



16 Daleham Gardens
London NW3 5DA

**Basement Impact Assessment
Appendices**

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1.0 Phase 1 Preliminary Risk Assessment

Site Analytical Services Ltd.

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Your Ref:

Our Ref:

11/18172-1
August 2011

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16 DALEHAM GARDENS
LONDON, NW3 5DA

REPORT ON A PHASE 1 PRELIMINARY RISK ASSESSMENT

Prepared for

Elliott Wood Partnership LLP Consulting Engineers

Acting on behalf of

Mr Chris Holm

Reg Office: Units 14 + 15, River Road Business Park,
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Business Reg. No. 2255616



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EXECUTIVE SUMMARY

Site Location	16 Daleham Gardens, London, NW3 5DA
Client	Mr Chris Holm
Consulting Engineers	Elliott Wood Partnership LLP
Proposed Development	Proposals for the site include a refurbishment of the upper floors and lowering the existing part basement of the property. It is envisaged that the excavation for the new basement will be a mixture of secant piled retaining walls and underpinning to the existing walls.
Historic and Current Activities	From a review of historical maps it would appear that the site was agricultural land until about 1896 when a residential property is evident. This building has not changed in shape or location since this date. The area surrounding the site has been dominantly residential in use over the years with the most potentially contaminating activities at the site coming from the sub-stations located in the general area.
Environmental Setting	The 1:50000 Geological Survey of Great Britain (England and Wales) covering the area (Sheet 256, 'North London', Solid and Drift Edition) indicates the site to be underlain by Superficial Head deposits overlying the London Clay Formation. The Superficial and Bedrock geology underlying the site are classified as Unproductive Strata; drift deposits or rock layers with low permeability that has negligible significance for water supply or river base flow. The site is 279m north-west from a Zone II (Outer Protection) Groundwater Source Protection Zone. The nearest surface water is recorded as being 570m south of the site.
Potential Contamination Sources	On Site: No sources Off Site: Depots, Dry cleaners, garages.
Previous Investigations	It is our understanding that no previous reports have been developed relating to the site.
Potential Risks	Human health: Inhalation of vapours Workforce Direct Contact Buildings / Service materials: Direct contact Flora/ecosystems
Recommendation	Undertake a quantitative risk assessment (site investigation) with the following objectives: Provide information for further characterisation of the site in relation to potential Made Ground conditions and potential pollution from local industry.

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1.0 INTRODUCTION**1.1 Project Objectives**

At the request of Elliott Wood Partnership LLP, Consulting Structural Engineers to Mr Chris Holm a preliminary risk assessment was carried out to develop an outline conceptual model and to establish whether or not there are any potentially unacceptable risks arising from potential contamination at the above site.

The information was required for a qualitative risk assessment of the potential for contamination at the site and to evaluate whether any remediation may be required for the protection of the end-user and other sensitive receptors from the presence of potential contamination.

The investigation is required by the London Borough of Camden under planning regulations.

The project objectives include the following aims:

- To assess the presence, extent and nature of potential risk of pollution to end-users of the site, controlled waters and other potentially sensitive receptors.
- To undertake a qualitative environmental risk assessment of the site and surroundings.
- To identify further works, if any, needed to further assess, manage or mitigate any potential risks.
- To provide information relevant for planning approval.

1.2 Scope of works

A preliminary risk assessment comprising a Phase 1 Land Quality Assessment (a desk study and site survey) has been undertaken and is summarised as follows:

- A review of current activities and conditions at the site based on information from the Client, regulatory data and the results of a site walkover survey.
- A review of the history of the site and surrounding area from historical maps and available anecdotal information.
- An assessment of geological, hydrological and hydrogeological information pertaining to the site.
- The development of a site conceptual model identifying potential sources, pathways, receptors and linkages, a preliminary qualitative risk assessment and identification of unacceptable risks.
- Recommendations for further works, if necessary

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The recommendations and comments given in this report are based on the information contained from the sources cited and may include information provided by the Client and other parties including anecdotal information. It must be noted that there may be special conditions prevailing at the site which have not been disclosed by the investigation and which have not been taken into account in the report. No liability can be accepted for any such conditions.

This report does not constitute a full environmental audit of either the site or its immediate environs.

1.3 Details of research undertaken

A number of database searches have been undertaken, soliciting information of the current and historical uses of the site and surrounding area in order to complete a qualitative risk assessment associated with the development of the site. These include:

- Environmental Data Search 1:10000
- Environmental Data Search 1:2500
- Site Sensitivity Maps and Data Sheets
- Historical Maps
- Local Council consultation
- Consultation with the Client / Architect / Site representatives.

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2.0 SITE DETAILS

(National Grid Reference: TQ 267 848)

2.1 Site Location

The site is situated on the east side of Daleham Gardens in the Belsize Park area of London, NW3 5DA; a site location plan is shown in Appendix A. The site is currently occupied by a large four-storey unoccupied residential property with a rear garden at a lower level. The site covers an area of approximately 0.08 Hectares and the general area is under the authority of the London Borough of Camden.

2.2 Surrounding land uses

The site is surrounded by large detached residential houses along both sides of Daleham Gardens and the general area is mainly residential in nature although there is a health clinic and the Tavistock Centre approximately 120m south of the site.

2.3 Site Walkover

The site was attended on 29th June 2011 for the purposes of conducting the site walkover.

