit	1930
84T	395	NW	Railway Sidings	1955
85R	396	Ν	Unspecified Quarry	1950
86X	397	NW	Tramway Sidings	1938
875	397	NW	Lime Works	1938
88BU	398	Ν	Unspecified Quarry	1930
89U	399	NW	Unspecified Quarry	1950
90	399	NW	Tramway Sidings	1950
91T	403	NW	Railway Sidings	1930
92T	403	NW	Railway Sidings	1938
93U	403	NW	Unspecified Quarry	1910
94U	403	NW	Railway Sidings	1910
95AA	404	NW	Unspecified Quarry	1846
965	404	NW	Lime Works	1910
97AJ	404	NW	Railway Sidings	1910
98R	409	Ν	Unspecified Old Quarry	1910
99BV	410	NW	Refuse Heap	1910
100V	413	NW	Unspecified Heap	1910
101V	413	NW	Unspecified Heap	1930
102V	413	NW	Unspecified Heap	1938
103Y	417	NW	Unspecified Ground Workings	1938
104	417	W	Lime Kiln	1846
105W	418	NE	Railway Building	1930
106W	418	NE	Railway Building	1910
107X	420	NW	Unspecified Ground Workings	1910
108Y	423	NW	Unspecified Ground Workings	1930
109U	423	NW	Tramway Sidings	1930
110AP	423	NW	Unspecified Ground Workings	1930
111X	425	NW	Tramway Sidings	1930
112	429	NW	Unspecified Works	1971
		-		



113Z	431	NW	Unspecified Heap	1938
114V	434	NW	Lime Kilns	1846
115Z	439	NW	Unspecified Heap	1930
116AE	441	NW	Refuse Heap	1938
117AA	441	NW	Unspecified Heap	1955
118AB	446	NW	Unspecified Heap	1930
119AB	446	NW	Unspecified Heap	1910
120AB	446	NW	Unspecified Heap	1938
121AC	447	W	Railway Sidings	1938
122AC	447	W	Railway Sidings	1930
123AB	449	NW	Unspecified Heap	1955
124AF	449	NW	Railway Sidings	1971
125AD	450	NE	Railway Sidings	1910
126AD	450	NE	Railway Sidings	1930
127BX	450	NW	Limestone Quarries	1846
128	451	NW	Lime Kiln	1846
129X	453	NW	Unspecified Ground Workings	1930
130AZ	455	NW	Refuse Heap	1910
131AH	456	NW	Refuse Heap	1910
132AE	458	NW	Limestone Quarries	1846
133	458	NW	Railway Sidings	1846
134	459	SE	Infectious Diseases Hospital	1914
135AB	459	NW	Railway Sidings	1930
136AB	459	NW	Railway Sidings	1938
137AF	459	NW	Railway Building	1938
138AF	459	NW	Railway Building	1930
139BY	462	S	Limestone Quarries	1846
140	462	NW	Railway Sidings	1910
141AG	466	NW	Railway Building	1930
142AG	466	NW	Railway Building	1938
143AH	468	NW	Unspecified Heap	1938
144AI	468	NW	Unspecified Heap	1910
145AI	469	NW	Limestone Quarries	1846
146	472	W	Unspecified Works	1971
147AJ	472	NW	Refuse Heap	1910
148AJ	472	NW	Refuse Heap	1938
149AI	472	NW	Unspecified Heap	1930
150BZ	474	NW	Unspecified Ground Workings	1955
151AK	475	NW	Asphalt Works	1938
152AK	475	NW	Asphalt Works	1930
153AL	477	NW	Cement Works	1938
154AL	477	NW	Cement Works	1910
155AQ	478	W	Unspecified Tank	1971
156S	478	NW	Refuse Heap	1930



LOCATION INTELLIGENCE	•			
157AL	480	NW	Cement Works	1930
158CB	484	NW	Unspecified Ground Workings	1955
159AB	485	NW	Lime Kilns	1846
160	485	NE	Railway Building	1910
161AM	485	NW	Railway Building	1930
162AM	485	NW	Railway Building	1938
163AK	485	NW	Unspecified Quarries	1910
164AN	485	NW	Unspecified Quarry	1930
165AN	485	NW	Unspecified Quarry	1938
166CA	487	SW	Unspecified Old Quarry	1910
167	488	NE	Unspecified Tanks	1930
168	490	NW	Railway Sidings	1910
169AG	490	NW	Railway Building	1910
170AT	493	NW	Lime Kilns	1846
171CC	496	NW	Refuse Heap	1971
171CC	496	NW	Refuse Heap	1971

1.2 Additional Information – Historical Tank Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical tanks within 500m of the search boundary:

ID	Distance (m)	Direction	Use	Date
172C	17	SE	Unspecified Tank	1989
173C	18	SE	Unspecified Tank	1976
174C	18	SE	Unspecified Tank	1964
175AO	312	W	Unspecified Tank	1932
176AO	312	W	Unspecified Tank	1912
177Z	441	NW	Tanks	1988
178AP	455	NW	Unspecified Tank	1989
179BW	470	NW	Unspecified Tank	1964
180AR	475	W	Tanks	1964
181AQ	477	W	Tanks	1964
182AQ	477	W	Tanks	1976
183AQ	481	W	Tanks	1984
184AR	483	W	Tanks	1976
185AR	483	W	Tanks	1964
186AQ	490	W	Tanks	1976
187AQ	490	W	Tanks	1964
188AS	490	W	Tanks	1976
189AS	490	W	Tanks	1964
190AQ	492	W	Tanks	1997

31





191AS	492	W	Tanks	1984
192AQ	493	W	Tanks	1984
193AQ	493	W	Tanks	1988
194AQ	495	W	Tanks	1964
195AQ	495	W	Tanks	1976
196AS	495	W	Tanks	1964
197AS	495	W	Tanks	1976
198AR	496	W	Tanks	1976
199AR	496	W	Tanks	1964
200AT	499	NW	Unspecified Tank	1884
201AU	499	W	Unspecified Tank	1976
202AU	499	W	Unspecified Tank	1964

1.3 Additional Information – Historical Energy Features Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical energy features within 500m of the search boundary:

22

ID	Distance (m)	Direction	Use	Date
203AV	27	NE	Electricity Substation	1989
204AV	35	NE	Electricity Substation	1976
205AW	436	S	Electricity Substation	1996
206AW	436	S	Electricity Substation	1997
207AW	439	S	Electricity Substation	1988
208AX	447	SW	Electricity Substation	1997
209AX	447	SW	Electricity Substation	1996
210AX	448	SW	Electricity Substation	1969
211AX	448	SW	Electricity Substation	1988
212AX	448	SW	Electricity Substation	1962
213AY	477	SW	Electricity Substation	1969
214AY	477	SW	Electricity Substation	1996
215AY	477	SW	Electricity Substation	1995
216AY	477	SW	Electricity Substation	1993
217AY	477	SW	Electricity Substation	1996
218AY	477	SW	Electricity Substation	1997
219AY	477	SW	Electricity Substation	1994
220AY	477	SW	Electricity Substation	1995
221AY	478	SW	Electricity Substation	1990
222AY	478	SW	Electricity Substation	1968
223AZ	490	NW	Electricity Substation	1989
224AZ	490	NW	Electricity Substation	1976





0

0

1.4 Additional Information – Historical Petrol and Fuel Site Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical petrol stations and fuel sites within 500m of the search boundary:

Database searched and no data found.

1.5 Additional Information - Historical Garage and Motor Vehicle Repair Database

The systematic analysis of data extracted from High Detailed 1:1,250 and 1:2,500 scale historical maps provides the following information.

Records of historical garage and motor vehicle repair sites within 500m of the search boundary: 0

Database searched and no data found.

1.6 Historical military sites

Certain military installations were not noted on historic mapping for security reasons. Whilst not all military land is necessarily of concern, Groundsure has researched and digitised a number of Ordnance Factories and other military industrial features (e.g. Ordnance Depots, Munitions Testing Grounds) which may be of contaminative concern. This research was drawn from a number of different sources, and should not be regarded as a definitive or exhaustive database of potentially contaminative military installations. The boundaries of sites within this database have been estimated from the best evidence available to Groundsure at the time of compilation.

Records of historical military sites within 500m of the search boundary:

Database searched and no data found.

