

	Target concentrations (mg/l)				
Determinant		UK Drinking Water Standard or Best	Environmental Quality Standard or Best Equivalent		
	Reporting Value	Equivalent	Freshwater	Transitional (estuaries) and Coastal Waters	
Nickel	-	0.02 <sup>(2)</sup>	0.02 <sup>(13c)</sup>	0.02 <sup>(13c)</sup>	
Selenium	-	0.01 <sup>(2)</sup>	-	-	
Zinc	-	5 <sup>(3)</sup>	0.008, 0.05, 0.075, 0.125 (13e)	0.04 <sup>(13a)</sup>	
		Chlorinated solvents			
Trichloroethene	0.0001(4)	0.01 <sup>(2)</sup>	0.01 <sup>(13c)</sup>	0.01 <sup>(13c)</sup>	
Tetrachloroethene	0.0001(4)	0.01 <sup>(2)</sup>	0.01 <sup>(13c)</sup>	0.01 <sup>(13c)</sup>	
1,1,1-Trichloroethane	0.0001(4)	-	0.1 <sup>(13c)</sup>	0.1 <sup>(13c)</sup>	
1,1,2-Trichloroethane	0.0001(4)	-	0.4 <sup>(13c)</sup>	0.3 <sup>(13c)</sup>	
Carbon tetrachloride (Tetrachloromethane)	0.0001 <sup>(4)</sup>	0.003 <sup>(2)</sup>	0.012 <sup>(13c)</sup>	0.012 <sup>(13c)</sup>	
1,2-Dichloroethane	0.001(4)	0.003 <sup>(2)</sup>	0.01 <sup>(13c)</sup>	0.01 <sup>(13c)</sup>	
Vinyl chloride (Chloroethene)	-	0.0005(2)	-	-	
Trihalomethanes	-	0.1 <sup>(2, 5)</sup>	-	-	
Chloroform (Trichloromethane) (one of the trihalomethanes included above)	0.0001 <sup>(4)</sup>	0.1 <sup>(2, 5)</sup>	0.0025 <sup>(13c)</sup>	0.0025 <sup>(13c)</sup>	
	Po	olycyclic aromatic hydrocarbo	ons		
Acenaphthene	-	-	0.0058 <sup>(1</sup>	0)	
Acenaphthylene	-	-	0.0058 <sup>(1)</sup>	0)	
Anthracene	-	-	0.0001 <sup>(13c)</sup>	0.0001 <sup>(13c)</sup>	



	Target concentrations (mg/l)					
Determinant	Minimum Reporting	UK Drinking Water Standard or Best	Environmental Quality Standard or Best Equivalent			
	Value	Equivalent	Freshwater	Transitional (estuaries) and Coastal Waters		
Benzo(a)anthracene	-	-	0.000018	3 <sup>(10)</sup>		
Benzo(b)fluoranthene	-		0.00003 <sup>(13f)</sup>	0.00003 <sup>(13f)</sup>		
Benzo(k)fluoranthene	-	0.0001 <sup>(2)</sup>	0.00003	0.00003		
Benzo(g,h,i)perylene	-		0.000002 <sup>(13g)</sup>	0.000002 <sup>(13g)</sup>		
Indeno(1,2,3-cd)pyrene	-		0.000002	0.000002		
Chrysene	-	-	0.00001 <sup>(10)</sup>			
Dibenzo(a,h)anthracene	-	-	0.00001 <sup>(10)</sup>			
Fluoranthene	-	-	0.0001 <sup>(13c)</sup>	0.0001 <sup>(13c)</sup>		
Fluorene	-	-	0.0021 <sup>(</sup>	10)		
Phenanthrene	-	-	0.003 <sup>(1</sup>	0)		
Pyrene	-	-	0.00004	(10)		
Benzo(a)pyrene	-	0.00001(2)	0.00005 <sup>(13c)</sup>	0.00005 <sup>(13c)</sup>		
Naphthalene	-	-	0.0024 <sup>(13c)</sup>	0.0012 <sup>(13c)</sup>		
		Petroleum hydrocarbons				
Total petroleum hydrocarbons	-	0.01 <sup>(3)</sup>	0.01 <sup>(3, 11)</sup>			
Benzene	0.001 <sup>(4)</sup>	0.001 <sup>(2)</sup>	0.01 <sup>(13c)</sup>	0.008 <sup>(13c)</sup>		
Toluene	0.004 <sup>(4)</sup>	0.7 <sup>(9)</sup>	0.05 <sup>(13a)</sup>	0.04 <sup>(13a)</sup>		
Ethylbenzene	-	0.3 <sup>(9)</sup>	0.02 <sup>(12)</sup>	0.02 <sup>(12)</sup>		
Xylene	0.003 <sup>(4)</sup>	0.5 <sup>(9)</sup>	0.03 <sup>(13c)</sup>	0.03 <sup>(13c)</sup>		



	Target concentrations (mg/l)				
Determinant	Minimum Reporting	UK Drinking Water Standard or Best	Environmental Quality Standard or Best Equivalent		
	Value	Equivalent	Freshwater	Transitional (estuaries) and Coastal Waters	
Methyl tertiary butyl ether	-	0.015 <sup>(7)</sup>			
		Pesticides and herbicides			
Aldrin	0.000003 <sup>(4)</sup>	0.00003 <sup>(2)</sup>			
Dieldrin	0.003 <sup>(4)</sup>	0.00003 <sup>(2)</sup>	0.00001 <sup>(13d)</sup>	0.000005 <sup>(13d)</sup>	
Endrin	0.000003 <sup>(4)</sup>	0.0006 <sup>(9)</sup>	0.00001	0.000005	
Isodrin	0.000003 <sup>(4)</sup>	-			
Heptachlor	-	0.00003 <sup>(2)</sup>			
Heptachlor epoxide	-	0.00003 <sup>(2)</sup>			
Other pesticides	-	0.0001 <sup>(2)</sup>			
Total pesticides	-	0.0005 <sup>(2)</sup>			
Total DDT	0.000004 <sup>(4)</sup>	0.001 <sup>(9)</sup>	0.000025 <sup>(13c)</sup>	0.000025 <sup>(13c)</sup>	
Azinphos – methyl	0.000001(4)	-	0.00001(1)		
Cyfluthrin	0.0001 <sup>(4)</sup>	-	0.000001 <sup>(14)</sup>		
Demeton	0.00005 <sup>(4)</sup>	-	0.0005 <sup>(14</sup>		
Dichlorvos	-	-	0.000001 <sup>(13c)</sup>	0.00004 <sup>(13c)</sup>	
Dimethoate	0.00001(4)	-	0.00048 <sup>(13a)</sup>	0.00048 <sup>(13a)</sup>	
Endosulphan	0.000005 <sup>(4)</sup>	-	0.000005 <sup>(13c)</sup>	0.0000005 <sup>(13c)</sup>	
Fenitrothion	0.000001 <sup>(4)</sup>	-	0.00001 <sup>(13c)</sup>	0.00001 <sup>(13c)</sup>	
Flucofuron	0.0001(4)	-	0.001(14)		



