Appendix D Site walkover proforma

Introduction

Subsequent to an initial but thorough revision of available desk study information, site walkover surveys provide valuable information with respect to the study site, land-use layout and environmental settings. When carrying out a walkover survey, bear in mind the construction of a conceptual model already, considering contaminant sources, pathways and receptors that could be impacted upon.

Objectives

A walkover of the site and surrounding area is usually completed as part of a site desk study and site reconnaissance (Phase 1) to

- Assess visual evidence of contamination;
- Review site processes, storage and handling of hazardous materials and housekeeping to assess the potential for pollution to occur, watch out for warning signs;
- Examine site settings (topography, site coverage and rainwater and/or contaminant permeability, geology where visible);
- Check for receptors on site and nearby areas (water courses, on site occupants);
- Examine the site for invasive species (Japanese Knotweed, Giant Hogweed etc.)
- Identify surrounding land use and receptors (residents, water courses etc.)
- Interview appropriate staff; and
- Where appropriate review environmental records held on site

Methodology

The documentation of site observations is facilitated by a proforma providing a useful series of prompts. A completed proforma also provides a permanent record of the observations made during the visit for the file.

The proforma includes questions relating to the most common issues. There may be a need to develop site specific proformas if particular aspects such as process details are required.

It is critical to ensure that all relevant areas of the site are visited, and a plan with the actual boundary of the site is invaluable. Where areas have been found inaccessible during the site walkover, this should be clearly documented as part of the site supplementary site survey might have to be carried out where access to such restricted areas is essential and can be organised subsequently.

Particular attention should be paid to those areas of the where past or present operations could potentially could have resulted in contamination and risks to the environment (areas of concern). Special attention

should also be paid to areas where receptors of higher sensitivity are present (e.g. toddlers, water courses, groundwater protection zones).

Assuming permission is not withheld, a photographic record shall also be made of the site and in particular of areas of concern or where contamination has been encountered.

It is always a good idea to pause to reflect just before you leave a site to check that all the sections have been completed on the proforma. Ask yourself;

- 1. have you got all relevant site contract details?
- 2. have you recorded all that you observed?
- 3. have you photographed all relevant parts of the site?
- 4. have you looked/driven around the general area / looked at any areas of interest identified form the map records e.g. old quarries?

Reading your notes though and making additional comments before you leave and while the site visit is fresh in your mind will help you remember when you come to write up and may reduce the number of (embarrassing) telephone calls you make to site management.

SITE WALKOVER PROFORMA

Job Number	20-5412QS		
Site Name:	Geothermal Distillery, United Downs		
Address:	United Downs, Cornwall		
Site Area (ha)			
NGR:			
-			
Photographed by		Olivia French	
Date inspection undertaken		23.02.2021	
Site contact (name, title, contact		Sue Webb, Cornwall Council	
Buro Happold			2

details)

Weather

Cloudy / Windy / Light rain

GENERAL SITE DESCRIPTION/CURRENT SITE USES

Note activities being undertaken on the site, site access details and give a description of the site boundary. Give information on significant areas on site where site access is restricted. If processes take place on the site you will need to ask rather than just note. Mark these on the plan or draw a sketch map. Take photo of any identifying name board at site entrance.

The site is located just off the Suez Recycling and Recovery Site at United Downs, accessed by turning into the Suez site but bearing right toward a set of porta cabins. Both porta cabins use electricity and water, and one is used as offices by Cornwall Council technical staff, who are responsible for the monitoring of gas levels and the gas infrastructure on the site. As you drive in, to the right there is what was reported to be a closed-up mineshaft with protective fencing surrounding it; this is detailed in A1.0 of Appendix 1. Access and road surfaces when driving into the site are sufficient, and the area is open upon accessing. When walking from Zone A (see Appendix 2) along to Zone C, D and E, the ground slopes down to the right along the northern boundary and stretches beyond what is depicted as the redline boundary in Appendix 2.

Surface cover of site

(eg buildings, hardstanding, grass etc. Potential for surface water infiltration)

- Largely open and accessible
- Mixture of grass and hard ground
- 2 x porta cabins on the northern boundary upon entering the site
- Large barn like structure to the left upon entering Area A (see Appendix 2), the use of this building is tbc
- Hard and soft ground largely uneven

Building and hardstanding materials

Details of materials (type and approximate quantities) that make up site buildings and hardstanding (take some photos). Note any evidence of structural distress/ patching (new bricks/ mortaring).

- Porta cabins look to be fairly new
- Barn-like structure reported to have been constructed circa 1999 (see A5.0 and A6.0 in Appendix 2)

Visible evidence of contamination

Look for vegetation dieback, discoloured ground, seepage of odorous/discoloured liquid. Any evidence of gas protection measures (vent pipes/ air bricks) - <u>Take photos</u>. Look at the land adjacent to the site.