1.7 Potentially Infilled Land

Records of Potentially Infilled Features from 1:10,000 scale mapping within 500m of the study site: 97

ID	Distance(m)	Direction	Use	Date
225BA	0	On Site	Cuttings	1914
226A	0	On Site	Cuttings	1950
227A	0	On Site	Cuttings	1846
228A	16	NE	Cuttings	1974
229D	30	NW	Unspecified Ground Workings	1950
230BB	34	NW	NW Unspecified Ground 1 Workings	
231BC	45	NE	Cuttings	1914
232D	48	NW	Unspecified Disused	1974

The following Historical Potentially Infilled Features derived from the Historical Mapping information is provided by Groundsure:





			Quarry	
233F	57	W	Unspecified Quarry	1938
234F	57	W	Unspecified Quarry	1930
235BD	58	NW	Unspecified Ground Workings	1914
236BE	77	W	Unspecified Heap	1910
237BF	108	W	Unspecified Heap	1910
238BG	109	SW	Unspecified Ground Workings	1914
239BH	165	Ν	Unspecified Ground Workings	1914
240H	167	NW	Limestone Quarry	1974
2411	169	NW	Unspecified Quarry	1950
242	188	NW	Pond	1914
243BI	188	Ν	Unspecified Quarry	1930
244J	197	Ν	Unspecified Quarry	1910
245J	222	Ν	Limestone Quarry	1846
246BJ	229	W	Unspecified Ground Workings	1955
247BK	231	NE	Cuttings	1846
248BJ	234	W	Pond	1971
249G	244	W	Unspecified Ground Workings	1971
250L	255	NW	Unspecified Ground Workings	1930
251BL	255	NW	Unspecified Ground Workings	1910
252L	255	NW	Unspecified Ground Workings	1938
253BM	261	SW	Cuttings	1955
254L	285	NW	Limestone Quarries	1846
255BN	288	S	Unspecified Disused Quarry	1974
256BO	308	NE	Unspecified Quarry	1910
257P	320	NW	Unspecified Heap	1910
258BP	320	NW	Unspecified Ground Workings	1910
259BQ	321	Ν	Limestone Quarry	1974
260AW	336	S	Unspecified Quarry	1950
261N	336	NW	Unspecified Ground Workings	1938
262BR	337	S	Unspecified Quarry	1914
263BS	338	NE	Pond	1914
264N	342	NW	Unspecified Heap	1930
265N	344	NW	Unspecified Ground Workings	1910
266N	345	NW	Unspecified Quarry	1930
267BS	349	NE	Pond	1950
268BT	350	NW	Unspecified Ground Workings	1910



269P	351	NW	Unspecified Heap	1910
270Q	352	Ν	Unspecified Pit 1930	
271Q	354	Ν	Unspecified Old Quarry	1910
272Q	355	Ν	Unspecified Quarry	1950
273	365	NW	Ponds	1910
274R	390	Ν	Unspecified Pit	1930
275R	396	Ν	Unspecified Quarry	1950
276BU	398	Ν	Unspecified Quarry	1930
277U	399	NW	Unspecified Quarry	1950
278U	403	NW	Unspecified Quarry	1910
279AA	404	NW	Unspecified Quarry	1846
280R	409	Ν	Unspecified Old Quarry	1910
281BV	410	NW	Refuse Heap	1910
282V	413	NW	Unspecified Heap	1930
283V	413	NW	Unspecified Heap	1938
284V	413	NW	Unspecified Heap	1910
285Y	417	NW	Unspecified Ground Workings	1938
286X	420	NW	Unspecified Ground Workings	1910
287Y	423	NW	Unspecified Ground Workings	1930
288AP	423	NW	Unspecified Ground Workings	1930
289Z	431	NW	Unspecified Heap	1938
290BW	439	NW	Unspecified Heap	1930
291BR	441	S	Pond	1950
292AE	441	NW	Refuse Heap	1938
293BW	441	NW	Unspecified Heap	1955
294AF	446	NW	Unspecified Heap	1938
295AF	446	NW	Unspecified Heap	1910
296AF	446	NW	Unspecified Heap	1930
297AG	449	NW	Unspecified Heap	1955
298BR	449	S	Pond	1914
299BX	450	NW	Limestone Quarries	1846
300X	453	NW	Unspecified Ground Workings	1930
301AZ	455	NW	Refuse Heap	1910
302AH	456	NW	Refuse Heap	1910
303AE	458	NW	Limestone Quarries	1846
304BY	462	S	Limestone Quarries	1846
305AI	468	NW	Unspecified Heap	1938
306AI	468	NW	Unspecified Heap	1910
307AI	469	NW	Limestone Quarries	1846
308AJ	472	NW	Refuse Heap	1910
309AJ	472	NW	Refuse Heap	1938
310AI	472	NW	Unspecified Heap	1930





311BZ	474	NW	Unspecified Ground Workings	1955
312S	478	NW	Refuse Heap	1930
313CA	480	SW	Pond	1950
314CB	484	NW	Unspecified Ground Workings	1955
315AK	485	NW	Unspecified Quarries	1910
316AN	485	NW	Unspecified Quarry	1938
317AN	485	NW	Unspecified Quarry	1930
318CA	487	SW	Pond	1938
319CA	487	SW	Unspecified Old Quarry	1910
320CA	487	SW	Pond	1930
321CC	496	NW	Refuse Heap	1971





2. Environmental Permits, Incidents and Registers Map



Red List Discharge Consents

Hazardous Substance Consents

and Enforcements





2. Environmental Permits, Incidents and Registers

2.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency/Natural Resources Wales and Local Authorities reveal the following information:

2.1.1 Records of historic IPC Authorisations within 500m of the study site:

Database searched and no data found.

2.1.2 Records of Part A(1) and IPPC Authorised Activities within 500m of the study site:

Database searched and no data found.

2.1.3 Records of Red List Discharge Consents (potentially harmful discharges to controlled waters) within 500m of the study site:

0

0

0

Database searched and no data found.

2.1.4 Records of List 1 Dangerous Substances Inventory Sites within 500m of the study site:

0

Database searched and no data found.

2.1.5 Records of List 2 Dangerous Substance Inventory Sites within 500m of the study site:

0

Database searched and no data found.





The following Part A(2) and Part B Activities are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Details		
35	245	NW	375164 443361	Address: Tarmac Ltd, Bankfield Quarry, Pimlico, Clitheroe, Lancashire, BB7 4QA Process: Roadstone Coating Processes Status: Current Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified	
36G	421	S	375472 442624	Address: RVBC depot, Church Walk, Clitheroe, BB7 2RA Process: Waste Oil Burner <0.4 MW Status: New Legislation Applies Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified	
37Н	449	S	375338 442569	Address: Paint It Ltd., Salthill Industrial Estate, Lincoln Way, Clitheroe, Lancashire, BB7 1QL Process: Respraying of Road Vehicles Status: Revoked Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified	
38H	449	S	375338 442569	Address: Steadplan Ltd, Unit 4C, Salthill Industrial Estate, Lincoln Way, Clitheroe, Lancashire, BB7 1QD Process: Respraying of Road Vehicles Status: Historical Permit Permit Type: Part B	Enforcement: No Enforcements Notified Date of Enforcement: No Enforcements Notified Comment: No Enforcements Notified	

2.1.7 Records of Category 3 or 4 Radioactive Substances Authorisations:

0

Database searched and no data found.

2.1.8 Records of Licensed Discharge Consents within 500m of the study site:

1

The following Licensed Discharge Consents records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Det	ails
34	451	NE	375850 443450	Address: BANKFIELD QUARRY, CLITHEROE, LANCASHIRE Effluent Type: MISCELLANEOUS DISCHARGES - MINE/GROUNDWATER AS RAISED Permit Number: 017190056 Permit Version: 1	Receiving Water: TRIBUTARY RIVER RIBBLE Status: PRE NRA LEGISLATION WHERE ISSUE DATE < 01-SEP-89 (HISTORIC ONLY) Issue date: - Effective Date: 01-Sep-1979 Revocation Date: -





2.1.9 Records of Water Industry Referrals (potentially harmful discharges to the public sewer) within 500m of the study site:

0

0

1

Database searched and no data found.

2.1.10 Records of Planning Hazardous Substance Consents and Enforcements within 500m of the study site:

Database searched and no data found.