	Target concentrations (mg/l)				
Determinant	Minimum UK Drinking Wate Reporting Standard or Best		Environmental Quality Standard or Best Equivalen		
	Reporting Value	Equivalent	Freshwater	Transitional (estuaries) and Coastal Waters	
Malathion	0.000001(4)	-	0.00001 <sup>(13c)</sup>	0.00002 <sup>(13c)</sup>	
Mevinphos	0.000005 <sup>(4)</sup>	-	0.00002 <sup>(14)</sup>	-	
Omethoate	0.0001 <sup>(4)</sup>	-	0.0000	1 (14)	
PCSDs (cyfluthrin, sulcofuron, flucofuron and <b>permethrin</b> )	-	-	0.00005 <sup>(15)</sup>		
Permethrin	0.000001(4)	-	0.00001 <sup>(13a)</sup>	0.00001 <sup>(13)</sup>	
Sulcofuron	0.0001 <sup>(4)</sup>	-	0.025(8,14)		
Triazaphos	0.0001 <sup>(4)</sup>	-	0.000005(8)		
Atrazine	0.00003 <sup>(4)</sup>	-	0.0006 <sup>(13c)</sup>	0.0006 <sup>(13c)</sup>	
Simazine	0.00003 <sup>(4)</sup>	-	0.001 <sup>(13c)</sup>	0.001 <sup>(13c)</sup>	
Bentazone	0.1 <sup>(4)</sup>	-	0.5 <sup>(13c)</sup>	0.5 <sup>(13a)</sup>	
Linuron	0.0001 <sup>(4)</sup>	-	0.0005 <sup>(13a)</sup>	0.0005 <sup>(13a)</sup>	
Mecoprop	0.00004 <sup>(4)</sup>	-	0.018 <sup>(13a)</sup>	0.018 <sup>(13a)</sup>	
Trifluralin	0.00001 <sup>(4)</sup>	-	0.00003 <sup>(13c)</sup>	0.00003 <sup>(13c)</sup>	
		Miscellaneous			
Cyanide (Hydrogen cyanide)	-	0.05 <sup>(2)</sup>	0.001 <sup>(13a)</sup>	0.001 <sup>(13a)</sup>	
Phenol	0.0005 <sup>(4)</sup>	-	0.0077 <sup>(13a)</sup>	0.0077 <sup>(13a)</sup>	
Sodium	-	200 <sup>(2)</sup>	-		
Chloride	-	250 <sup>(2)</sup>	250 <sup>(6,14)</sup>	-	



	Target concentrations (mg/l)				
Determinant	Minimum Reporting	UK Drinking Water Standard or Best	Environmental Quality Standard or Best Equivalent		
	Value Equivalent		Freshwater	Transitional (estuaries) and Coastal Waters	
Ammonium (as NH <sub>4</sub> <sup>+</sup> )	-	0.5 <sup>(2)</sup>	0.3 <sup>(13a)</sup>		
Ammonia (NH <sub>3</sub> )	-	-	0.025 <sup>(15)</sup>	0.021 <sup>(13a)</sup>	
Sulphate	-	250 <sup>(2)</sup>	400 <sup>(6,14)</sup>	-	
Iron	-	0.20 <sup>(2)</sup>	1 <sup>(13a)</sup>	1 <sup>(13a)</sup>	
Manganese	-	0.05 <sup>(2)</sup>	0.03 <sup>(6,14)</sup>	No EQS required (12)	
Aluminium	-	0.2 <sup>(2)</sup>	-		
Nitrate (as NO <sub>3</sub> )	-	50 <sup>(2)</sup>	-		
Nitrite (as NO <sub>2</sub> )	-	0.1 <sup>(2)</sup>	0.01 <sup>(15)</sup>	-	

**Analytes in bold are hazardous**, *analytes in italics are non hazardous*, analytes in plain text are unclassified; according to JAGDAG Determination List June 2010