The site comprises of a large unoccupied four-storey detached house with three-stories evident at the front and a part basement or lower ground floor at the rear. There is a small overgrown front garden with access paths to the front door and side access to the rear at the north end as well as a limited drive leading to a single-storey side garage at the south end. The rear garden is relatively large and comprises of an overgrown lawn with a gazebo in the north-east corner and shrubbery adjacent to the house.

The garden is bounded on the east side by a high brick wall and by close board fencing to the north and south.

The site lies on ground sloping down to the south and east towards Swiss Cottage and has considerable amounts of vegetation. The rear garden is surrounded by mature trees with a large tree close to the house and overgrown bushes along the rear of the house where a narrow path is present. A row of small trees is present along the western boundary behind a low brick wall adjacent to Daleham Gardens

From the site walkover there were no obvious potentially contaminating activities on the site which consists of a recently occupied residence.

2.4 Details of intended future uses of the site

The proposals for the site are to refurbish the upper floors and lower the existing basement of the property. It is envisaged that the excavation for the new basement will be a mixture of secant piled retaining walls and underpinning to the existing walls.

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2.5 References of planning applications

A recent planning application has been submitted to the London Borough of Camden for the site (Application No. 2011/0892/P - Registration date: 23rd February 2011). The planning decision has been approved.

3.0 INFORMATION ON HISTORICAL AND CURRENT ACTIVITIES ON-SITE AND SURROUNDING AREA

3.1 Historical Maps

The site history was compiled from information available from a series of past Ordnance Survey maps (scale 1:1,250, 1:2,500 and 1:10,000, 1:10,560, 1:25,000), details of which are presented in Appendix C.

- 1869** The first available large scale map of the area shows the site as undeveloped agricultural land. Three farm buildings are shown to the south-east of the site labelled as 'Belize Farm', whilst a line of trees is evident on the eastern boundary of the site. Land towards the east of the site is already heavily developed with the existing Belize Lane and residential property evident. Conversely, land to the west of the site is undeveloped and detailed as agricultural land. A ventilating (air) shaft is labelled 150m north of the site associated with an underground rail tunnel (Belsize Tunnel) which is still operational today. Ponds are shown 200m north-east of the site and 170m and 200m north-west of the site.
- 1895** A residential building is shown on the site and land to the north and west of the site is shown as having been developed, with access roads (including Daleham Gardens) and residential property shown. A depot is located 25m east of the site.
- 1915** The site remains essentially the same as of 1896. There has been very little change to the general area and immediate areas, although an additional air shaft is shown 200m west of the site.
- 1934** The site remains essentially the same as of 1896. A hospital is labelled 200m south of the site.
- 1954** The site remains essentially the same as of 1896.

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- 1960** The site remains essentially the same as of 1896. There has been very little change to the general area and immediate areas.
- 1971** The site remains essentially the same as of 1896. Two sub-stations are labelled 130m south of the site and the hospital is relabelled as the Tavistock Centre.
- 1991** The site remains essentially the same as of 1896. The immediate and general areas experience only minor changes.
- 2010** The site remains generally the same as of 1896. There has been very little change to the general area and immediate areas.

From a review of historical maps it would appear that the site was agricultural land until about 1896 when a residential property is evident. This building has not changed in shape or location since this date. The area surrounding the site has been dominantly residential in use over the years with the most potentially contaminating activities at the site coming from a local depot 25m east of the site.

3.2 Present Use and Activities

There are no entries in the contemporary trade directories on-site, six within 250m of the site, thirty one within 500m and one hundred and thirty eight within one kilometre of the site.

The entries within 250m of the site include garages (four entries) from 6m east and dry cleaners from 42m east (two entries).

There are three fuel station entries within one kilometre of the site and are located 397m south-west (recorded as open), 554m north-east (open) and 957m south (obsolete).

There are no Control of Major Accident Hazards (COMAH) sites, Explosive sites, Notification of Installations Handling Hazardous Substances (NIHHS), Planning Hazardous Substance Enforcements or Planning Hazardous Substance consents within one kilometre of the site.

There have been thirty seven local authority pollution prevention and controls found within one kilometre of the site, the closest being located 157m north-east of the site and relating to dry cleaning processes.

There are twenty five registered radioactive substances within 1km of the site, the closest being 746m south of the site and relating to keeping, use and disposal of radioactive waste at the Royal Free Hospital, Hampstead, London.

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3.3 Landfill Sites and Waste

There are two registered waste transfer sites located 515m west of the site both relating to a former British Rail good yard on Finchley Road, Camden. The licence statuses are stated as having lapsed/superseded.

There is one historical landfill site located 638m west of the site on Canfield Place, London NW6. The licence status and details of registered waste are not provided in the Envirocheck report.

There are no BGS recorded landfill sites, registered landfill sites, local authority landfill sites, integrated pollution control registered wastes sites, licence waste management facilities (landfill boundaries or locations) or registered waste treatment or disposal sites within 1km of the site.

3.4 Radon

The National Radon Protection Board states that less than one percent of homes are above the Action Level (200Bqm⁻³). The British Geological Survey recommends that no Radon protection measures are necessary at the location of the site.

3.5 Pollution Incidents and Discharge Consents

There have been no pollution incidents to controlled waters within 1km of the site and there are no entries in the Substantiated Pollution Incident Register or discharge consents within 1km of the site.