2.2 Dangerous or Hazardous Sites

Records of COMAH & NIHHS sites within 500m of the study site:

The following COMAH & NIHHS Authorisation records provided by the Health and Safety Executive are represented as polygons or buffered points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	Company	Address	Operational Status	Tier
39	461	W	Johnson Matthey Plc	Johnson Matthey Plc, Clitheroe, Pimlico Industrial Area, West Bradford Road, Clitheroe, Lancashire, BB7 4QB	Current COMAH Site	COMAH Lower Tier Operator

2.3 Environment Agency/Natural Resources Wales Recorded Pollution Incidents

2.3.1 Records of National Incidents Recording System, List 2 within 500m of the study site:

29

The following NIRS List 2 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distance (m)	Direction	NGR	Det	tails
1	200	SW	375200.0 442860.0	Incident Date: 08-Nov-2001 Incident Identification: 41923.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Fumes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)
2	209	SW	375164.0 442880.0	Incident Date: 17-Apr-2003 Incident Identification: 152079.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)



LOCATION INTELLIGENCE



ID	Distance (m)	Direction	NGR	Details		
3A	233	W	375011.0 443021.0	Incident Date: 13-Apr-2002 Incident Identification: 71439.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)	
4A	233	W	375011.0 443021.0	Incident Date: 27-Aug-2001 Incident Identification: 27035.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
5A	233	W	375011.0 443021.0	Incident Date: 05-Sep-2001 Incident Identification: 29510.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
6A	233	W	375011.0 443021.0	Incident Date: 27-Aug-2001 Incident Identification: 27035.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
7	245	NW	375280.0 443440.0	Incident Date: 23-Mar-2002 Incident Identification: 66114.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)	
8B	281	W	374951.0 443056.0	Incident Date: 20-Sep-2001 Incident Identification: 31921.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
9B	281	W	374951.0 443056.0	Incident Date: 24-Sep-2002 Incident Identification: 110179.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)	
10B	281	W	374951.0 443056.0	Incident Date: 05-Sep-2001 Incident Identification: 29512.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
11B	281	W	374951.0 443056.0	Incident Date: 27-Aug-2001 Incident Identification: 27040.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
12C	292	S	375242.0 442737.0	Incident Date: 23-Sep-2002 Incident Identification: 109759.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)	
13C	292	S	375242.0 442737.0	Incident Date: 08-Nov-2001 Incident Identification: 41873.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Fumes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
14C	292	S	375242.0 442737.0	Incident Date: 28-Aug-2001 Incident Identification: 27244.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
15C	292	S	375242.0 442737.0	Incident Date: 29-Jan-2003 Incident Identification: 133953.0	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact)	
		-	-			





ID	Distance (m)	Direction	NGR	Details		
				Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Chemical Odour	Air Impact: Category 3 (Minor)	
16C	292	S	375242.0 442737.0	Incident Date: 09-Sep-2001 Incident Identification: 29749.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Fumes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
17C	296	S	375253.0 442730.0	Incident Date: 27-Aug-2001 Incident Identification: 27019.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)	
18C	296	S	375253.0 442730.0	Incident Date: 27-Aug-2001 Incident Identification: 27019.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)	
19	309	S	375261.0 442715.0	Incident Date: 25-May-2001 Incident Identification: 6669.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)	
20	336	W	374894.0 443067.0	Incident Date: 26-Sep-2001 Incident Identification: 33080.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
21D	366	NW	374890.0 443251.0	Incident Date: 12-Mar-2001 Incident Identification: 235.0 Pollutant: Inert Materials and Wastes Pollutant Description: Mineral Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)	
22D	383	NW	374875.0 443258.0	Incident Date: 10-Oct-2001 Incident Identification: 35778.0 Pollutant: Inert Materials and Wastes Pollutant Description: Mineral Materials and Wastes	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 4 (No Impact)	
23	423	W	374809.0 443045.0	Incident Date: 20-Sep-2001 Incident Identification: 31848.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	
24	458	W	374797.0 442950.0	Incident Date: 23-Sep-2002 Incident Identification: 109907.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)	
25E	461	SW	374970.0 442717.0	Incident Date: 13-Apr-2002 Incident Identification: 71471.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)	
26E	461	SW	374970.0 442717.0	Incident Date: 19-Oct-2002 Incident Identification: 115750.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Dust	Water Impact: Category 3 (Minor) Land Impact: Category 3 (Minor) Air Impact: Category 3 (Minor)	
27E	461	SW	374970.0 442717.0	Incident Date: 30-Jan-2003 Incident Identification: 134214.0 Pollutant: Atmospheric Pollutants and	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)	



CENTRE MAPS LIVE.

ID	Distance (m)	Direction	NGR	Det	tails			
				Effects Pollutant Description: Chemical Odour				
28E	461	SW	374970.0 442717.0	0.0 Incident Date: 07-Apr-2001 7.0 Incident Identification: 1863.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Other Atmospheric Pollutant or Effect				
29E	462	SW	374965.0 442721.0	Incident Date: 30-Aug-2003 Incident Identification: 186171.0 Pollutant: Atmospheric Pollutants and Effects Pollutant Description: Sulphide Odour	Water Impact: Category 4 (No Impact) Land Impact: Category 4 (No Impact) Air Impact: Category 3 (Minor)			

2.3.2 Records of National Incidents Recording System, List 1 within 500m of the study site:

4

The following NIRS List 1 records are represented as points on the Environmental Permits, Incidents and Registers Map:

ID	Distanc e(m)	Direction	NGR	Detail	S
30	120	S		Incident Date: 22-Jan-2000 Incident Identification: 35418.0 Catchments Name: RIVER RIBBLE (LONG GILL) Water Description: RIVER STRETCH (FRESHWATER) Water Course: COASTLINE TRIB Incident Substantiated: Yes	Priority Description: Immediate (2 Hours) Waste Description: Not Available Water Impact: No Impact Land Impact: No Impact Air Impact: Significant Impact Action Taken: Not Available
31F	250	SW		Incident Date: 03-Oct-1999 Incident Identification: 32972.0 Catchments Name: RIVER RIBBLE (LONG GILL) Water Description: RIVER STRETCH (FRESHWATER) Water Course: COASTLINE TRIB Incident Substantiated: Yes	Priority Description: Immediate (2 Hours) Waste Description: Not Available Water Impact: No Impact Land Impact: No Impact Air Impact: Significant Impact Action Taken: Not Available
32F	250	SW		Incident Date: 03-Oct-1999 Incident Identification: 32970.0 Catchments Name: RIVER RIBBLE (LONG GILL) Water Description: RIVER STRETCH (FRESHWATER) Water Course: COASTLINE TRIB Incident Substantiated: Yes	Priority Description: Immediate (2 Hours) Waste Description: Not Available Water Impact: No Impact Land Impact: No Impact Air Impact: Significant Impact Action Taken: Not Available
33G	454	SE		Incident Date: 03-Mar-2000 Incident Identification: 36451.0 Catchments Name: RIVER RIBBLE (LONG GILL) Water Description: RIVER STRETCH (FRESHWATER) Water Course: COASTLINE TRIB Incident Substantiated: Yes	Priority Description: Immediate (2 Hours) Waste Description: Not Available Water Impact: No Impact Land Impact: No Impact Air Impact: Significant Impact Action Taken: Not Available





Records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site 0

Database searched and no data found.





3. Landfill and Other Waste Sites Map







3. Landfill and Other Waste Sites

3.1 Landfill Sites

3.1.1 Records from Environment Agency/Natural Resources Wales landfill data within 1000m of the study site:

1

The following Environment Agency/Natural Resources Wales landfill records are represented as polygons on the Landfill and Other Waste Sites map:

2 50 NW 375100 Landfill Reference: CAS001 Operators: Castle Cement Ltd (Waste) Reference: CAS001 EPR Reference: Landfill Type: A07: Industrial Waste Landfill (Factory curtilage)	ID	Distance (m)	Direction	NGR	Details			
	2	50	NW	375100 443100	Address: Coplow Quarry, Ribblesdale Works, West Bradford Road, Clitheroe, Lancashire, BB7 4QF Landfill Reference: 54014.0 Environmental Permitting Regulations (Waste) Reference: CAS001 Landfill Type: A07: Industrial Waste Landfill (Factory curtilage)	Operator: Castle Cement Ltd Status: Modified IPPC Reference: EPR Reference:		