### Notes:

- 1. Environment Agency. Groundwater Protection: Principles and Policy (GP3). Part 1 4. Part 4 and 5 under consultation.
- Statutory Instrument 2000 No. 3184. The Water Supply (Water Quality) Regulations 2000, as amended by SI 2001/2885, SI 2002/2469, SI 2005/2035, SI 2007/2734 and SI 2010/991 (applying from April 20 2010)
- 3. Statutory Instrument 1989 No. 1147. The Water Supply (Water Quality) Regulations 1989, as amended.
- 4. Minimum reporting values listed in Annex (j) of Horizontal Guidance Note H1 (H1 Environmental Risk Assessment Framework, Environment Agency, April 2010 v2.0). Note target concentration for xylenes is 0.003mg/l each for o-xylene and m/p xylene.
- 5. Statutory Instrument 2000 No. 3184. The Water Supply (Water Quality) Regulations 2000 sum of chloroform, bromoform, dibromochloromethane and bromodichloromethane.
- 6. Proposed list of EQS for implementation of the Dangerous Substances Directive (76/464.EEC).
- 7. Environment Agency MTBE guidance, 2006.
- 8. Freshwater Environmental Quality Standards: The Water Framework Directive 200/60/EC.
- 9. WHO (2004) guidelines for drinking-water quality.
- 10. WRc plc (2002), R&D Technical Report P45. Where predicted no-effect concentration is below the laboratory method detection limit (LMDL) for chrysene, dibenzo(a,h)anthracene and fluoranthene, the target concentration has been set at the LMDL of 0.00001mg/l.
- 11. Please note this is a very conservative value. If necessary please refer to EA, 2009. Petroleum hydrocarbons in Groundwater Supplementary Guidance for Hydrogeological Risk Assessment, which provides advice on risk rankings of TPH CWG fractions. It may be possible to eliminate low risk fractions and/or those not detected above LMDL from concern.
- 12. Environment Agency Chemical Standards Database (May 2011). http://evidence.environment-agency.gov.uk/ChemicalStandards/home.aspx
- 13. The River Basin Districts Typology, Standards and Groundwater Threshold Values (Water Framework Directive) (England and Wales) Directions 2010.
  - 13a. Annual mean concentration (mg/l) for 'Good' standard.
  - 13b. Applies to hardness ranges of <40mg/l CaCO<sub>3</sub>, 40–<50mg/l CaCO<sub>3</sub>, 50–<100mg/l CaCO<sub>3</sub>, 100–<200mg/l CaCO<sub>3</sub> and >/=200mg/l CaCO<sub>3</sub>. The target concentrations included in Table 1 are listed in order of increasing calcium carbonate concentrations.
  - 13c Annual Average EQS (surface waters).
  - 13d. Sum of aldrin, dieldrin, endrin and isodrin.
  - 13e. Applies to hardness ranges of 0–50mg/l CaCO<sub>3</sub>, 50–100mg/l CaCO<sub>3</sub>, 100–250mg/l CaCO<sub>3</sub> and >250mg/l CaCO<sub>3</sub>. The target concentrations included in Table 1 are listed in order of increasing calcium carbonate concentrations; applies to annual mean concentration (mg/l) of CaCO<sub>3</sub>. Applies to annual mean concentration of metal (mg/l) for 'Good' standard.

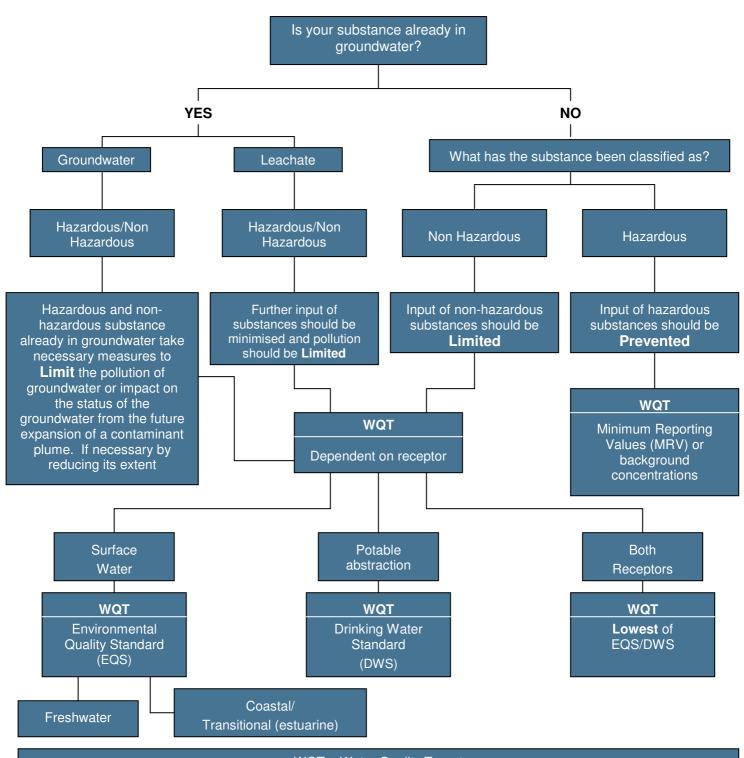


- 13f. Sum of benzo(b)fluoranthene and benzo(k)fluoranthene.
- 13g. Sum of benzo(g,h,i)perylene and indeno(1,2,3-cd)pyrene.
- 14. Council Directive on Pollution Caused by Certain Dangerous Substances Discharged into the Aquatic Environment of the Community (Dangerous Substances Directive) List II Substances. Council Directive 76/464/EEC and Surface Waters (Dangerous Substances) (Classification) Regulations 1998
- 15. Council Directive on the Quality of Fresh Waters Needing Protection or Improvement in Order to Support Fish Life (Freshwater Fish Directive). Surface Waters (Fishlife) (Classification) Regulations 1997.

Note: '-' A target concentration is not available.



## FLOW CHART TO ASSIST WITH SELECTION OF TARGET CONCENTRATIONS



### WQT = Water Quality Target

When leachate is being assessed the 'compliance point' is the groundwater body. Therefore dilution within the groundwater body may be applied <u>with caution</u> before comparing with the WQT.

When directly assessing a receptor, e.g., a river, the appropriate WQT should be selected.

### APPENDIX E

- (i) Environmental Data Sheets
  - (ii) Historical Mapping



### GroundSure Environmental Data Report

Address: Grovefield Way, CHELTENHAM, GL51 6RF

Date: Jul 22, 2008

GroundSure Reference: HMD-24-174362

Your Reference: 722048/MB

**Client:** Structural Soils



Brought to you by GroundSure



### **Aerial Photograph of Study Site**



Site Name: Grovefield Way, CHELTENHAM, GL51 6RF Grid Reference: 390648,221452

Aerial photography supplied by Getmapping PLC.
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### **Overview of Findings**

For further details on each dataset, please refer to each individual section in the main Report as listed. Where the database has been searched a numerical result will be recorded. Where the database has not been searched '-' will be recorded.