3.6 Identification of potential contaminants of concern and source areas

Dates	Feature	Distance and Direction from the site (m)	Potential Contaminants	Potential impact on the site?
Active	Garages	From 6m E	Chromium, Copper, Lead, Zinc, Vanadium, Asbestos, pH, Oil/Fuel Hydrocarbons, Aromatic Hydrocarbons, PAH's, Chlorinated Aliphatic Hydrocarbons, Organo-lead compound's.	Yes
1895-1919	Depot	25m east	Chromium, Copper, Lead, Zinc, Vanadium, Asbestos, pH, Oil/Fuel Hydrocarbons, Aromatic Hydrocarbons, PAH's, Chlorinated Aliphatic Hydrocarbons, Organo-lead compound's.	Yes
Active	Dry Cleaners	42m E	Cadmium, Chromium, Copper, Lead, Mercury, Zinc, Arsenic, Selenium, Free Cyanide, Nitrate, Sulphate, Asbestos, pH, Aromatic Hydrocarbons, Chlorinated Aliphatic Hydrocarbons, PCB's.	Yes

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4.0 ENVIRONMENTAL SETTINGS

4.1 Geology

The 1:50000 Geological Survey of Great Britain (England and Wales) covering the area (Sheet 256, 'North London', Solid and Drift Edition) indicates the site to be underlain by Superficial Head deposits overlying the London Clay Formation.

The BGS 1:625000 Solid Geology Deposits indicate the site to be underlain by the London Clay Formation.

The records of the British Geological Survey indicate that the site is at no risk from compressible ground stability hazards, ground dissolution stability hazards or running sand ground stability hazards. There is also no risk from non coal mining areas on-site.

However, the site is at very low risk from landslide ground stability hazards, and at moderate risk from shrinking or swelling clay ground stability hazards.

4.2 Hydrogeology

The Environment Agency Groundwater Protection Policy uses aquifer designations that are consistent with the Water Framework Directive. These designations reflect the importance of aquifers in terms of groundwater as a resource (drinking water supply) and also their role in supporting surface water flows and wetland ecosystems.

The Superficial and Bedrock geology underlying the site are classified as Unproductive Strata; drift deposits or rock layers with low permeability that have negligible significance for water supply or river base flow.

Considering the thickness of London Clay, it is considered that the potential for pollutants, if present, to interact with the underlying chalk aquifer would be minimal.

The site is 279m north-west from a Zone II (Outer Protection) Groundwater Source Protection Zone.

There is a single groundwater abstraction entry located within 1 km of the site located 599m south of the site at Swiss Cottage Open Space and relating to spray irrigation.

It is considered that the possibility of persistent pollutants being present on-site would not affect groundwater in the area due to the presence of geology classified as a non aquifer beneath the site.

4.3 Hydrology and Drainage

The nearest surface water is recorded as being 570m south of the site.

There are no fluvial or tidal floodplains located within 1km of the site.

A potential risk to the surface water feature from any persistent pollutants on-site is unlikely given the presence of impermeable soils below the site and the distance between the water feature and the site.

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4.4 Sensitive Land Use

A Local Nature Reserve (Belsize Wood) is located 809m north-east of the site.

4.5 Summary of potential environmental receptors

Receptor Type	Receptor(s)	Sensitivity	Comments
Groundwater	Unproductive	Low	There is no significant underlying groundwater at the site.
Surface water	570m South	Low	A potential pathway would not exist exist between the site and the surface water feature 570m S.
Flooding	On-site	Low	There are no fluvial or tidal floodplains located within 1km of the site.
Sensitive Land	Belsize Wood 809m NE	Low	Due to the distance to the Local Nature Reserve, there is not expected to be a significant risk.

5.0 INFORMATION ON SITE DRAINAGE AND
MAN MADE POTENTIAL POLLUTANT PATHWAYS

The site was recently in use as a large residence and as such drainage may be present under and surrounding the site buildings, however this is unlikely to lead to lateral or vertical migration of potential pollutants on-site.

There was no further information available regarding underground services at the site.

6.0 CONSULTATION WITH THE LOCAL AUTHORITY,
THE ENVIRONMENT AGENCY, ETC.

Consultation with the Local Authority was undertaken via the council's online planning portal and did not indicate any further information. The Local Council have also been cited within the information of the Envirocheck report.

Consultation with the Environment Agency has not been undertaken, however the Environment Agency have been cited within the information of the Envirocheck report.

There was no additional consultation with other bodies/sources undertaken.

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7.0 REVIEW AND SUMMARY OF PREVIOUS REPORTS

There have not been any previous reports available to us at the time of writing.

8.0 OUTLINE CONCEPTUAL MODEL

In accordance with current UK guidance on land contamination risk assessment (CLR 11, Science Report – SC050021/SR3 and BS10175), the following conceptual site model has been generated for the subject site.

The purpose of the conceptual model is to identify:

- All potential source(s) of contamination at and / or within the immediate vicinity of the site.
- Any potentially sensitive receptor(s) which may be at risk from the above source(s).
- Any potential migration and / or exposure pathways which link the source(s) to the receptor(s).

Only if all three of the above elements are present i.e. a source-pathway-receptor, is a potential risk present. Such a relationship is termed a 'pollutant linkage'. The SCM describes in detail any potentially significant pollutant linkages present and justifies the exclusion of any potential pollutant linkages considered to be non significant.

8.1 Contamination Sources

A review of the current and historical land uses indicated the potential contaminative land uses that may impact the site are similar to the following industries highlighted in DoE industry profiles for potential contaminants of concern.

