



Littlecott Mill

**GSHP LICENSING
INVESTIGATION REPORT**

Site Address:

Littlecott Mill,
Enford Pewsey Wilts,
SN9 6AW

Background

From 2nd October 2023 the Environment Agency updated the regulations for Closed loop ground source heating and cooling systems as set out in The Environmental Permitting (England and Wales) (Amendment) (England) Regulations 2023. Closed loop systems are systems that are fully sealed, do not take water from the environment and do not discharge water or fluids to the environment. Boreholes or pipework used for these systems are fully sealed and have no direct connection with any groundwater.

An environmental permit may be required if you cannot meet the specified exemption conditions laid out in this report.

If the system meets the exemption conditions, there is no requirement to register the system with the Environment Agency or apply for an Environmental Permit. The aim of this report is to assess the need for an Environmental Permit or if the specification meets the exemption conditions.

The aim of this report is to assess the need for an Environmental Permit or if the specification meets the exemption conditions.

Site Specification

This planned GSHP system has been designed for installation at Little Cott Mill, Enford Pewsey Wilts, SN9 6AW. Six, GSHP Boreholes are planned. The maximum output is less than 45 kilowatts (kW).

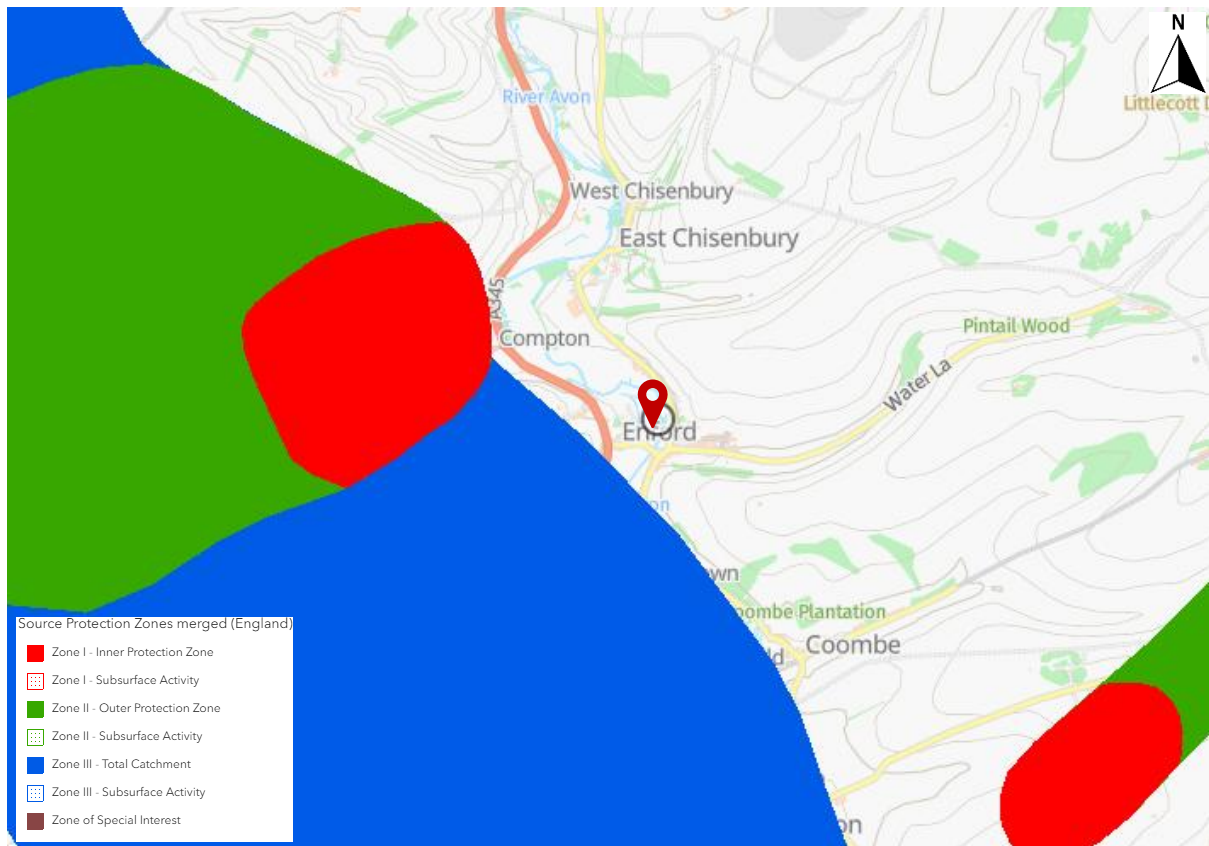
Location



3. Source Protection Zone (SPZ)

To prevent groundwater pollution the system must not be in a groundwater source protection zone 1 (SPZ1).

The map below shows the site does not fall within any SPZ. The nearest SPZ is over 1047.35 meters northwest of the site.



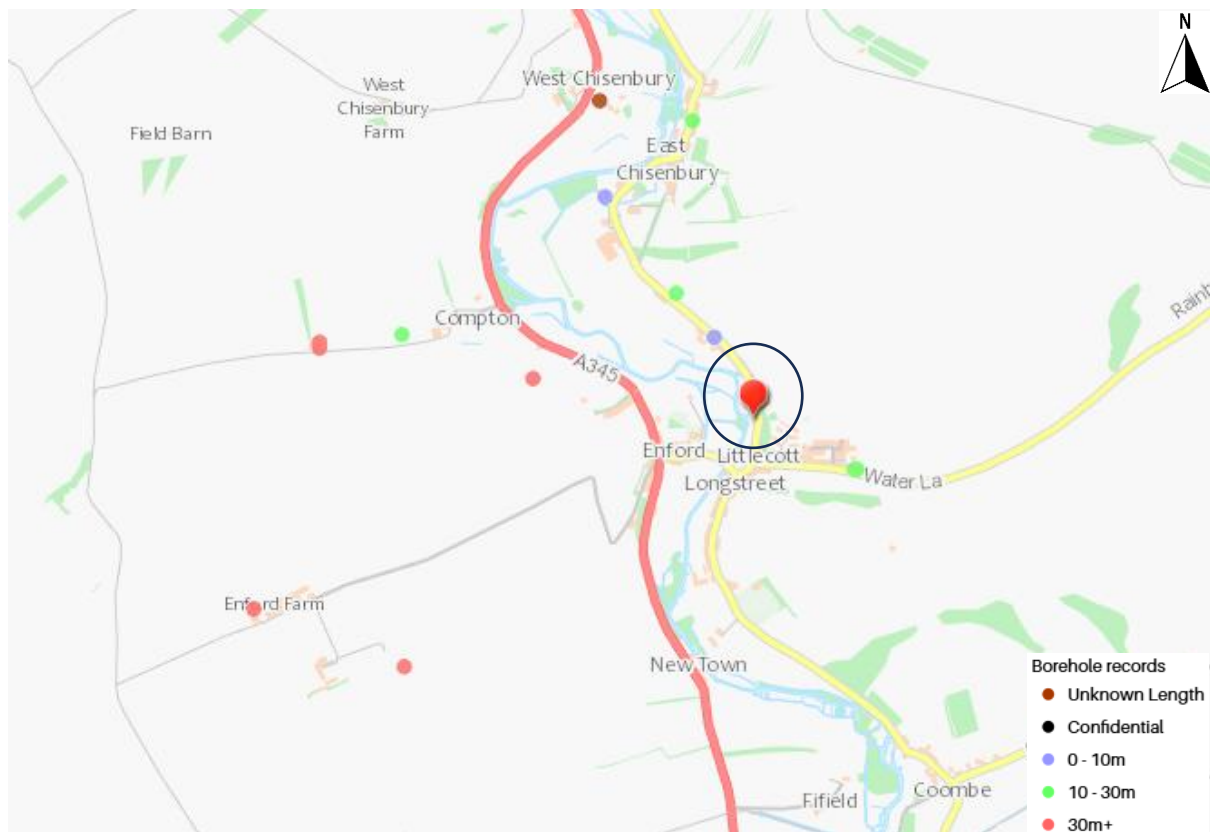
4. Review of Existing Abstractors (Borehole)

The system must not be within 50 metres of a well, spring or borehole used to supply water for domestic or food production purposes. This is to prevent groundwater pollution.