Report Section	Number of records found within (X) m of the study site boundary						
1. Authorisations, Incidents and Registers	on-site	0-50	51-250	251-500	501-1000	1000-1500	
1.1 Industrial Sites Holding Licenses and/or Authorisations							
Records of IPC Authorisations	0	0	0	0	0	-	
Records of IPPC Authorisations	0	0	0	0	0	-	
Records of Water Industry Referrals (potentially harmful discharges to the public sewer)	0	0	0	0	-	-	
Records of Red List Discharge Consents (potentially harmful discharges to controlled waters)	0	0	0	0	-	-	
Records of List 1 Dangerous Substances Inventory sites	0	0	0	0	-	-	
Records of List 2 Dangerous Substances Inventory sites	0	0	0	5	-	-	
Records of LAPPC (LAPC) Authorisations	0	0	0	0	-	-	
Records of Category 3 or 4 Radioactive Substances Authorisations	0	0	0	0	-	-	
Records of Licensed Discharge Consents	0	0	0	3	-	-	
1.2 Records of COMAH and NIHHS sites	0	0	0	0	-	-	
1.3 Environment Agency Recorded Pollution Incidents							
National Incidents Recording System, List 2	0	0	0	-	-	-	
National Incidents Recording System, List 1	0	0	0	-	-	-	
1.4 Sites Determined as Contaminated Land under Part IIA EPA 1990	0	0	0	0	-	-	
2. Landfill and Other Waste Sites	on-site	0-50	51-250	251-500	501-1000	1000-150	
2.1 Landfill Sites							
Environment Agency Registered landfill Sites	0	0	0	0	0	0	
Landfill Data – Operational Landfill Sites	0	0	0	0	0	0	
Environment Agency Historic Landfill Sites	0	1	0	0	0	1	
Landfill Data – Non-Operational Landfill Sites	0	0	1	0	0	1	
BGS/DoE Landfill Site Survey	0	0	0	0	0	0	
GroundSure Local Authority Landfill Sites Data	0	0	0	0	0	0	
2.2 Landfill and Other Waste Sites Findings							
Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	1	-	-	
Non-Operational Waste Treatment, Transfer and Disposal Sites	0	0	0	1	-	-	
Environment Agency (REGIS) Waste Sites	0	0	1	2	3	0	
3. Current Land Uses	on-site	0-50	51-250	251-500	501-1000	1000-150	
3.1 Current Industrial Sites Data	0	0	2	29	-	-	
3.2 Records of Petrol and Fuel Sites	0	0	0	0	-	-	
3.3 Underground High Pressure Oil and Gas Pipelines	0	0	0	0	-	-	



4. Geology Description

 $4.1\,\mathrm{Are}$  there any records of Artificial Ground and Made Ground present beneath the study site? \*

None None

4.2 Are there any records of Superficial Ground and Drift Geology present beneath the study site?

 $4.3\ \mathsf{For}\ \mathsf{records}\ \mathsf{of}\ \mathsf{Bedrock}\ \mathsf{and}\ \mathsf{Solid}\ \mathsf{Geology}\ \mathsf{beneath}\ \mathsf{the}\ \mathsf{study}\ \mathsf{site}^{\boldsymbol{*}}\ \mathsf{see}\ \mathsf{the}\ \mathsf{detailed}\ \mathsf{findings}\ \mathsf{section}.$ 

Source: Scale: 1:50,000 BGS Sheet 216

st This includes an automatically generated 50m buffer zone around the site.

5. Hydrogeology and Hydrology	on-site	0-50	51-250	251-500	501-1000	1001-2000*
5.1 Environment Agency Groundwater Vulnerability and Soil Classification						
Minor Aquifer (within 200m)	No	No	No	-	-	-
Major Aquifer (within 200m)	No	No	No	-	-	-
Soil Classification (within 200m)	No	No	No	-	-	-
5.2 Groundwater Abstraction Licences (within 2000m of the study site).	0	0	0	0	0	0
5.3 Surface Water Abstraction Licences (within 1000m of the study site).	0	0	0	0	1	-
5.4 Source Protection Zones						
Source Protection Zones within 500m of the study site.	0	0	0	0	-	-
5.5 Potable Water Abstraction Licences (within 2000m of the study site).	0	0	0	0	0	0
5.6 River Quality						
Is there any Environment Agency information on river quality within 500m of the study site?	No	No	No	No	-	-
5.7 Main Rivers						
Main Rivers within 500m of the study site.	0	0	0	0	-	-

### 6. Flooding

6.1 Are there any Environment Agency indicative Zone 2 floodplains within 250m of the study site?	No
6.2 Are there any Environment Agency indicative Zone 3 floodplains within 250m of the study site?	No
6.3 Are there any Areas benefiting from Flood Defences within 250m of the study site?	No
6.4 Are there any Areas used for Flood Storage within 250m of the study site?	No
6.5 What is the maximum BGS groundwater flooding susceptibility within 50m of the study site?	Not Applicable
6.6 What is the BGS confidence rating for the groundwater flooding susceptibility areas?	Not Applicable



7. Ecological Designated Sites	on-site	0-50	51-250	251-500	501-1000	1001-1500
7.1 Records of Sites of Special Scientific Interest (SSSI):	0	0	0	0	1	-
7.2 Records of National Nature Reserves (NNR) :	0	0	0	0	0	-
7.3 Records of Local Nature Reserves (LNR):	0	0	0	0	0	-
7.4 Records of Special Areas of Conservation (SAC):	0	0	0	0	0	-
7.5 Records of Special Protection Areas (SPA):	0	0	0	0	0	-
7.6 Records of Ramsar sites:	0	0	0	0	0	-
7.7 Records of World Heritage Sites:	0	0	0	0	0	-

### 8. Natural Hazards

8.1 What is the maximum risk of natural ground subsidence?

Low

### 9. Mining

9.1 Are there any coal mining areas within 75m of the study site?

No

9.2 What is the risk of subsidence relating to shallow mining within 150m of the study site?

Negligible



### **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. Authorisations, Incidents and Registers

Provides information on Regulated Industrial Activities and Pollution Incidents as recorded by the Environment Agency, and sites determined as Contaminated Land. This search is conducted using radii up to 1000m.

#### 2. 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.

### 3. Current Land Uses

Provides information on artificial and superficial deposits and bedrock beneath the study site. These searches are conducted onsite and includes a 50m buffer zone.

### 4. Geology

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

### 5. Hydrogeology and Hydrology

Provides information on groundwater vulnerability, soil leaching potential, abstraction licenses, Source Protection Zones (SPZ) and river quality. These searches are conducted using radii of up to 2000m.

### 6. Flooding

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

### 7. Ecological Designated 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) and World Heritage Sites. These searches are conducted using radii of up to 1000m.

### 8. Natural Hazards

Provides information on a range of natural hazards that may pose a risk to the study site. These searches are conducted using radii of up to 75m.

### 9. Mining

Provides information on areas of coal and shallow mining. These searches are conducted using radii of up to 150m.

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### 10. 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 (01273 819700) 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.