On site sources:

- No significant sources

Off Site Sources

- Depot
- Garages
- Dry cleaners

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8.2 Contaminants of Concern

It is considered that a number of the contamination sources are similar to those highlighted in "DoE industry profiles for potential contaminants of concern" and those likely to be of concern can be summarised as follows:

- Metals and metalloids: Cadmium, Chromium, Copper, Lead, Selenium, Nickel, Vanadium, Zinc, Arsenic, Mercury, Boron
- Inorganic Compounds: Nitrate, Sulphate, Sulphide, Complex and Free Cyanide
- Organic compounds: Acetone, Oil/Fuel Hydrocarbons, Aromatic Hydrocarbons, PAH's, Chlorinated Aliphatic Hydrocarbons, PCB's, Organo-lead compounds.
- Other: Asbestos, pH

8.3 Receptors

The receptors / resources considered to be affected by identified contamination during the assessment included the following:

- Construction workers
- Future site residents
- Building materials and services
- Site flora / fauna

8.4 Pollutant Linkages

The following tables illustrate the hypothesised Source - Pathway - Receptor linkages for exposure to possible contaminants associated with industrial activity in the area, the current site conditions and the proposed development.

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Area of Potential Concern (and contaminants of concern)	Potential Receptor	Potential Pathway to Receptor	Hazard (Potential Consequence)	Likelihood of Pollutant Linkage	Justification / Comments
On site: No Source Off Site: local industry including:	Construction workers	Inhalation, ingestion, direct contact with contaminated soil	Acute and chronic toxicity, carcinogenic impact	Possible	Significant excavation of a basement on-site is planned. As such, significant groundwater would be involved in the construction process. Additional investigation required.
Dry cleaners Depot Garages	Future users – open landscaped areas	Inhalation, ingestion, direct contact with contaminated soil	Acute and chronic toxicity, carcinogenic impact	Possible	The proposed development will have private gardens and areas of soft landscaping. Additional investigation required.
Metals and metalloids: Inorganic Compounds: Organic compounds: Asbestos	Future users – within building footprint	Inhalation	Acute and chronic toxicity, carcinogenic impact	Possible	The presence of volatile contaminants may be possible within potential Made Ground. Additional investigation required.
	Non Aquifer / unproductive strata	Contaminant leaching, vertical migration within Made Ground	Water pollution	Unlikely	The site is situated in an area of Non Aquifer / unproductive strata. Therefore no potential risk is expected.
	Built materials and services	Direct contact	Degradation	Possible	It is probable that future underground services and structures will come into contact with potentially impacted soils. Additional investigation required.
	Proposed flora / landscaping	Direct uptake	Phytotoxicity	Possible	The proposed development will have private gardens and areas of soft landscaping. Additional investigation required.

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9.0 IDENTIFICATION OF UNACCEPTABLE RISKS

Following the hypothesised Source - Pathway - Receptor linkages for exposure to possible contaminants as identified in the site conceptual model, the following possible unacceptable risks have been identified and further investigation of the site should be undertaken to confirm or refute the risk.

Receptor	Pathway	Nature of Risk
Human Health	Inhalation of vapours	Potential volatile contaminants in made ground.
	Direct contact	Direct contact with soils (Metals, Metalloids, Asbestos, Speciated PAH, Hydrocarbons)
	Workforce	Direct contact with soils (Metals, Metalloids, Asbestos, Speciated PAH, Hydrocarbons)
Groundwater	Unproductive	No Risk
Surface water	570m south	No Risk
Site Flora / Ecosystems	Plant uptake	Direct contact with soils (Metals, Metalloids, Speciated PAH, Hydrocarbons)
Buildings / Service Materials	Direct contact	Direct contact with soils (Inorganics, Acids/Alkalis Speciated PAH's, Hydrocarbons)

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10.0 SUGGESTED NEXT STEPS

The information from the preliminary risk assessment and site conceptual model has identified a number of potential unacceptable risks relating to sensitive receptors on-site.

Dependent on the scope of the proposed works on-site, it may be necessary to fully assess the potentially unacceptable risks, for which additional information would be required. We would suggest that the most viable method of assessment would be via a Quantitative Risk Assessment (Site Investigation) and the investigation would have the following objectives:

- Provide information for further characterisation of the site in relation to potential Made Ground conditions and potential pollution from local industry.

The scope of any such investigation should be agreed with the Local Authority, Environment Agency and any other Interested Parties prior to commencement.

p.p. SITE ANALYTICAL SERVICES LIMITED

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Geotechnical Engineer



A M Davidson BSc. (Hons), MSc, DIC.
Environmental Engineer

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Appendix A

Site location plan



16 Daleham Gardens, London, NW3 5DA



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Appendix B

Site Photographs

Photograph 1. View looking north-east towards the property



Photograph 2. View looking north-west showing the garden area





Photograph 3. View looking north-east detailing the garden area and boundary wall



APPENDIX 'C'

Envirocheck Data



Envirocheck® Report: Datasheet

Order Details:
Order Number:
35254599_1_1
Customer Reference:
11/18172
National Grid Reference:
526720, 184890
Slice:
A
Site Area (Ha):
0.08
Search Buffer (m):
1000

Site Details:
16 Daleham Gardens
LONDON
NW3 5DA

Client Details:
Mr A Davidson
Site Analytical Services Ltd
Unit 14 & 15
River Road Business Park
33 River Road
Barking
IG11 0EA