3.1.2 Records of Environment Agency/Natural Resources Wales historic landfill sites within 1500m of the study site:

5

The following landfill records are represented as either points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details				
4	479	NW		Site Address: Crosshills Quarry, West Bradford Road, Pimlico, Clitheroe, Lancashire Waste Licence: - Site Reference: K1/03/006 Waste Type: Inert, Industrial, Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Clitheroe Metropolitan Borough Licence Holder: Clitheroe Municipal Borough Council First Recorded: 01-Oct-1967 Last Recorded: 31-Dec-1979			
5	525	SE		Site Address: Salt Hills Quarry, Off Pimlico - Bypass Link Road, Clitheroe, Ribble Valley, Lancashire Waste Licence: - Site Reference: K1/03/042 Waste Type: Waste Unknown Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -			
6	848	SW		Site Address: Atkinsons of Clitheroe,	Licence Issue:			



ID	Distance (m)	Direction	NGR	Details		
				Clitheroe, Ribble Valley, Lancashire Waste Licence: - Site Reference: K1/03/029 Waste Type: Inert Environmental Permitting Regulations (Waste) Reference: -	Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -	
Not shown	1345	NE		Site Address: Chatburn, Off Chatburn Old Road, Clitheroe, Lancashire Waste Licence: - Site Reference: K1/03/005, Resolution 200/52 Waste Type: Inert, Industrial, Commercial, Household, Liquid sludge Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: Clitheroe Rural District Council Licence Holder: Ribble Valley Borough Council First Recorded: 01-Nov-1953 Last Recorded: 31-Dec-1978	
Not shown	1470	NW		Site Address: Waddington Brickworks, Waddington Road, West Bradford, Lancashire Waste Licence: - Site Reference: K1/03/049 Waste Type: Household Environmental Permitting Regulations (Waste) Reference: -	Licence Issue: Licence Surrendered: Licence Holder Address: - Operator: - Licence Holder: - First Recorded: - Last Recorded: -	

3.1.3 Records of BGS/DoE non-operational landfill sites within 1500m of the study site:

The following landfill records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
1	692	NW	374600.0 443400.0	Address: Crosshills Tip, West Bradford Rd, Clitheroe, Lancs BGS Number: 1917.0	Risk: No risk to aquifer Waste Type: N/A

3.1.4 Records of Landfills from Local Authority and Historical Mapping Records within 1500m of the study site:

3

1

The following landfill records are represented as points or polygons on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Site Address	Source	Data Type
20D	493	NW	374729 443308	Refuse Tip	1976 mapping	Polygon
21D	493	NW	374729 443308	Refuse Tip	1964 mapping	Polygon
Not shown	1351	NE	376554 444092	Refuse Tip	1972 mapping	Polygon





3.2.1 Records of waste treatment, transfer or disposal sites within 500m of the study site:

1

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR		Details	
3	399	S	375391 442599	Type of Site: Waste Transfer Station Site Address: Ribble Valley Waste, Transfer Station, Lincoln Way, CLITHEROE, Lancashire, BB7 1QD	Planning Application Reference: 3/2004/1197 Date: -	Further Details: Scheme comprises construction of Waste Transfer station, including 2 buildings for use of waste transfer, office extension, retention of transport maintenance and storage depot. The existing floor area is 587sqm, increasing to 2,174sqm. Associated works include enabling, landscaping and engineering. An application (ref: 3/2004/1197) for Detailed Planning permission was granted by Ribble Valley B.C. on 9th February 2005. Askam Construction Ltd are the preferred contractor. Official contract award isestimated for July 2005. Askam Construction Ltd are preferred contractors. Data Source: Historic Planning Application Data Type: Point

3.2.2 Records of Environment Agency/Natural Resources Wales licensed waste sites within 1500m of the study site:

11

The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map:

ID	Distance (m)	Direction	NGR	Details	
9A	128	W	375100 443100	Site Address: Coplow Quarry, Ribblesdale Works, West Bradford Road, Clitheroe, Lancashire, BB7 4QF Type: Landfill taking Non-Biodegradeable Wastes Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAS001 EPR reference: EA/EPR/TP3691CB/V002 Operator: Castle Cement Ltd Waste Management licence No: 54014 Annual Tonnage: 5000.0	Issue Date: 13/03/1980 Effective Date: - Modified: 05/05/2009 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Coplow Quarry Correspondence Address: -
10A	128	W	375100	Site Address: Coplow Quarry, Ribblesdale	Issue Date: 13/03/1980





ID	Distance (m)	Direction	NGR	Details			
			443100	Works, West Bradford Road, Clitheroe, Lancashire, BB7 4QF Type: Industrial Waste Landfill (Factory curtilage) Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAS001 EPR reference: EA/EPR/TP3691CB/V002 Operator: Castle Cement Ltd Waste Management licence No: 54014 Annual Tonnage: 5000.0	Effective Date: - Modified: 05/05/2009 Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Modified Site Name: Coplow Quarry Correspondence Address: -		
11	424	S	375470 442620	Site Address: Council Depot, Lincoln Way, Salthill Industrial Estat, Clitheroe, Lancashire, BB7 1QD Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: RIB003 EPR reference: EA/EPR/BP3193ZP/A001 Operator: Ribble Valley Brough Council Waste Management licence No: 54467 Annual Tonnage: 250000.0	Issue Date: 17/07/2006 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Lincoln Way Council Depot Correspondence Address: -		
12B	456	S	375417 442572	Site Address: Unit 3 Salthill Ind Est, Lincoln Way, Salthill Ind Est, Clitheroe, Lancashire, BB7 1QD Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FOX017 EPR reference: EA/EPR/EP3793MS/A001 Operator: Miles Fox (Haulage) Ltd Waste Management licence No: 101189 Annual Tonnage: 24999.0	Issue Date: 29/06/2010 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Miles Fox (Haulage) Ltd Correspondence Address: -		
13B	456	S	375417 442572	Site Address: Unit 3 Salthill Industrial Estate, Lincoln Way, Clitheroe, Lancashire, BB7 1QD Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: FOX017 EPR reference: EA/EPR/EP3793MS/S002 Operator: Miles Fox (Haulage) Limited Waste Management licence No: 101189 Annual Tonnage: 0.0	Issue Date: 29/06/2010 Effective Date: - Modified: - Surrendered Date: Jan 24 2019 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Miles Fox (Haulage) Ltd Correspondence Address: -		
14	656	NW	374897 443677	Site Address: Clitheroe Recycling, Bankfield Road, Pimlico Link Road, Clitheroe, Lancashire, BB7 4QA Type: Physical Treatment Facility Size: >= 25000 tonnes < 75000 tonnes Environmental Permitting Regulations (Waste) Licence Number: TAR002 EPR reference: EA/EPR/EV3408XM/A001 Operator: Tarmac Trading Limited Waste Management licence No: 403529 Annual Tonnage: 65000.0	Issue Date: 19/12/2016 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Clitheroe Recycling Correspondence Address: -		
15C	660	NW	374839 443642	Site Address: West Bradford Street, Clitheroe, Lancashire, BB7 4QF Type: - Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAS003 EPR reference: - Operator: Castle Cement Ltd	Issue Date: 05/01/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: IPPC Site Name: Ribblesdale Works		



ID	Distance (m)	Direction	NGR	Details				
				Waste Management licence No: 54486 Annual Tonnage: 0.0	Correspondence Address: Birmingham Business Park, Park Square, 3160, Solihull Parkway, Birmingham, West Midlands, B37 7YN			
16C	660	NW	374839 443642	Site Address: West Bradford Street, Clitheroe, Lancashire, BB7 4QF Type: Co-Disposal Landfill Site Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CAS003 EPR reference: EA/EPR/LP3993ZS/A001 Operator: Castle Cement Ltd Waste Management licence No: 54486 Annual Tonnage: 1.0	Issue Date: 05/01/2007 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: To PPC Site Name: Ribblesdale Works Correspondence Address: -			
Not shown	817	NE	376237 443533	Site Address: Pendle Trading Estate, Clitheroe Road, Chatburn, Clitheroe, Lancashire, BB7 4JY Type: 75kte HCI Waste TS + treatment Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: LSH003 EPR reference: EA/EPR/DP3292EU/S002 Operator: Lancashire Skips Ltd Waste Management licence No: 100987 Annual Tonnage: 0.0	Issue Date: 10/09/2009 Effective Date: - Modified: - Surrendered Date: Oct 8 2012 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: Lancashire Skips Ltd Correspondence Address: -			
Not shown	951	E	376400 443500	Site Address: Pendle Trading Estate, Chatburn, Clitheroe, Lancashire, BB7 4JY Type: Household, Commercial & Industrial Waste T Stn Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: W&B001 EPR reference: EA/EPR/VP3391CY/S002 Operator: W & B Transport Ltd Waste Management licence No: 54079 Annual Tonnage: 4800.0	Issue Date: 29/12/1992 Effective Date: - Modified: - Surrendered Date: Jan 31 2006 12:00AM Expiry Date: - Cancelled Date: - Status: Surrendered Site Name: W & B Transport Ltd Correspondence Address: -			
Not shown	1484	NW	374429 444360	Site Address: Lyon Road Ind Est, Kearsley, Bolton, Lancashire, BL4 8NB Type: 75kte HCI Waste TS Size: < 25000 tonnes Environmental Permitting Regulations (Waste) Licence Number: CIR004 EPR reference: EA/EPR/FB3801TR/A001 Operator: Circle North West Limited Waste Management licence No: 404506 Annual Tonnage: 0.0	Issue Date: 26/10/2018 Effective Date: - Modified: - Surrendered Date: - Expiry Date: - Cancelled Date: - Status: Issued Site Name: Circle North West Limited Correspondence Address: -			