- See photographs in Appendix 1
- Large amount of gas infrastructure onsite see Appendix 1

Presence of vegetation and invasive weeds

Record presence condition of trees, plants and shrubs etc. Look for evidence of invasive weeds [Japanese Knotweed; Giant Hogweed; Himalayan Balsom on land and Australian swamp stonecrop; Parrot's feather and floating pennywort in surface water bodies]. See PIN 6 or Environment Agency web site.

- Largely over grown along the right / northern boundary as walking from Zone A through to Zone F.
- See Appendix 2 for vegetation

- Reported by Sue Webb that Japanese knotweed is currently controlled and not directly within the boundary line marked out in Appendix 2

Presence of wildlife

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Record presence of nesting birds. Is the site within an area of ecological importance e.g. SSSI or National Park. Is wildlife on site protected in accordance with the Wildlife and Countryside Act 1981 and 1985 – see Defra website for information.

- Reported by Sue Webb that there have not been any Ecology surveys undertaken recently
- Clear presence of some wildlife i.e. droppings in Zones C, D, E, F and G

Presence of Asbestos

Age of building, pipe lagging, ceiling tiles; brake pads; if evident what state of repair is it in? Look out for asbestos containing materials especially in gutters and roofs. Has there been an asbestos survey undertaken on the site?

- Unknown

Presence of PCBs [electricity sub stations/ transformers]

(Polychlorinated biphenyls, production banned since 1979 but still may be present on site as a transformer coolant in electrical components. Require specialist disposal by incineration). Has there been a survey. It there any correspondence with the Electricity Company? Note the identification label which is present on all sub stations. Call the Electricity Company to confirm presence/ absence of PCBs.

Reported by Sue Webb that transformer located adjacent to porta cabin (see Appendix 1 and A3.0 in Appendix 2)

Storage of materials and old tanks

(Check for evidence of wastes and chemicals stored both **above** and **below** ground, mark location of storage areas on site plan). Are there any underground storage tanks which have been decommissioned? [look for breather pipes, old manholes/ access chamber covers etc] Were they removed? Were they backfilled? Was any ground testing done at the time?

- Presence of waste and chemical storage unknown
- Landfill site so waste below ground anticipated but the condition of which is unknown

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- A large number of gas manifolds / gas wells / dewatering chambers onsite (see Appendices 1 and 2)

SERVICES

Overhead or buried services? (overhead wires, sewers, gas main, petrol interceptors, where do drains discharge to?) Are service plans available on site? Are any surface water drains in sensitive areas, eg, by storage areas?

- No visible overhead services
- Buried services unknown
- Reported by Sue Webb that there is a large amount of gas infrastructure below ground
- As Built gas layout plan was provided by Sue Webb detailing the above

HISTORY OF USE

Cite evidence, conclusions and sources. There may be relevant street/house/locality or pub names within 250m of the site. Have a look.

- Unknown

GEOLOGY, HYDROLOGY, HYDROGELOGY

Before the visit make sure you know the basic environmental setting of the site and check that it is consistent with your observations.

Site geology

Describe any surface outcrops/ exposures or exposures of soils/ rocks in any areas of excavations, drainage ditches, cuttings etc.

- Rough and uneven ground of different grades of softness and density Buro Happold

- Small and large rocks (see D28.0 and D29.0 and E31.0 of Appendix 1)

Any previous investigations (ask on site, eg, when extensions built, when tanks excavated)

(contaminative or geotechnical). Any previous audits, Environment Agency Pollution prevention audits

- Unknown

Site topography

Flat, sloping etc. Are there any obvious discontinuities within the site or between the site and its neighbours. Any cuttings, embankments, mounds/ areas of fill.

- Relatively flat on entering the site, despite uneven to tread

- Ground forms a steep bank sloping down to the right along the northern boundary (along the length of the boundary in Appendix 2 past Zones B, C, D, E and F

- Beyond the redline boundary detailed in Appendix 2, the bank slopes upward again between the site and the neighbouring site (industrial estate)

Surface water bodies and courses

(name, type, quality)

- See G38.0 of Appendix 1 for possible surface water
- See H43.0 of Appendix 1 for possible surface water

Hydrogeology

(eg wells, abstraction, seepages, aquifers)

- Unknown

ANY OTHER RELEVANT INFORMATION

(include information on any underground structures or on the presence of trees, vegetation etc)

- Unknown

SITE NEIGHBOURS

Nature of surrounding land

(eg industrial, residential, commercial, SSSIs))

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- Industrial

Approximate distance to nearest properties

a) industrial

- Approximately 225 metres from northern boundary of site (taken from one point on Google Earth)

b) residential: have there been any complaints? have these been resolved? Were the local authority involved? Was any enforcement action taken?

c) commercial

Observations on neighbouring sites

(note eg, spillages, apparent poor site management)

- See Appendix 1; Zone H

PHOTOS TAKEN:

Note the picture number together with a brief description stating the direction of view, what you are taking the photo of and for, other points of interest in foreground/ background etc. It may be easier to do this as annotations on a site plan (i.e. where photo was taken from and in which direction. Caption digital photos

Picture No:

Description

SKETCH PLAN

Prepare a sketch plan showing the key features of the site or mark up a copy of a site plan.