Order Number: 35254599_1_1 Date: 29-Jun-2011 rpr_ec_datasheet v47.0 A Landmark Information Group Service



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Introduction

The Environment Act 1985 has made site sensitivity a key issue, as the legislation pays as much attention to the pathways by which contamination could spread, and to the vulnerable targets of contamination, as it does the potential sources of contamination. For this reason, Landmark's Site Sensitivity maps and Datasheet(s) place great emphasis on statutory data provided by the Environment Agency and the Scottish Environment Protection Agency; it also incorporates data from Natural England (and the Scottish and Welsh equivalents) and Local Authorities; and highlights hydrogeological features required by environmental and geotechnical consultants. It does not include any information concerning past uses of land. The datasheet is produced by querying the Landmark database to a distance defined by the client from a site boundary provided by the client.

In the attached datasheet the National Grid References (NGRs) are rounded to the nearest 10m in accordance with Landmark's agreements with a number of Data Suppliers.

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Report Version v47.0

Order Number: 35254599_1_1 Date: 29-Jun-2011 rpr_ec_datasheet v47.0 A Landmark Information Group Service



Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Agency & Hydrological					
Contaminated Land Register Entries and Notices					
Discharge Consents					
Enforcement and Prohibition Notices					
Integrated Pollution Controls					
Integrated Pollution Prevention And Control					
Local Authority Integrated Pollution Prevention And Control					
Local Authority Pollution Prevention and Controls	pg 1		1	3	14
Local Authority Pollution Prevention and Control Enforcements					
Nearest Surface Water Feature	pg 3				Yes
Pollution Incidents to Controlled Waters					
Prosecutions Relating to Authorised Processes					
Prosecutions Relating to Controlled Waters					
Registered Radioactive Substances	pg 3				37
River Quality					
River Quality Biology Sampling Points					
River Quality Chemistry Sampling Points					
Substantiated Pollution Incident Register					
Water Abstractions	pg 10				1 (*7)
Water Industry Act Referrals					
Groundwater Vulnerability	pg 11	Yes	n/a	n/a	n/a
Bedrock Aquifer Designations	pg 11	Yes	n/a	n/a	n/a
Superficial Aquifer Designations			n/a	n/a	n/a
Source Protection Zones	pg 12			1	
Extreme Flooding from Rivers or Sea without Defences				n/a	n/a
Flooding from Rivers or Sea without Defences				n/a	n/a
Areas Benefiting from Flood Defences				n/a	n/a
Flood Water Storage Areas				n/a	n/a
Flood Defences				n/a	n/a
Waste					
BGS Recorded Landfill Sites					
Historical Landfill Sites	pg 13				1
Integrated Pollution Control Registered Waste Sites					
Licensed Waste Management Facilities (Landfill Boundaries)					
Licensed Waste Management Facilities (Locations)					
Local Authority Recorded Landfill Sites					
Registered Landfill Sites					
Registered Waste Transfer Sites	pg 13				2
Registered Waste Treatment or Disposal Sites					

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Hazardous Substances					
Control of Major Accident Hazards Sites (COMAH)					
Explosive Sites					
Notification of Installations Handling Hazardous Substances (NIHHS)					
Planning Hazardous Substance Consents					
Planning Hazardous Substance Enforcements					
Geological					
BGS Recorded Mineral Sites					
BGS 1:625,000 Solid Geology	pg 14	Yes	n/a	n/a	n/a
Brine Compensation Area			n/a	n/a	n/a
Coal Mining Affected Areas			n/a	n/a	n/a
Mining Instability			n/a	n/a	n/a
Man-Made Mining Cavities					
Natural Cavities					
Non Coal Mining Areas of Great Britain				n/a	n/a
Potential for Collapsible Ground Stability Hazards				n/a	n/a
Potential for Compressible Ground Stability Hazards				n/a	n/a
Potential for Ground Dissolution Stability Hazards				n/a	n/a
Potential for Landslide Ground Stability Hazards	pg 14	Yes	Yes	n/a	n/a
Potential for Running Sand Ground Stability Hazards	pg 14		Yes	n/a	n/a
Potential for Shrinking or Swelling Clay Ground Stability Hazards	pg 14	Yes	Yes	n/a	n/a
Radon Potential - Radon Affected Areas			n/a	n/a	n/a
Radon Potential - Radon Protection Measures			n/a	n/a	n/a
Industrial Land Use					
Contemporary Trade Directory Entries	pg 15		6	31	138
Fuel Station Entries	pg 29			1	2

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Summary

Data Type	Page Number	On Site	0 to 250m	251 to 500m	501 to 1000m (*up to 2000m)
Sensitive Land Use					
Areas of Adopted Green Belt					
Areas of Unadopted Green Belt					
Areas of Outstanding Natural Beauty					
Environmentally Sensitive Areas					
Forest Parks					
Local Nature Reserves	pg 30				1
Marine Nature Reserves					
National Nature Reserves					
National Parks					
Nitrate Sensitive Areas					
Nitrate Vulnerable Zones					
Ramsar Sites					
Sites of Special Scientific Interest					
Special Areas of Conservation					
Special Protection Areas					