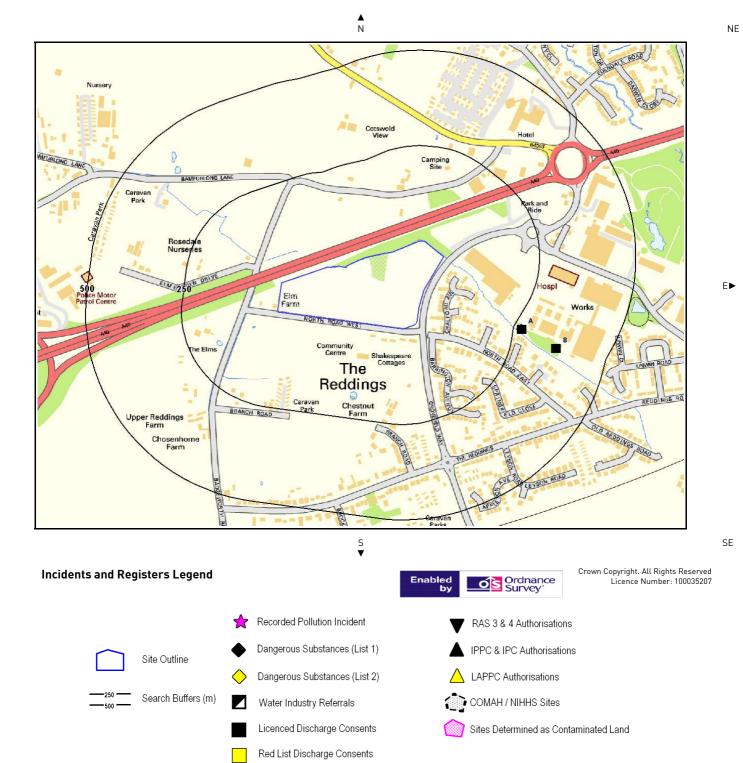
NW

**∢**W

SW



# 1. Authorisations, Incidents and Registers Map





### 1. Authorisations, Incidents and Registers

### 1.1 Industrial Sites Holding Licences and/or Authorisations

Searches of information provided by the Environment Agency and Local Authorities reveal the following information:

#### Records of Part A Licences (IPC Processes) within 1000m of the study site:

0

Database searched and no data found.

#### Records of Part A Licences (IPPC Processes) within 1000m of the study site:

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

0

Database searched and no data found.

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

5

The following List 2 Dangerous Substance Inventory Site records are represented as points on the Authorisations, Incidents and Registers map:

	-	-			_
ID	Distance	Direction	NGR	Details	5
1A	270.0	SE	391050,221350	Name: Lucas Aerospace, Arle Court,	Receiving Water: -
				Cheltenham	Discharge Type: -
				Sample Site Name: No Site	
				Sample Site Number: No site	
2A	270.0	SE	391050,221350	Name: Lucas Aerospace, Arle Court,	Receiving Water: -
				Cheltenham	Discharge Type: Trd
				Sample Site Name: No Site	
				Sample Site Number: No site	
3A	270.0	SE	391050,221350	Name: Lucas Aerospace, Arle Court,	Receiving Water: -
				Cheltenham	Discharge Type: -
				Sample Site Name: No Site	
				Sample Site Number: No site	
4A	270.0	SE	391050,221350	Name: Lucas Aerospace, Arle Court,	Receiving Water: -
				Cheltenham	Discharge Type: 04311905
				Sample Site Name: No Site	
				Sample Site Number: No site	
5A	270.0	SE	391050,221350	Name: Lucas Aerospace, Arle Court,	Receiving Water: -
				Cheltenham	Discharge Type: Trd
				Sample Site Name: No Site	
				Sample Site Number: No site	

#### Records of LAPPC (LAPC) Authorisations within 500m of the study site:

0

Database searched and no data found.



#### Records of Category 3 or 4 Radioactive Substance Licences within 500m of the study site:

O

Database searched and no data found.

Records of Licenced Discharge Consents within 500m of the study site:

3

The following Licenced Discharge Consents records are represented as points on the Authorisations, Incidents and Registers map:

ID	Distance	Direction	NGR	Detail	ls
6A	270.0	SE	391050,221350	Address: Woodward Aircraft Controls, Arle	Receiving Water: Arle Court Brook
				Court, Cheltenham, Gloucestershire	Status: New Consent (wra 91, S88 & Sched
				Effluent Type: Trade Discharges - Cooling	10 As Amended By Env Act 1995)
				Water	Issue date: 23-12-1996
				Permit Number: S/20/25107/T	Effective Date: 29-9-2003
				Permit Version: 2	Revocation Date: -
7A	270.0	SE	391050,221350	Address: Woodward Aircraft Controls, Arle	Receiving Water: Arle Court Brook
				Court, Cheltenham, Gloucestershire	Status: New Consent (wra 91, S88 & Sched
				Effluent Type: Trade Discharges - Cooling	10 As Amended By Env Act 1995)
				Water	Issue date: 23-12-1996
				Permit Number: S/20/25107/T	Effective Date: 29-9-2003
				Permit Version: 2	Revocation Date: -
8	367.0	E	391140,221300	Address: Delphi Diesel Systems Limited,	Receiving Water: Arle Court Brook
				Hatherley Lane, Cheltenham, Gloucestershire	Status: New Consent (wra 91, S88 & Sched
				Effluent Type: Trade Discharges - Site Drainage	10 As Amended By Env Act 1995)
				Permit Number: S/20/25631/T	Issue date: 25-7-2000
				Permit Version: 1	Effective Date: 25-7-2000
					Revocation Date: -

### 1.2 Dangerous or Hazardous Sites

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

0

Database searched and no data found.

### 1.3 Environment Agency Recorded Pollution Incidents

Records of National Incidents Recording System, List 2 within 250m of the study site:

0

Database searched and no data found.

Records of National Incidents Recording System, List 1 within 250m of the study site:

C

Database searched and no data found.