The map below shows the location of existing boreholes, logged with the British Geological (BGS) GeolIndex.

No existing boreholes are within 50m of the site. A buffer zone of 100m is shown in the map below.

Wiltshire Council were contacted by Nicholls Licensing and no private water users are listed with the Environmental Health Officer near the site.



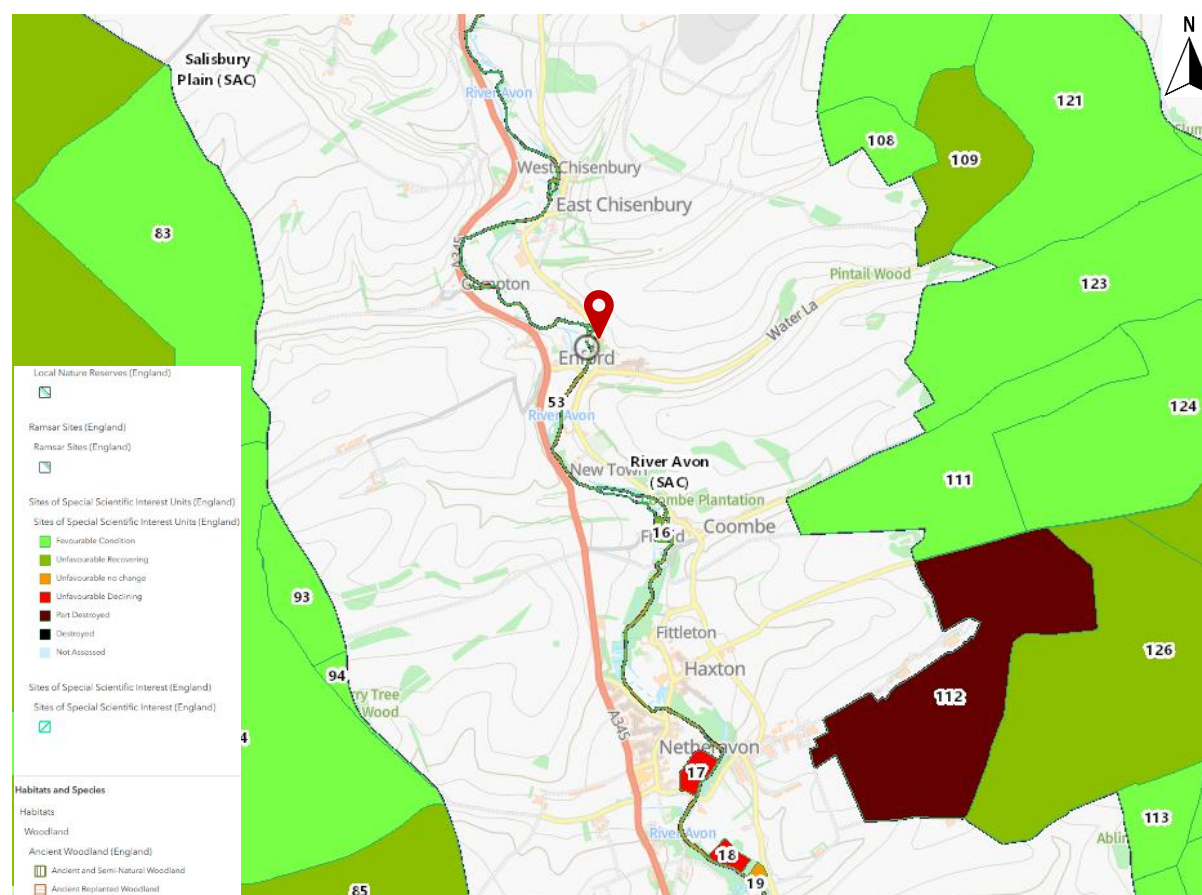
5. Protected Sites

The system must not be in or near protected sites and ancient woodlands.