Agency & Hydrological

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
1	Local Authority Pollution Prevention and Controls Name: Pyramid Cleaners Location: 52 Besize Lane, London, NW3 5AR Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC8 Dated: 1st January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG646 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A13NE (NE)	157	1	526872 184585
2	Local Authority Pollution Prevention and Controls Name: B P Harmony Location: 104a Finchley Road, London, NW3 5EY Authority: London Borough of Camden, Pollution Projects Team Permit Reference: Not Given Dated: 1st July 1999 Process Type: Local Authority Air Pollution Control Description: PG1/14 Petrol filling station Status: Authorised Positional Accuracy: Automatically positioned to the address	A13SW (SW)	397	1	526471 184554
2	Local Authority Pollution Prevention and Controls Name: Bp Harmony Location: 104a Finchley Road, LONDON, NW3 5EY Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC18 Dated: 1st July 1999 Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station Status: Permitted Positional Accuracy: Automatically positioned to the address	A13SW (SW)	397	1	526471 184554
3	Local Authority Pollution Prevention and Controls Name: Is Dry Cleaners Location: 6 Canfield Gardens, London, NW6 3ba Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC18 Dated: 5th February 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG646 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A12SE (SW)	497	1	526257 184662
4	Local Authority Pollution Prevention and Controls Name: Hampstead Express Dry Cleaning Location: 279a Finchley Road, London, NW3 6BT Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC8 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG646 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A12NE (W)	527	1	526178 184902
4	Local Authority Pollution Prevention and Controls Name: Janets Hand Laundry Ltd Location: 281a Finchley Road, London, NW3 6nd Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC14 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG646 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A12NE (W)	539	1	526167 184924
5	Local Authority Pollution Prevention and Controls Name: Belize Park Service Station Location: 215 Haverstock Hill, LONDON, NW3 4RE Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC21 Dated: 2nd January 1999 Process Type: Local Authority Pollution Prevention and Control Description: PG1/14 Petrol filling station Status: Permitted Positional Accuracy: Automatically positioned to the address	A19SW (NE)	554	1	527187 185227

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
6	Local Authority Pollution Prevention and Controls Name: Kings Location: 25 Winchester Road, London, E4 Authority: London Borough of Waltham Forest, Environmental Health Department Permit Reference: DC05 Dated: Not Supplied Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Manually positioned to the address or location	A8NE (S)	571	2	525812 184310
7	Local Authority Pollution Prevention and Controls Name: Swiss Cottage Dry Cleaners Location: 121 Finchley Road, London, NW3 6HY Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC10 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A8NW (S)	610	1	526626 184270
8	Local Authority Pollution Prevention and Controls Name: Perkins Dry Cleaners Location: 171 Haverstock Hill, London, NW3 4QS Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC7 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A14NW (E)	620	1	527342 185065
8	Local Authority Pollution Prevention and Controls Name: Swan Dry Cleaners Location: 163 Haverstock Hill, London, NW3 4QT Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC42 Dated: 24th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A14NW (E)	642	1	527371 185032
9	Local Authority Pollution Prevention and Controls Name: The Royal Free Hospital Location: Pond Street, LONDON, NW3 2QG Authority: London Borough of Camden, Pollution Projects Team Permit Reference: Not Given Dated: 24th July 1992 Process Type: Local Authority Air Pollution Control Description: PG5/1 Clinical waste incineration processes under 1 tonne an hour Status: Authorisation revoked/Revoked Positional Accuracy: Manually positioned to the address or location	A18SW (NE)	755	1	527296 185410
10	Local Authority Pollution Prevention and Controls Name: Chequers Textile Care Ltd Location: 48 Englands Lane, London, NW3 4UE Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC47 Dated: 5th December 2006 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A14SE (E)	812	1	527498 184580
11	Local Authority Pollution Prevention and Controls Name: Connoisseur Dry Cleaners Location: 3-5 Fairhazel Gardens, London, NW6 3QE Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC11 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	876	1	526262 184119

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
11	Local Authority Pollution Prevention and Controls Name: Squeaky Clean Professional Dry Cleaners Location: 13 Fairhazel Gardens, London, NW6 3QE Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC37 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	877	1	526237 184134
12	Local Authority Pollution Prevention and Controls Name: Perkins Dry Cleaners Location: 40 Heath Street, London, NW3 6TE Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC8 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A17NE (NW)	894	1	526374 185724
13	Local Authority Pollution Prevention and Controls Name: Masterclean Dry Cleaners Location: 6 Langtry Walk, London, NW6 0DU Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC38 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A7SE (SW)	940	1	526352 184004
14	Local Authority Pollution Prevention and Controls Name: Top Choice Dry Cleaners Location: 96 Fleet Road, London, NW3 2QP Authority: London Borough of Camden, Pollution Projects Team Permit Reference: PPC/DC13 Dated: 12th January 2007 Process Type: Local Authority Pollution Prevention and Control Description: PG6/46 Dry cleaning Status: Permitted Positional Accuracy: Located by supplier to within 10m	A19SE (NE)	974	1	527529 185471
	Nearest Surface Water Feature	A8NE (S)	570	-	526760 184307
15	Registered Radioactive Substances Name: Royal Free Hampstead NHS Trust Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, Greater London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: AV8011 Dated: 25th October 1996 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	746	3	527282 185400
15	Registered Radioactive Substances Name: Royal Free Hampstead NHS Trust Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, Greater London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: AT8398 Dated: 17th January 1996 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	749	3	527282 185406