### 1.4 Sites Determined as Contaminated Land under Part IIA EPA 1990

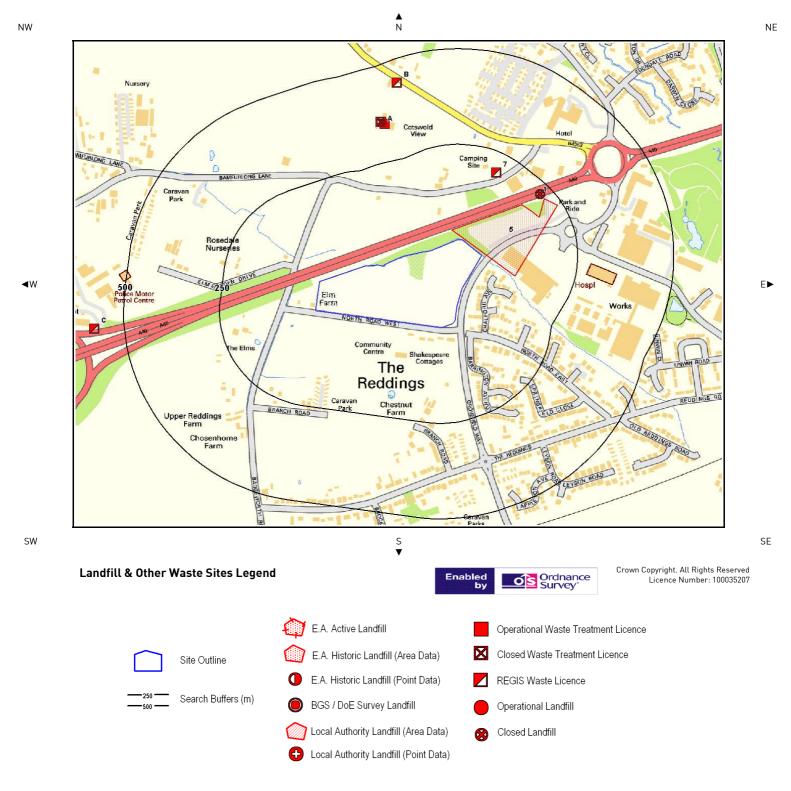
How many records of sites determined as contaminated land under Section 78R of the Environmental Protection Act 1990 are there within 500m of the study site?

Database searched and no data found.

<sup>&</sup>lt;sup>1</sup>Further information on sites that have been determined under the Contaminated Land Regime is maintained by Local Authorities under Section 78R of the Environmental Protection Act 1990. Information should be available on both sites currently determined as Contaminated Land and Special Sites.



### 2. Landfill and Other Waste Sites Map





### 2. Landfill and Other Waste Sites

### 2.1 Landfill Sites<sup>1</sup>

#### Records from Environment Agency landfill data within 1000m of the study site:

0

Database searched and no data found.

#### Records of operational landfill sites sourced from Landmark within 1500m of the study site:

0

Database searched and no data found.

#### Records of Environment Agency historic landfill sites within 1500m of the study site:

2

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

ID	Distance	Direction	NGR	Deta	ils
5	5.0	NE	390900,221500	Site Address: Land off Hatherley Lane, Hatherley Waste Licence: Yes Site Reference: 150/408 Waste Type: No data	Data Type: Polygon Licence Issue: 21-Apr-1994 Licence Surrendered: 06-Oct-1994 Licence Hold Address: - Operator: -
Not shown	1198.0	NW	389800,222500	Regis Reference: - Site Address: Swanbrook Grill, Swanbrook Grill, Cheltenham Road, Valley Farm, Staverton, Near Cheltenham, Gloucestershire Waste Licence: Yes Site Reference: 20/267, 897 226, 1600/0267 Waste Type: Inert, Industrial, Commercial Regis Reference: -	Data Type: Polygon Licence Issue: 08-Feb-1980 Licence Surrendered: 31-Dec-1993 Licence Hold Address: Cafe, Swanbrook Grill, Gloucester Road, Staverton Operator: -

### Records of non-operational landfill sites sourced from Landmark within 1500m of the study site:

2

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

ID	Distance	Direction	NGR	Details Details		
1	221.0	NE	391000,221700	Site Address: Hatherley Lane, Arle Court	Record Date: 01-May-1994	
				Roundabout, CHELTENHAM,	Transfer Date:	
				Gloucestershire,	Modification Date:	
				Landfill Licence: 160AHAAL	Status: Licence	
				Agency Reference:	lapsed/cancelled/defunct/not	
				Waste Type: Inert	applicable/surrendered	
				Waste Description: Inert Landfill	Category: LANDFILL	
				Known Restrictions: No known restriction	Regulator: EA - Midlands Region - Lower	
				on source of waste	Severn Area (Tewkesbury)	
					Size: Very Small (←10,000 tonnes/year)	

<sup>&#</sup>x27;This information is gathered from a wide range of sources including, the Environment Agency (Agency), The British Geological Survey (BGS) and under licence from Landmark Information Group Limited®. Data supplied by Landmark Information Group Limited® and the Agency refers to waste management licences required (under either the Control of Pollution Act 1974 and/or the Environmental Protection Act 1990) by anyone involved in waste disposal. A survey by the BGS undertaken in 1972/3 provides data on some older landfill sites that were not subject to legislation. Environment Agency data on historic waste / landfill sites is still being updated by the Agency as part of an ongoing project. GroundSure use this data because more accurate data is not yet publicly available and will use enhanced Environment Agency data when it is released.



Not shown 1341.0

NW

389700,222600

Site Address: Swanbrook Grill,
Gloucester Road, Staverton,
CHELTENHAM, Gloucestershire,
Landfill Licence: 160AATAL
Agency Reference:
Waste Type: Inert
Waste Description: Inert Landfill
Known Restrictions: No known restriction
on source of waste

Record Date: 01-Feb-1980
Transfer Date:
Modification Date:
Status: Licence
lapsed/cancelled/defunct/not
applicable/surrendered
Category: LANDFILL
Regulator: EA - Midlands Region - Lower
Severn Area (Tewkesbury)
Size: Undefined

### Records of BGS/DoEnon-operational landfill sites within 1500m of the study site:

0

Database searched and no data found.

### Records of Local Authority landfill sites within 1500m of the study site:

0

Database searched and no data found.