Appendix 1 – Photographic Survey

Zone A (as per Appendix 2)













Geothermal Distillery, United Downs: Photographic Survey Date: 23rd February 2021













Geothermal Distillery, United Downs: Photographic Survey

Date: 23rd February 2021





Zone B (as per Appendix 2)





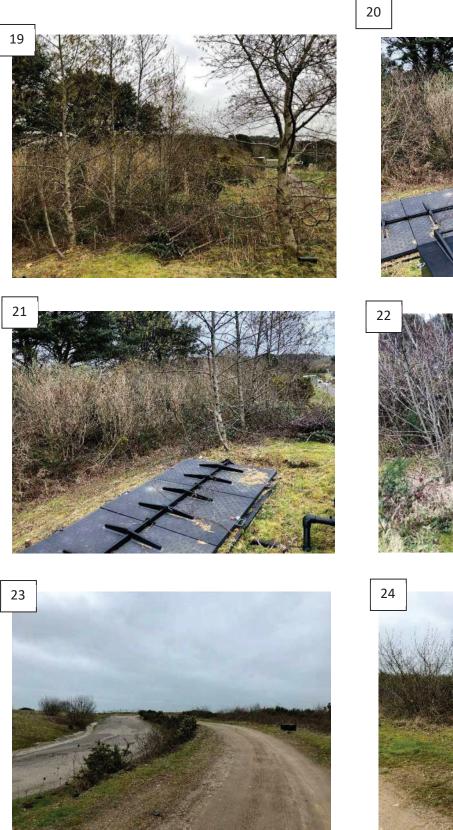




Geothermal Distillery, United Downs: Photographic Survey

Date: 23rd February 2021

Zone C (as per Appendix 2)







Zone D (as per Appendix 2)



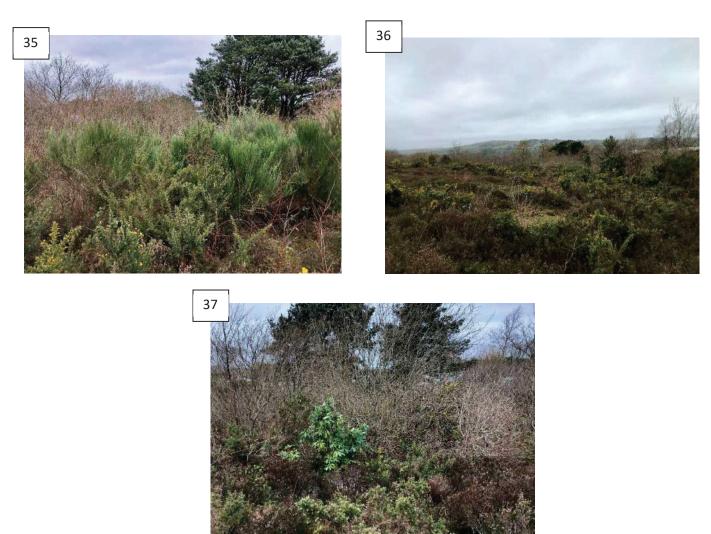
Zone E (as per Appendix 2)







Zone F (as per Appendix 2)



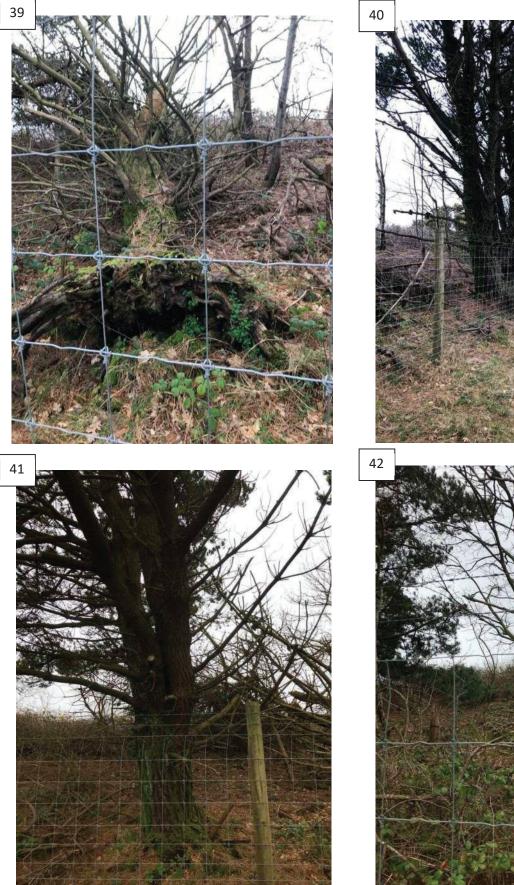
Zone G (as per Appendix 2)



Geothermal Distillery, United Downs: Photographic Survey

Date: 23rd February 2021

Zone H (as per Appendix 2)





Geothermal Distillery, United Downs: Photographic Survey

Date: 23rd February 2021



Appendix 2 – Annotated Site Plan