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Registered Radioactive Substances Name: Royal Free And University College Medical School Of University College London Location: Royal Free Hospital, Pond Street, London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bz9758 Dated: 5th January 2006 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Application has been authorised and any conditions apply to the operatorAuthorised Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	750	3	527299 185399
15	Registered Radioactive Substances Name: Royal Free And University College Medical School Of University College London Location: Royal Free Hospital, Pond Street, London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: By6010 Dated: 3rd August 2005 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	750	3	527299 185399
15	Registered Radioactive Substances Name: Royal Free And University College Medical School Of University College London Location: Royal Free Hospital, Pond Street, London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bw7635 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	750	3	527299 185399
15	Registered Radioactive Substances Name: Royal Free And University College Medical School Of University College London Location: Royal Free Hospital, Pond Street, London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bj5694 Dated: 14th February 2001 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	750	3	527299 185399
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, Greater London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: AR0446 Dated: 12th July 1995 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	753	3	527292 185410
15	Registered Radioactive Substances Name: Anthony Nolan Trust (Ant) Location: Fleet Road, London, NW3 2QR Authority: Environment Agency, Thames Region Permit Reference: CB1915 Dated: 2nd October 2007 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Application has been authorised and any conditions apply to the operatorAuthorised Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	755	3	527296 185410

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: CD3170 Dated: 13th July 2009 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Application has been authorised and any conditions apply to the operatorAuthorised Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: CB2954 Dated: 20th July 2007 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to an authorisation under S13 or S14 RSA in respect of a registration under S7 when Technetium 99M is used being <= 10 g/gabecquerels Status: Authorisation either revoked or cancelledCancelled Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Ca2592 Dated: 13th April 2006 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bz9162 Dated: 9th December 2005 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, HAMPSTEAD, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bz1617 Dated: 9th September 2005 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free And University College Medical School Of University College London Location: Medical Physics Department, Royal Free Hospital, Pond Street, London, Greater London, NW3 2PF Authority: Environment Agency, Thames Region Permit Reference: By6001 Dated: 3rd August 2005 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Application has been authorised and any conditions apply to the operatorAuthorised Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Registered Radioactive Substances Name: Anthony Nolan Trust (Ant) Location: Medical Physics Department Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bz0831 Dated: 14th July 2005 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA80 S1) Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Manually positioned to the address or location	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, HAMPSTEAD, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: By5714 Dated: 6th December 2004 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA80 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, HAMPSTEAD, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: By5705 Dated: 22nd November 2004 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA80 S1) Description: Discretionary registration under the Act of an open source which is also the subject of an authorisation Status: Application has been authorised and any conditions apply to the operatorAuthorised Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, HAMPSTEAD, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bw6841 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA80 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: B18709 Dated: 12th May 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA80 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, HAMPSTEAD, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bz4883 Dated: 29th July 2002 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA80 S1) Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410

 Agency & Hydrological					
Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Registered Radioactive Substances Name: Anthony Nolan Trust (Ant) Location: Royal Free Hospital, Pond Street, HAMPSTEAD, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bz0832 Dated: 29th April 2002 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA80 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, HAMPSTEAD, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bz4008 Dated: 29th April 2002 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA80 S1) Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free And University College Medical School Of University College London Location: Medical Physics Department, Royal Free Hospital, Pond Street, London, Greater London, NW3 2PF Authority: Environment Agency, Thames Region Permit Reference: Bm0214 Dated: 28th November 2001 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA80 S1) Description: Substantial variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: B15708 Dated: 14th February 2001 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA80 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Polymase Pharmaceuticals Plc Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bz5678 Dated: 14th February 2001 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA80 S7) Description: Authorisation under RSA Status: Authorisation either revoked or cancelledCancelled Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410



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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
15	Registered Radioactive Substances Name: Royal Free And University College Medical School Of University College London Location: Medical Physics Department, Royal Free Hospital, Pond Street, London, Greater London, NW3 2PF Authority: Environment Agency, Thames Region Permit Reference: BB6254 Dated: 27th October 1998 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: AV1327 Dated: 11th August 1987 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Substantial variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free And University College Medical School Of University College London Location: Medical Physics Department, Royal Free Hospital, Pond Street, London, Greater London, NW3 2PF Authority: Environment Agency, Thames Region Permit Reference: AR0403 Dated: 12th July 1995 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: AH9987 Dated: 21st June 1994 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, LONDON, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: AB4095 Dated: 31st March 1991 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527297 185410
15	Registered Radioactive Substances Name: Anthony Nolan Trust (Ant) Location: Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: CB5171 Dated: 2nd October 2007 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Application has been authorised and any conditions apply to the operatorAuthorised Positional Accuracy: Automatically positioned to the address	A19SW (NE)	757	3	527297 185411