### 2.2 Other Waste Sites<sup>1</sup>

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

1

1

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

ID	Distance	Direction	NGR	Details		
3A	350.0	N	390595,221885	Site Address: Cotswold View, Golden	Record Date: 01-Mar-1997	
				Valley, Gloucester Road, CHELTENHAM,	Transfer Date:	
				Gloucestershire, GL51 0SS	Modification Date: 01-Mar-1999	
				Landfill Licence: B21AATAL	Status: Operational as far as is known	
				EA Reference: EAWML48061	Category: SCRAPYARD	
				Waste Type: Non-Hazardous	Regulator: EA - Midlands Region - Lower	
				Rating: Non-Hazardous Scrapyard	Severn Area (Tewkesbury)	
				Known Restrictions: No known	Size: Very Small (←10,000 tonnes/year)	
				restriction on source of waste		

#### Records of non-operational waste treatment, transfer or disposal sites within 500m of the study site:

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

ID	Distance	Direction	NGR	Details		
4A	354.0	N N	221887,221887	Site Address: Cotswold View, Golden Valley, Gloucester Road, CHELTENHAM, Gloucestershire, GL51 0SS Landfill Licence: 160ADEAL EA Reference: - Waste Type: Non-Hazardous Waste Description: - Known Restrictions: No known restriction on source of waste	Record Date:01-Dec-1991 Transfer Date: Modification Date: 01-Apr-1995 Status: Record superseded Category: SCRAPYARD Regulator: EA - Midlands Region - Lower Severn Area (Tewkesbury) Size: Very Small (←10,000 tonnes/year)	

#### Records of Environment Agency (REGIS) waste sites within 1500m of the study site:

6

<sup>&#</sup>x27;This information is gathered from a wide range of sources including, the Environment Agency (Agency), The British Geological Survey (BGS) and under licence from Landmark Information Group Limited®. Data supplied by Landmark Information Group Limited® and the Agency refers to waste management licences required (under either the Control of Pollution Act 1974 and/or the Environmental Protection Act 1990) by anyone involved in waste disposal. A survey by the BGS undertaken in 1972/3 provides data on some older landfill sites that were not subject to legislation. Environment Agency data on historic waste / landfill sites is still being updated by the Agency as part of an ongoing project. GroundSure use this data because more accurate data is not yet publicly available and will use enhanced Environment Agency data when it is released.



The following waste treatment, transfer or disposal sites records are represented as points on the Landfill and Other Waste Sites map: NGR Distance Direction Details 390886,221757 198.0 NE Site Address: Shurdington, Issue Date: 16/08/1993 Expiry Date: Gloucestershire, Type: Landfills taking non-biodegradeable Effective Date: wastes (not construction) Status: Closure Size: ← 25000 tonnes Modified: Regis Licence Number: CAP001 Site Name: Brook Villa Farm Operator: Capaldi Plant Hire Limited Cancelled Date: Correspondence Address: Pillar House, Surrendered Date: Waste Management licence No: 48027 113/115, Bath Road, Cheltenham, Annual Tonnage: 5501 Gloucestershire, GL53 7LS 8B 441 0 Ν 390627.221993 Site Address: Golden Valley, Gloucester Issue Date: 03/12/1991 Road, Cheltenham, Gloucestershire, GL50 Expiry Date: 0SS Effective Date: -Type: Metal recycling sites (vehicle Status: Issued Modified: dismantlers) Size: ← 25000 tonnes Site Name: Cotswold View Regis Licence Number: BUC001 Cancelled Date: -Operator: Buckland Henry Raymond Correspondence Address: Oak Priors, Surrendered Date: Gloucester Road, Staverton, Cheltenham, Gloucestershire, GL50 0SS Waste Management licence No: 48061 Annual Tonnage: No Data 9B 441 0 Ν 390627.221993 Site Address: Golden Valley, Gloucester Issue Date: 03/12/1991 Road, Staverton, Cheltenham, Expiry Date: Gloucestershire, GL51 0SS Effective Date: Type: Metal recycling sites (vehicle Status: Issued dismantlers) Modified: Size: ← 25000 tonnes Site Name: Cotswold View Regis Licence Number: BUC001 Cancelled Date: Operator: Buckland Henry Raymond Correspondence Address: Oak Priors, Surrendered Date: Gloucester Road, Staverton, Cheltenham, Gloucestershire, GL51 0SS Waste Management licence No: 48061 Annual Tonnage: 4999 Issue Date: 22/03/1995 100 578 0 W 389840 221348 Site Address: Bamfurlong Depot, Golden Valley Interchange, Cheltenham, Expiry Date: -Gloucestershire, GL51 6SU Effective Date: -Type: Household, Commercial and Status: Issued Industrial transfer stations Modified: -Size: ← 25000 tonnes Site Name: Bamfurlong Depot Regis Licence Number: RIN002 Cancelled Date: Operator: Ringway Infrastructure Services Correspondence Address: Ringway Gloucester Ĺimited Depot, Shepherd Road, Cole Avenue, Surrendered Date: -Gloucester, GL2 5HA Waste Management licence No: 48057 Annual Tonnage: 312 Issue Date: 22/03/1995 11C 578.0 W 389840,221348 Site Address: Bamfurlong Depot, Golden Valley Interchange, Cheltenham, Expiry Date: Gloucestershire, GL51 6SU Effective Date: Type: Household, Commercial and Status: Issued Industrial transfer stations Modified: Size:  $\leftarrow$  25000 tonnes Site Name: Bamfurlong Depot Regis Licence Number: RIN002 Cancelled Date: Operator: Ringway Infrastructure Services Correspondence Address: Highways House, Ltd 225, London Road, Worcester, WR5 2BE Surrendered Date: Waste Management licence No: 48057 Annual Tonnage: 312 389840.221348 12C 578 0 W Issue Date: 22/03/1995 Site Address: Golden Valley Interchange, Expiry Date: -Cheltenham, Gloucestershire, GL51 6SU