4. Current Land Use Map







4. Current Land Uses

4.1 Current Industrial Data

Records of potentially contaminative industrial sites within 250m of the study site:

11

The following records are represented as points on the Current Land Uses map.

ID	Distance (m)	Directio n	Company	NGR	Address	Activity	Category
1	22	SE	Tank	375501 443105	Lancashire, BB7	Tanks (Generic)	Industrial Features
2	37	NE	Electricity Sub Station	375540 443175	Lancashire, BB7	Electrical Features	Infrastructure and Facilities
3	74	SE	Clitheroe Hospital	375532 443063	Chatburn Road, Clitheroe, Lancashire, BB7 4JX	Hospitals	Health Practitioners and Establishments
4	128	SE	Electricity Sub Station	375599 443048	Lancashire, BB7	Electrical Features	Infrastructure and Facilities
5	135	W	Coplow Quarry (Disused)	375100 443153	Lancashire, BB7	Unspecified Quarries Or Mines	Extractive Industries
6	167	SE	Elan Precision	375532 442951	Unit 11 Deanfield Drive, Link 59 Business Park, Clitheroe, Lancashire, BB7 1QJ	Precision Engineers	Engineering Services
7	170	SE	Fowler UK	375512 442935	Unit 9 Deanfield Drive, Link 59 Business Park, Clitheroe, Lancashire, BB7 1QJ	Food and Beverage Industry Machinery	Industrial Products
8	192	SE	Woven Art Co Ltd	375602 442967	Unit 16 Deanfield Drive, Link 59 Business Park, Clitheroe, Lancashire, BB7 1QJ	Textiles, Fabrics, Silk and Machinery	Industrial Products
9	214	NE	Works	375540 443393	Lancashire, BB7	Unspecified Works Or Factories	Industrial Features
10	226	SE	Deanfield Test Centre	375542 442888	Unit 1 Deanfield Drive, Link 59 Business Park, Clitheroe, Lancashire, BB7 1QJ	Vehicle Repair, Testing and Servicing	Repair and Servicing
11	249	SE	Electricity Sub Station	375514 442844	Lancashire, BB7	Electrical Features	Infrastructure and Facilities





1

Records of petrol or fuel sites within 500m of the study site:

The following petrol or fuel site records provided by Catalist are represented as points on the Current Land Use map:

ID	Distance (m)	Directio n	NGR	Company	Address	LPG	Status
12	476	SE	375589 442623	UNBRANDED	Lincoln Way, Clitheroe, Lancashire, BB7 1QL	Not Applicable	Obsolete

4.3 National Grid High Voltage Underground Electricity Transmission Cables

This dataset identifies the high voltage electricity transmission lines running between generating power plants and electricity substations. The dataset does not include the electricity distribution network (smaller, lower voltage cables distributing power from substations to the local user network). This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high voltage underground electricity transmission cables within 500m of the study site:

Database searched and no data found.

0

0

4.4 National Grid High Pressure Gas Transmission Pipelines

This dataset identifies high-pressure, large diameter pipelines which carry gas between gas terminals, power stations, compressors and storage facilities. The dataset does not include the Local Transmission System (LTS) which supplies gas directly into homes and businesses. This information has been extracted from databases held by National Grid and is provided for information only with no guarantee as to its completeness or accuracy. National Grid do not offer any warranty as to the accuracy of the available data and are excluded from any liability for any such inaccuracies or errors.

Records of National Grid high pressure gas transmission pipelines within 500m of the study site:

Database searched and no data found.





5. Geology

5.1 Artificial Ground and Made Ground

Database searched and no data found.

The database has been searched on site, including a 50m buffer.

5.2 Superficial Ground and Drift Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
TILLD-DMTN	TILL, DEVENSIAN	DIAMICTON

5.3 Bedrock and Solid Geology

The database has been searched on site, including a 50m buffer.

Lex Code	Description	Rock Type
CLHOM-MDST	CLITHEROE LIMESTONE FORMATION AND HODDER MUDSTONE FORMATION (UNDIFFERENTIATED)	MUDSTONE
CLLK-LMST	CLITHEROE LIMESTONE FORMATION (KNOLL-REEF)	LIMESTONE

(Derived from the BGS 1:50,000 Digital Geological Map of Great Britain)





6 Hydrogeology and Hydrology 6a. Aquifer Within Superficial Geology







6b. Aquifer Within Bedrock Geology and Abstraction Licences









6c. Hydrogeology – Source Protection Zones and Potable Water Abstraction Licences



© Crown copyright and database rights 2019 Ordnance Survey licence 100035207.




6d. Hydrogeology – Source Protection Zones within confined aquifer

Groundsure









6e. Hydrology – Watercourse Network and River Quality



Foreshore Drain or Transfer

General Quality Assessment: Chemistry





6.Hydrogeology and Hydrology

6.1 Aquifer within Superficial Deposits

Records of strata classification within the superficial geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Superficial Geology Map (6a):

ID	Distanc e (m)	Direction	Designation	Description
6	0	On Site	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type
7	243	W	Secondary (undifferentiated)	Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type

6.2 Aquifer within Bedrock Deposits

Records of strata classification within the bedrock geology at or in proximity to the property Yes

From 1 April 2010, the Environment Agency/Natural Resources Wales's Groundwater Protection Policy has been using aquifer designations consistent with the Water Framework Directive. For further details on the designation and interpretation of this information, please refer to the Groundsure Enviro Insight User Guide.

The following aquifer records are shown on the Aquifer within Bedrock Geology Map (6b):

ID	Distanc e (m)	Direction	Designation	Description
1	0	On Site	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers
2	227	W	Secondary A	Permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers





Groundwater Abstraction Licences within 2000m of the study site

Identified

The following Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR	Details	
ЗA	256	NW	375200 443400	Status: Historical Licence No: 2671309038 Details: Dust suppression Direct Source: Ground Water - North West Region Point: "BANKFIELD QUARRY, CLITHEROE, LANCS" Data Type: Point Name: TARMAC CENTRAL LTD	Annual Volume (m ³): - Max Daily Volume (m ³): - Original Application No: - Original Start Date: 15/12/1976 Expiry Date: - Issue No: 102 Version Start Date: 19/10/2001 Version End Date:
4A	256	NW	375200 443400	Status: Active Licence No: 2671309038 Details: Dust Suppression Direct Source: Ground Water - North West Region Point: BANKFIELD QUARRY, CLITHEROE, LANCS Data Type: Point Name: Tarmac Trading Limited	Annual Volume (m ³): 159113 Max Daily Volume (m ³): 818 Original Application No: - Original Start Date: 15/12/1976 Expiry Date: - Issue No: 106 Version Start Date: 08/09/2016 Version End Date:
5B	471	SE	375721 442711	Status: Active Licence No: NW/071/0309/006 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT CLITHEROE AUCTION MART, CLITHEROE Data Type: Point Name: CLITHEROE AUCTION MART COMPANY LTD	Annual Volume (m ³): 15261 Max Daily Volume (m ³): 45 Original Application No: - Original Start Date: 01/04/2013 Expiry Date: 31/03/2028 Issue No: 1 Version Start Date: 26/11/2018 Version End Date:
6B	471	SE	375720 442710	Status: Historical Licence No: 2671309053 Details: General Use Relating To Secondary Category (Medium Loss) Direct Source: Ground Water - North West Region Point: BOREHOLE AT CLITHEROE AUCTION MART, CLITHEROE Data Type: Point Name: CLITHEROE AUCTION MART COMPANY LTD	Annual Volume (m ³): 9977 Max Daily Volume (m ³): 28 Original Application No: - Original Start Date: 05/10/2004 Expiry Date: 31/03/2013 Issue No: 1 Version Start Date: 05/10/2004 Version End Date:

6.4 Surface Water Abstraction Licences

Surface Water Abstraction Licences within 2000m of the study site

Identified

The following Surface Water Abstraction Licences records are represented as points, lines and regions on the Aquifer within Bedrock Geology Map (6b):

ID	Distance (m)	Direction	NGR		Details
Not	1094	NW	374900	Status: Historical	Annual Volume (m ³): -

Report Reference: CMAPS-CM-814908-29721-170719EDR Client Reference: 29721

ID	Distance (m)	Direction	NGR	Details			
shown			444200	Licence No: 2671309016 Details: Process water Direct Source: "Surface, Non-Tidal - North West Region" Point: "R RIBBLE AT CLITHEROE, LANCS" Data Type: Point Name: CASTLE CEMENT RIBBLESDALE LTD	Max Daily Volume (m³): - Application No: - Original Start Date: 18/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1986 Version End Date:		
Not shown	1094	NW	374900 444200	Status: Historical Licence No: 2671309016 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: "Surface, Non-Tidal - North West Region" Point: "R RIBBLE AT CLITHEROE, LANCS" Data Type: Point Name: CASTLE CEMENT RIBBLESDALE LTD	Annual Volume (m³): - Max Daily Volume (m³): - Application No: - Original Start Date: 18/11/1966 Expiry Date: - Issue No: 100 Version Start Date: 01/11/1986 Version End Date:		
Not shown	1094	NW	374900 444200	Status: Active Licence No: 2671309016 Details: General Cooling (Existing Licences Only) (Low Loss) Direct Source: Surface, Non-Tidal - North West Region Point: R RIBBLE AT CLITHEROE, LANCS Data Type: Point Name: Castle Cement Limited	Annual Volume (m ³): 2.00024 Max Daily Volume (m ³): 13092.5 Application No: - Original Start Date: 18/11/1966 Expiry Date: - Issue No: 101 Version Start Date: 18/12/2012 Version End Date:		
Not shown	1094	NW	374900 444200	Status: Active Licence No: 2671309016 Details: Process Water Direct Source: Surface, Non-Tidal - North West Region Point: R RIBBLE AT CLITHEROE, LANCS Data Type: Point Name: Castle Cement Limited	Annual Volume (m ³): 2.00024 Max Daily Volume (m ³): 13092.5 Application No: - Original Start Date: 18/11/1966 Expiry Date: - Issue No: 101 Version Start Date: 18/12/2012 Version End Date:		

6.5 Potable Water Abstraction Licences

Potable Water Abstraction Licences within 2000m of the study site

Database searched and no data found.

6.6 Source Protection Zones

Source Protection Zones within 500m of the study site

Database searched and no data found.

None identified





None identified





Source Protection Zones within the Confined Aquifer within 500m of the study site None identified

Historically, Source Protection Zone maps have been focused on regulation of activities which occur at or near the ground surface, such as prevention of point source pollution and bacterial contamination of water supplies. Sources in confined aquifers were often considered to be protected from these surface pressures due to the presence of a low permeability confining layer (e.g. glacial till, clay). The increased interest in subsurface activities such as onshore oil and gas exploration, ground source heating and cooling requires protection zones for confined sources to be marked on SPZ maps where this has not already been done.

Database searched and no data found.

6.8 Groundwater Vulnerability and Soil Leaching Potential

Environment Agency/Natural Resources Wales information on groundwater vulnerability and soil leaching potential within 500m of the study site Identified

Distance (m)	Direction	Classification	Soil Vulnerability Category	Description
0	On Site	Minor Aquifer/Low Leaching Potential	L	Soils in which pollutants are unlikely to penetrate the soil layer because either water movement is largely horizontal, or they have the ability to attenuate diffuse pollutants.
154	Ν	Minor Aquifer/High Leaching Potential	H1	Soils which readily transmit liquid discharges because they are shallow or susceptible to rapid flow directly to rock, gravel or groundwater.

6.9 River Quality

Environment Agency/Natural Resources Wales information on river quality within 1500m of the study site Identified





Biological Quality data describes water quality in terms of 83 groups of macroinvertebrates, some of which are pollution sensitive. The results are graded from A ('Very Good') to F ('Bad').

	Distanc	Divertien	NCD	Diver Quelity Crede		Biolog	Biological Quality Grade		
ID	e (m)	Direction	NGR	River Quality Grade –	2005	2006	2007	2008	2009
Not shown	1045	E	376500 443500	River Name: Pimlico Brook Reach: Qsl At Chatburn I.e. To Mearley Bk. End/Start of Stretch: Start of Stretch NGR	С	В	В	В	В
Not shown	1331	SW	374600 441900	River Name: Pimlico Brook Reach: Qsl At Chatburn I.e. To Mearley Bk. End/Start of Stretch: End of Stretch NGR	С	В	В	В	В

The following Biological Quality records are shown on the Hydrology Map (6e):

6.9.2 Chemical Quality:

Chemical quality data is based on the General Quality Assessment Headline Indicators scheme (GQAHI). In England, each chemical sample is measured for ammonia and dissolved oxygen. In Wales, the samples are measured for biological oxygen demand (BOD), ammonia and dissolved oxygen. The results are graded from A ('Very Good') to F ('Bad').

The following Chemical Quality records are shown on the Hydrology Map (6e):

						Chemi	cal Quality	Grade	
ID	Distanc e (m)	Direction	NGR	River Quality Grade	2005	2006	2007	2008	2009
Not shown	1002	SW	374583 442339	River Name: Pimlico Bk. Reach: Qsl At Chatburn I.e. To Mearley Bk. End/Start of Stretch: Sample Point NGR	A	A	A	A	A
Not shown	1045	E	376500 443500	River Name: Pimlico Bk. Reach: Qsl At Chatburn I.e. To Mearley Bk. End/Start of Stretch: Start of Stretch NGR	A	A	A	A	A
Not shown	NGR River Name: Pimlico Bk. t 1331 SW 374600 wn 441900 Bk. End/Start of Stretch: End of Stretch NGR		A	A	A	A	A		





Ordnance Survey MasterMap Water Network entries within 500m of the study site

This watercourse information is provided by Ordnance Survey MasterMap Water Network. The data provides a detailed centre line following the curve of the waterway precisely, so all distances provided in the report should be understood as measurements to the centreline rather than a measurement to the nearest point of the watercourse. Underground watercourses are inferred from entry and exit points so caution is advised in using these to indicate precise locations of underground watercourses when planning site investigation and development.

The following Ordnance Survey MasterMap Water Network records are represented on the Hydrology Map (6e):

ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
1	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
2	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
13	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
14	0 On Site	-	Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
3	34 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
15	34 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.1
4	65 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
16	65 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: Underground Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
5	68 NE	-	Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided





ID	Distance/ Direction	N	ame	Type of Watercourse	Additional Details
17	68 NE	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
6	319 SW	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
18	319 SW	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.4
7	347 NE	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
19	347 NE	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: Not provided Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
8	409 NE	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.3
20	409 NE	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.3
9	422 NE	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
Not shown	422 NE	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): Not Provided
10	435 SW	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
22	435 SW	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 2.0
11	436 SW	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6
23	436	-		Inland river not influenced by normal tidal action.	Catchment Area: Ribble Relationship to Ground Level: On ground surface

52

	LOCATION INTELLIGE	ENCE		
ID	Distance/ Direction	Name	Type of Watercourse	Additional Details
	SW			Permanence: Watercourse contains water year round (in normal conditions) Average Width in Watercourse Section (m): 1.6

6.11 Surface Water Features

Surface water features within 250m of the study site

The following surface water records are not represented on mapping:

Distance (m)	Direction
0	On Site
68	NE
81	SW
145	SW
150	SE



Identified





7a. Environment Agency/Natural Resources Wales Flood Map for Planning (from rivers and the sea)







7b. Environment Agency/Natural Resources Wales Risk of Flooding from Rivers and the Sea (RoFRaS) Map





7 Flooding

7.1 River and Coastal Zone 2 Flooding

Environment Agency/Natural Resources Wales Zone 2 floodplain within 250m Identified

Environment Agency/Natural Resources Wales Zone 2 floodplains estimate the annual probability of flooding as between 1 in 1000 (0.1%) and 1 in 100 (1%) from rivers and between 1 in 1000 (0.1%) and 1 in 200 (0.5%) from the sea. Any relevant data is represented on Map 7a – Flood Map for Planning:

ID	Distance (m)	Direction	Update	Туре
1	0	On Site	20-Jun-2019	Zone 2 - (Fluvial /Tidal Models)

7.2 River and Coastal Zone 3 Flooding

Environment Agency/Natural Resources Wales Zone 3 floodplain within 250m Identified

Zone 3 shows the extent of a river flood with a 1 in 100 (1%) or greater chance of occurring in any year or a sea flood with a 1 in 200 (0.5%) or greater chance of occurring in any year. Any relevant data is represented on Map 7a – Flood Map for Planning.