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15	Registered Radioactive Substances Name: Anthony Nolan Trust (Ant) Location: Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bz0777 Dated: 14th July 2005 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	757	3	527297 185411
15	Registered Radioactive Substances Name: Anthony Nolan Trust (Ant) Location: Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: Bw7643 Dated: 1st December 2003 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Minor variation to authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	757	3	527297 185411
15	Registered Radioactive Substances Name: Anthony Nolan Trust (Ant) Location: Royal Free Hospital, Pond Street, Hampstead, London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: B5716 Dated: 14th February 2001 Process Type: Authorisation under S13 RSA for the disposal of Radioactive waste (was RSA60 S7) Description: Authorisation under RSA Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	757	3	527297 185411
15	Registered Radioactive Substances Name: Royal Free Hampstead Nhs Trust Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, Greater London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: AE8658 Dated: 24th March 1992 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of multiple open sources which are also the subject of authorisations Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	757	3	527302 185405
15	Registered Radioactive Substances Name: Royal Free Hampstead NHS Trust Location: Royal Free Hospital, Pond Street, Hampstead, LONDON, Greater London, NW3 2QG Authority: Environment Agency, Thames Region Permit Reference: AR0373 Dated: 11th July 1995 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Minor variation to a registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation superseded by a substantial or non substantial variationSuperseded Positional Accuracy: Automatically positioned to the address	A19SW (NE)	756	3	527302 185410
16	Registered Radioactive Substances Name: Polymase Pharmaceuticals Plc Location: Anthony Nolan Building, Royal Free Hospital Site, Fleet Road, Hampstead, LONDON, Greater London, NW3 2EZ Authority: Environment Agency, Thames Region Permit Reference: AU4924 Dated: 20th February 1996 Process Type: Registration under S7 RSA for the keeping and use of Radioactive materials (was RSA60 S1) Description: Registration under the Act of an open source which is also the subject of an authorisation Status: Authorisation either revoked or cancelledCancelled Positional Accuracy: Manually positioned to the address or location	A19SE (NE)	966	3	527500 185495

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Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
17	Water Abstractions Operator: London Borough Of Camden Licence Number: 28/39/39/0219 Permit Version: 1 Location: Swiss Cottage Open Space- Borehole Authority: Environment Agency, Thames Region Abstraction: Municipal Grounds: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Swiss Cottage Open Space, Winchester Road, London. Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2008 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A8NE (S)	599	3	526800 184280
	Water Abstractions Operator: Thames Water Utilities Ltd Licence Number: 28/39/39/0231 Permit Version: 1 Location: Barrow Hill Pumping Station - Borehole Authority: Environment Agency, Thames Region Abstraction: Public Water Supply: Potable Water Supply - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Barrow Hill Pumping Station Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 1st April 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	1488	3	527640 183690
	Water Abstractions Operator: Thames Water Utilities Ltd Licence Number: 28/39/39/0202 Permit Version: 1 Location: Barrow Hill Pumping Station - Borehole Authority: Environment Agency, Thames Region Abstraction: Public Water Supply: Potable Water Supply - Direct Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Barrow Hill Pumping Station Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 26th September 2002 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	A4NE (SE)	1488	3	527640 183690
	Water Abstractions Operator: Zoological Society Of London Licence Number: 28/39/39/0035 Permit Version: 100 Location: Borehole At Regent'S Park, London Nw1 Authority: Environment Agency, Thames Region Abstraction: Zoos/Kennels/Stables: Animal Watering & General Use (Non Agricultural) Abstraction Type: Water may be abstracted from a single point Source: Groundwater Daily Rate (m3): 59 Yearly Rate (m3): 681 Details: Regent'S Park, London Nw1 Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 4th April 1996 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	A5SW (SE)	1940	3	526000 183400



Agency & Hydrological

Map ID	Details	Quadrant Reference (Compass Direction)	Estimated Distance From Site	Contact	NGR
	Water Abstractions Operator: British Waterways Board Licence Number: 28/39/39/0173 Permit Version: 100 Location: Oval Road, Camden - Grand Union Regents Canal Authority: Environment Agency, Thames Region Abstraction: Other Industrial/Commercial/Public Services: Non-Evaporative Cooling Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 20 Yearly Rate (m3): 7000 Details: Land At Oval Road, Camden, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 8th December 1994 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(SE)	1946	3	526490 184020
	Water Abstractions Operator: British Waterways Board Licence Number: 28/39/39/0164 Permit Version: 101 Location: Southampton Bridge, London, Nw8 - Regents Canal Authority: Environment Agency, Thames Region Abstraction: Amenity: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): Not Supplied Yearly Rate (m3): Not Supplied Details: Pipeline Alongside The Regents Canal, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 17th December 2007 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(SE)	1955	3	528500 184020
	Water Abstractions Operator: British Waterways Board Licence Number: 28/39/39/0164 Permit Version: 100 Location: Southampton Bridge, London, Nw8 - Regents Canal Authority: Environment Agency, Thames Region Abstraction: Amenity: Spray Irrigation - Direct Abstraction Type: Water may be abstracted from a single point Source: Surface Daily Rate (m3): 3840 Yearly Rate (m3): 1 Details: Pipeline Alongside The Regents Canal, London Authorised Start: 01 January Authorised End: 31 December Permit Start Date: 25th April 1983 Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 10m	(SE)	1955	3	528500 184020
	Water Abstractions Operator: British Waterways Licence Number: 28/39/39/0164B Permit Version: Not Supplied Location: Southampton Bridge, LONDON, Nw8 Authority: Environment Agency, Thames Region Abstraction: Industrial Cooling (Cegb) Abstraction Type: Not Supplied Source: River Daily Rate (m3): 3840 Yearly Rate (m3): 1 Details: Annual Abstraction Total Aggregated To Another Licence For Quantity Purposes. Authorised Start: Not Supplied Authorised End: Not Supplied Permit Start Date: Not Supplied Permit End Date: Not Supplied Positional Accuracy: Located by supplier to within 100m	(SE)	1964	3	528500 184000
	Groundwater Vulnerability Soil Classification: Not classified Map Sheet: Sheet 39 West London Scale: 1:100,000	A13NW (S)	0	3	526724 184885
	Drift Deposits None				
	Bedrock Aquifer Designations Aquifer Designation: Unproductive Strata	A13NW (S)	0	4	526724 184885