Type: Household, Commercial and

Industrial transfer stations

Size: ← 25000 tonnes

Regis Licence Number: RIN002

Operator: Ringway Highway Services Ltd

Surrendered Date: -

Waste Management licence No: 48057

Annual Tonnage: 312

Effective Date: -

Status: Issued

Site Name: Bamfurlong Depot

Correspondence Address: Shepherd Road,

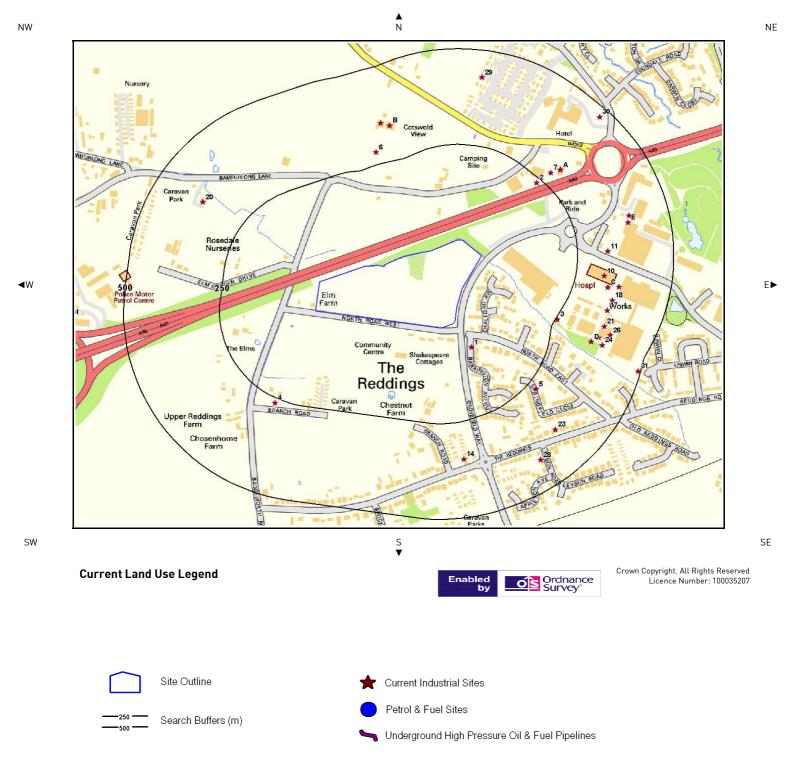
Cole Avenue, Gloucester, GL2 5HA

Modified:

Cancelled Date:



### 3. Current Land Use Map





### 3. Current Land Uses

### 3.1 Current Industrial Data

Records of potentially contaminative industrial sites within 500m of the study site:

31

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

ID	Distance	Direction	Company	Address	Activity	Category
1	78.0	SE	Electricity Sub Station	-	Electrical Features	Infrastructure And Facilities
2	238.0	NE	Danet		Container and	Transport,
2	230.0	INE	Depot	-		•
					Storage	Storage And
	05/0	65			T 1 (0 :)	Delivery
3	254.0	SE	Tanks	-	Tanks (Generic)	Industrial
						Features
4	263.0	SW	D W Taylor	Branch Cottage, Branch Road, The	Vehicle Repair and	Repair And
				Reddings, Cheltenham, GL51 6RH	Servicing	Servicing
5	274.0	SE	Electricity Sub Station	-	Electrical	Infrastructure And
					Features	Facilities
6	282.0	N	Scrap Yard	-	Scrap Metal	Recycling Services
			'		Merchants	, ,
7	282.0	NE	Depot	-	Container and	Transport,
,	202.0		Верег		Storage	Storage And
					Storage	
	000.0			0.11. 1/11. 01	0 . 0	Delivery
A8	303.0	NE	Easy Mix Ltd	Golden Valley, Gloucester Rd,	Concrete Products	Industrial
				Cheltenham, Gloucestershire, GL51 0TT		Products
9A	304.0	NE	Keltruck Ltd	Golden Valley, Gloucester Road,	New Vehicles	Motoring
				Cheltenham, GL51 0TT		
10	323.0	Е	The Nuffield Hospital	Hatherley Lane, Cheltenham, GL51 6SY	Hospitals	Health
	020.0	_	Cheltenham	riamente y zame, emettermann, ezer ee.	rioopitato	Practitioners And
			Offictioninality			Establishments
11	000.0		FI		FI	
11	328.0	E	Electricity Sub Station	-	Electrical	Infrastructure And
					Features	Facilities
12C	338.0	E	Electricity Sub Station	-	Electrical	Infrastructure And
					Features	Facilities
13B	342.0	N	Frost Engineering	Gloucester Road, Staverton,	Precision	Engineering
				Cheltenham, GL51 0SS	Engineers	Services
14	347.0	S	Electricity Sub Station	onettermann, ozor oso	Electrical	Infrastructure And
14	347.0	3	Liectificity Sub Station	_		
455	05/0			0 : 111/2 01 : D 1	Features	Facilities
15B	354.0	N	Harry Buckland	Cotswold View, Gloucester Road,	Vehicle Breakers	Recycling Services
				Staverton, Cheltenham, GL51 0SS		
16D	357.0	E	Electricity Sub Station	-	Electrical	Infrastructure And
					Features	Facilities
17	357.0	SE	Electricity Sub Station	-	Electrical	Infrastructure And
			,		Features	Facilities
18	360.0	E	Works	_	Unspecified Works	Industrial
10	000.0	_	Works		Or Factories	Features
100	366.0	Е	Chimanau			Industrial
19C	366.0	E	Chimney	-	Chimneys	
						Features
20	368.0	NW	B J M Refrigeration	23 Valley Mobile Home Park,	Domestic	Consumer
				Bamfurlong Lane, Cheltenham, GL51	Appliances	Products
				6SL		
21	369.0	SE	Tank	-	Tanks (Generic)	Industrial
					,	Features
22D	371.0	SE	Tank		Tanks (Generic)	Industrial
ZZU	3/1.0	3E	iank	<del>-</del>	ranks (Generic)	
00	0010	65	D III D : ::	Limit El Til D. Cr. Co. Cr. C.	FI . :	Features
23	384.0	SE	Bulldog Protection	Little Elms, The Reddings, Cheltenham,	Electronic	Industrial
			Systems	GL51 6RY	Equipment	Products
24	387.0	E	Tanks	-	Tanks (Generic)	Industrial
						Features
25E	390.0	Е	Chimney	-	Chimneys	Industrial
	0,0.0	_	············		5	Features
2/	394.0	SE	[]:-:-:		Electrical	
26	374.0	3E	Electricity Sub Station	-		Infrastructure And
					Features	Facilities
27E	397.0	E	Tanks	-	Tanks (Generic)	Industrial
						Features
28	423.0	SE	A Piece of Cake	4, Leyson Road, The Reddings,	Baking and	Foodstuffs
				Cheltenham, GL51 6RU	Confectionery	
				onettermann, ozor otto	Join Colloner y	