ID	Distance (m)	Direction	Update	Туре
1	0	On Site	20-Jun-2019	Zone 3 - (Fluvial Models)
	73	SW	20-Jun-2019	Zone 3 - (Fluvial Models)

7.3 Risk of Flooding from Rivers and the Sea (RoFRaS) Flood Rating

Highest risk of flooding onsite

The Environment Agency/Natural Resources Wales RoFRaS database provides an indication of river and coastal flood risk at a national level on a 50m grid with the flood rating at the centre of the grid calculated and given above. The data considers the probability that the flood defences will overtop or breach by considering their location, type, condition and standard of protection.

RoFRaS data for the study site indicates the property is in an area with a High (1 in 30 or greater) chance of flooding in any given year.

Any relevant data within 250m is represented on the RoFRaS Flood map. Data to 50m is reported in the table below.

ID Distance Direction (m)

RoFRas flood Risk

High





LC	OCATION IN	TELLIGENCE	
1	0.0	On Site	Medium
2	0.0	On Site	Medium
3	0.0	On Site	Medium
4	0.0	On Site	Medium
5	0.0	On Site	High
6A	0.0	On Site	Medium
7A	0.0	On Site	High
8	0.0	On Site	Medium

7.4 Flood Defences

Flood Defences within 250m of the study site None identified Database searched and no data found.

7.5 Areas benefiting from Flood Defences

Areas benefiting from Flood Defences within 250m of the study site None identified

7.6 Areas benefiting from Flood Storage

Areas used for Flood Storage within 250m of the study site None identified

7.7 Groundwater Flooding Susceptibility Areas

7.7.1 British Geological Survey groundwater flooding susceptibility areas within 50m of the boundary of the study site Identified

Clearwater Flooding or Superficial Deposits Flooding

Notes: Groundwater flooding may either be associated with shallow unconsolidated sedimentary aquifers which overlie unproductive aquifers (Superficial Deposits Flooding), or with unconfined aquifers (Clearwater Flooding).

7.7.2 Highest susceptibility to groundwater flooding in the search area based on the underlying geological conditions

Potential at Surface

Superficial Deposits Flooding

Where potential for groundwater flooding to occur at surface is indicated, this means that given the geological conditions in the area groundwater flooding hazard should be considered in all land-use planning decisions. It is recommended that other relevant information e.g. records of previous incidence of groundwater flooding, rainfall, property type, and land drainage information be investigated in order to establish relative, but not absolute, risk of groundwater flooding.





British Geological Survey confidence rating in this result

High

Notes: Groundwater flooding is defined as the emergence of groundwater at the ground surface or the rising of groundwater into man-made ground under conditions where the normal range of groundwater levels is exceeded.

The confidence rating is on a threefold scale - Low, Moderate and High. This provides a relative indication of the BGS confidence in the accuracy of the susceptibility result for groundwater flooding. This is based on the amount and precision of the information used in the assessment. In areas with a relatively lower level of confidence the susceptibility result should be treated with more caution. In other areas with higher levels of confidence the susceptibility result can be used with more confidence.





8. Designated Environmentally Sensitive Sites Map



Nitrate Vulnerable

Zones

Nitrate Sensitive

Areas





8. Designated Environmentally Sensitive Sites

Designated Environmentally Sensitive Sites within 2000m of the study site

Identified

8.1 Records of Sites of Special Scientific Interest (SSSI) within 2000m of the study site:

6

The following Site of Special Scientific Interest (SSSI) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Direction	SSSI Name	Data Source
1	18	NW	Coplow Quarry	Natural England
2	306	S	Salthill and Bellmanpark Quarries	Natural England
3	468	SE	Salthill and Bellmanpark Quarries	Natural England
4	594	SE	Salthill and Bellmanpark Quarries	Natural England
5	1214	E	Clitheroe Knoll Reefs	Natural England
Not shown	1722	E	Clitheroe Knoll Reefs	Natural England

8.2 Records of National Nature Reserves (NNR) within 2000m of the study site:

0

Database searched and no data found.

8.3 Records of Special Areas of Conservation (SAC) within 2000m of the study site:

0

0

Database searched and no data found.

8.4 Records of Special Protection Areas (SPA) within 2000m of the study site:

Database searched and no data found.

Distance

(m)

306

469

471

Direction

S

SE

W

ID

7

8

9

10

Database searched and no data found.

Database searched and no data found.

8.9 Records of Environmentally Sensitive Areas within 2000m of the study site:

8.8 Records of World Heritage Sites within 2000m of the study site:

478 SE Natural England Salthill Quarry

The following Local Nature Reserve (LNR) records provided by Natural England/Natural Resources Wales

LNR Name

Salthill Quarry

Salthill Quarry

Cross Hill Quarry

are represented as polygons on the Designated Environmentally Sensitive Sites Map:

8.7 Records of Local Nature Reserves (LNR) within 2000m of the study site:

Distance ID Direction Ancient Woodland Name Data Source (m) Ancient and Semi-Natural Not 1904 Ν UNKNOWN shown Woodland

Database searched and no data found.

8.6 Records of Ancient Woodland within 2000m of the study site:

Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

Grou LOCATION INTELLIGENCE 8.5 Records of Ramsar sites within 2000m of the study site:

Data Source

Natural England

Natural England

Natural England

0



0

1

4



0

60



2

0

0

0

0

The following Area of Outstanding Natural Beauty (AONB) records provided by Natural England/Natural Resources Wales are represented as polygons on the Designated Environmentally Sensitive Sites Map:

ID	Distance (m)	Directio n	AONB/NSA Name	Data Source
Not shown	1605	NW	Forest Of Bowland	Natural England
Not shown	1958	NE	Forest Of Bowland	Natural England

8.11 Records of National Parks (NP) within 2000m of the study site:

Database searched and no data found.

8.12 Records of Nitrate Sensitive Areas within 2000m of the study site:

Database searched and no data found.

8.13 Records of Nitrate Vulnerable Zones within 2000m of the study site:

Database searched and no data found.

8.14 Records of Green Belt land within 2000m of the study site:

Database searched and no data found.



9. Natural Hazards Findings

9.1 Detailed BGS GeoSure Data

BGS GeoSure Data has been searched to 50m. The data is included in tabular format. If you require further information on geology and ground stability, please obtain a Groundsure Geo Insight, available from our website. The following information has been found:

9.1.1 Shrink Swell

Maximum Shrink-Swell** hazard rating identified on the study site

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Ground conditions predominantly low plasticity. No special actions required to avoid problems due to shrink-swell clays. No special ground
investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with shrink-swell
clavs.

9.1.2 Landslides

Maximum Landslide* hazard rating identified on the study site

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Possibility of slope instability problems after major changes in ground conditions. Consideration should be given to stability if changes to drainage or excavations take place. Possible increase in construction cost to reduce potential slope stability problems. Existing property no significant increase in insurance risk due to natural slope instability problems.

Hazard

9.1.3 Soluble Rocks

Maximum Soluble Rocks* hazard rating identified on the study site

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Hazard

Significant soluble rocks are present. Low possibility of subsidence occurring naturally, but may be possible in adverse conditions such as high surface or subsurface water flow. Consider implications for stability when changes to drainage or new construction are planned. For new build site investigation should consider potential for dissolution problems on the site and its surroundings. Care should be taken with local drainage into the bedrock. Some possibility groundwater pollution. For existing property possible increase in insurance risk due to soluble rocks.

This indicates an automatically generated 50m buffer and site.

Low





Low

Very Low

Maximum Compressible Ground* hazard rating identified on the study site

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

No indicators for compressible deposits identified. No special actions required to avoid problems due to compressible deposits. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with compressible deposits.

Hazard

9.1.5 Collapsible Rocks

Maximum Collapsible Rocks* hazard rating identified on the study site

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Deposits with potential to collapse when loaded and saturated are unlikely to be present. No special ground investigation required or increased construction costs or increased financial risk due to potential problems with collapsible deposits.

Hazard

9.1.6 Running Sand

Maximum Running Sand** hazard rating identified on the study site

The following natural subsidence information provided by the British Geological Survey is not represented on mapping:

Very low potential for running sand problems if water table rises or if sandy strata are exposed to water. No special actions required, to avoid problems due to running sand. No special ground investigation required, and increased construction costs or increased financial risks are unlikely due to potential problems with running sand.

Hazard



Negligible

Very Low

Very Low

63

^{*} This indicates an automatically generated 50m buffer and site.





9.2.1 Radon Affected Areas

Is the property in a Radon Affected Area as defined by the Health Protection Agency (HPA) and if so what percentage of homes are above the Action Level? The site is in a Radon Affected Area, as between 10 and 30% of properties are above the Action Level.

The radon data in this report is supplied by the BGS/Public Health England and is the definitive map of Radon Affected Areas in Great Britain and Northern Ireland. The dataset was created using long-term radon measurements in over 479,000 homes across Great Britain and 23,000 homes across Northern Ireland, combined with geological data. The dataset is considered accurate to 50m to allow for the margin of error in geological lines, and the findings of this report supercede any answer given in the less accurate Indicative Atlas of Radon in Great Britain, which simplifies the data to give the highest risk within any given 1km grid square. As such, the radon atlas is considered indicative, whereas the data given in this report is considered definitive.

9.2.2 Radon Protection

Is the property in an area where Radon Protection are required for new properties or extensions to existing

ones as described in publication BR211 by the Building Research Establishment? Full radon protective measures are necessary.





10.1 Coal Mining

Coal mining areas within 75m of the study site

Database searched and no data found.

10.2 Non-Coal Mining

Non-Coal Mining areas within 50m of the study site boundary

The following non-coal mining information is provided by the BGS:

Distance (m)	Direction	Name	Commodity	Assessment of likelihood
0.0	On Site	Not available	Vein Mineral	Localised small scale underground mining may have occurred. Potential for difficult ground conditions are unlikely or localised and are at a level where they need not be considered

Past underground mine workings may occur. The rock types present in these areas are such that small mineral veins may be present on which it is possible that small scale mining has been undertaken and/or it is possible that limited underground extraction of other materials may have occurred. All such occurrences are likely to be of minor localised extent and infrequent. It should be noted, however, that there is always the possibility of the existence of other sub-surface excavations, such as wells, cess pits, follies, air raid shelters/bunkers and other military structures etc. that could affect surface ground stability but which are outside the scope of this dataset. However, if in a coalfield area you should still consider a Coal Authority mining search for the area of interest.

10.3 Brine Affected Areas

Brine affected areas within 75m of the study site Guidance: No Guidance Required.

None identified





Identified

None identified



APPENDIX D

Potential Pollutant Linkages



POTENTIAL RECEPTOR	COMMENTS	Include in PCM
PROPERTY: Other		
On Site		
Crops	None intended on site	×
Domestic Produce	May be grown in residential gardens	✓
Livestock	None anticipated on site	×
Domestic Animals	May be owned by residents	~
Game	None on site	×
Off Site		
Crops	Possibly in fields in surrounding area	✓
Domestic Produce	Possibly in houses in surrounding area	✓
Livestock	None adjacent to the site	×
Domestic Animals	May belong to adjacent residents	~
Game	Not applicable	×
PROPERTY: Buildings		
On Site		
	Residential properties, services, flora	✓
Off Site		
	Residential properties, services, flora	✓
HUMANS		
On Site		
Residents	Future Residents	✓
Construction workers	During ground excavations	✓
Employees	Not applicable	×
Surface water users	Stream/brook flows through the site	✓
Off Site		
Residents	Residents adjacent to the site	✓
Recreational users	Possible walkers using the public footpaths close by	✓
Groundwater users	Not applicable	×
Controlled Waters		
On Site		
Surface Waters	A stream on site	~
Groundwater	The site is overlain with laterally continuous impermeable superficial	
	deposits which will inhibit vertical migration of contamination to the	×
	underlying bedrock.	
Off Site		
Controlled Waters	No significant water features identified	\checkmark
Ecological Systems		
On/Off Site		
SSSIs, national		
nature reserves,	Not applicable to the site	×
SACs etc		

 Table A: Potential Receptors to be Considered in the Preliminary Conceptual Model



Link	Source	Hazard	Transport Mechanism	Pathway	Medium of Exposure	Receptor	Risk Summary*
1	Contaminated soils	Direct contact /ingestion of soil or dust	Direct contact with contaminated soil	Dermal contact/ingestion of soil at surface	Soil	Humans (on-site/off- site), domestic pets	Low
2	Contaminated soils	Ingestion of homegrown vegetables	Ingestion of plants affected by contamination	Ingestion	Pore Waters	Humans (On-site)	Low
3	Contaminated soils	Particulate inhalation	Wind blown particulates	Inhalation of particulates	Air	Humans (on-site/off- site), domestic pets	Low
4	Contaminated Soils	Impaired produce growth	Uptake of contaminants by homegrown produce resulting in loss	Uptake during growth	Vegetable produce	Property (domestic produce)	Low
5	Contaminated Soils	Damage to property/services	Direct contact of contaminants with building structure/services	Direct Contact	Soil/Water	Flora, services	Low
6	Contaminated Soils	Degradation of water quality	Dissolution or suspension of contaminants into surface watercourse	Dissolution or suspension	Water	Watercourse	Low
7	Contaminated Soils	Ground Gas Inhalation	Degradation of contaminants generating ground gas through unsaturated zone of soil leading to inhalation	Inhalation of gases	Air	Humans (on-site/off- site) domestic pets	Low-Medium
8	Natural Strata	Inhalation of Radon Gas	Diffusion of natural radon gas through shallow strata and accumulate in confined spaced in buildings	Inhalation of Radon	Air	Humans (on-site/ off-site, domestic pets)	Low-Medium

Table B: Preliminary Conceptual Model

*Relative Risk Screening and Prioritisation for further Investigation & or Assessment

High	Higher probability of occurrence and identification of primary sources of contamination with respect to most sensitive receptors.
Medium	Pollutant linkage generally dependent on the presence of other primary pollutant linkages and/or where pollutant linkage generally associated with less sensitive receptors.
	Lower probability of occurrence such as based on requirement for significant migration pathway or where pollutant linkage requires the presence of source contaminants at
Low	concentration likely to be much higher than other identified pollutant linkages.



APPENDIX E Photographs



























A culvert located in the easternmost corner of the site, although the flow was negligible and it was unclear as to the direction the water flows.
Photograph 19
The surface water discharged from the culvert in the easternmost corner of the site, although the flow was negligible and it was unclear as to the direction the water flows.
Photograph 20



APPENDIX F Drawings






Housetype Schedule			
Ref	Housetype	Description	Number
Bow	Bowfell	4 Bed detached house	9
Bow-Spl	Bowfell Split Level	4 Bed split level detached house	2
Cal	Caldew	1 Bed terraced house	2
Enn	Ennerdale	4 Bed detached house	2
Gras	Grasmere	4 Bed detached house	4
Griz	Grizedale	2 Bed semi detached bunalow	2
Hon	Honister	4 Bed detached House	1
Kirk	Kirkstone	4 Bed detached house	2
Low	Lowther	3 Bed semi detached/terraced house	3
Roth	Rothay	2 Bed semi/terraced house	6
Thirl	Thirlmere	4 Bed detached house	3
Thirl-Spl	Thirlmere Split Level	4 Bed Split level detached house	1
Was-Spl	Wasdale Split Level	4 Bed Split level detached house	2
			39

466.43

Amenity Area







GEO-ENVIRONMENTAL CONSULTING ENGINEERS

Suite One | No 3 Mitton Road Business Park | Mitton Road | Whalley | Lancashire | BB7 9YE Office: 01254 377622 Mobile: 07906 753583 mbuckley@bekenviro.co.uk www.bekenviro.co.uk