This site meets condition 5.1* of the guidance notes, meaning the system supplies a single residential property and the maximum output is 45 kilowatts (kW) or less. Therefore, a 20m search radius from the site for the following protected sites is required.

Protected Site Type	Protected Site within 20m of St Marys Grove
Special areas of conservation	None
Special protection areas	None
Ramsar sites	None
Biological sites of special scientific interest (SSSIs)	Boundary of garden
Local nature reserves	None
Ancient woodland	None

The River Avon borders the garden of the property; the river is a biological site of special scientific interest. The boreholes should be drilled within the boundary of the property and a minimum distance of 20m from the River Avon.



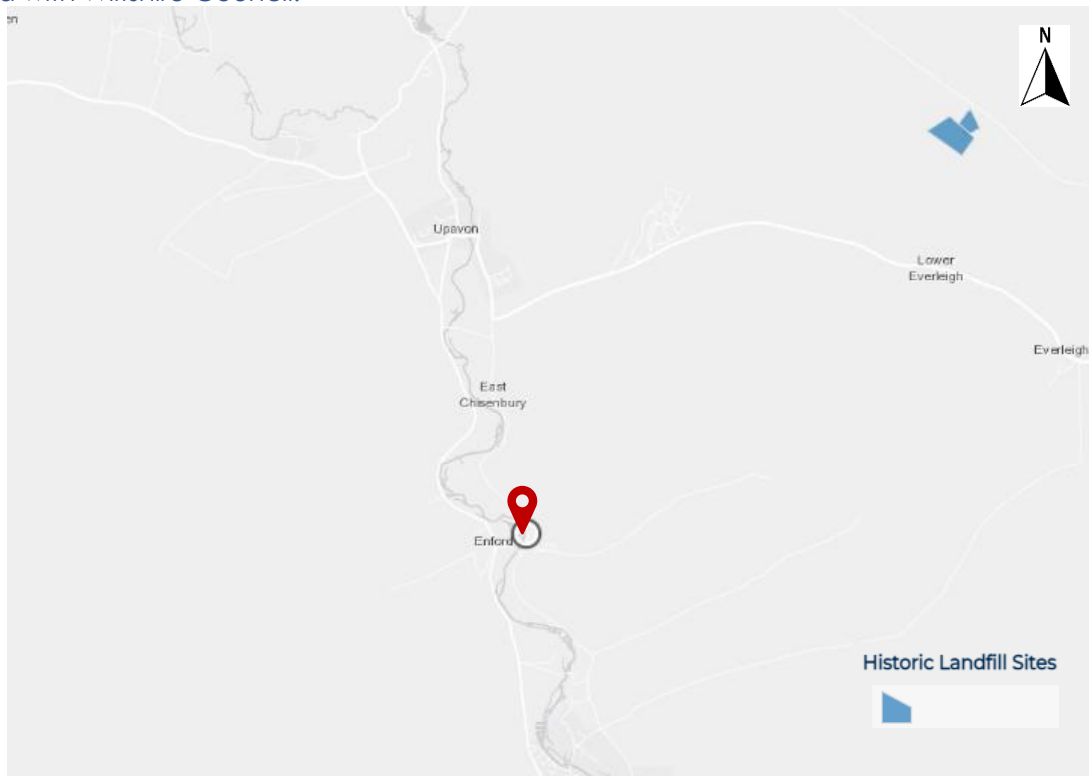
*The full list of conditions can be found in Appendices A.

6. Contamination & Historic Land Use

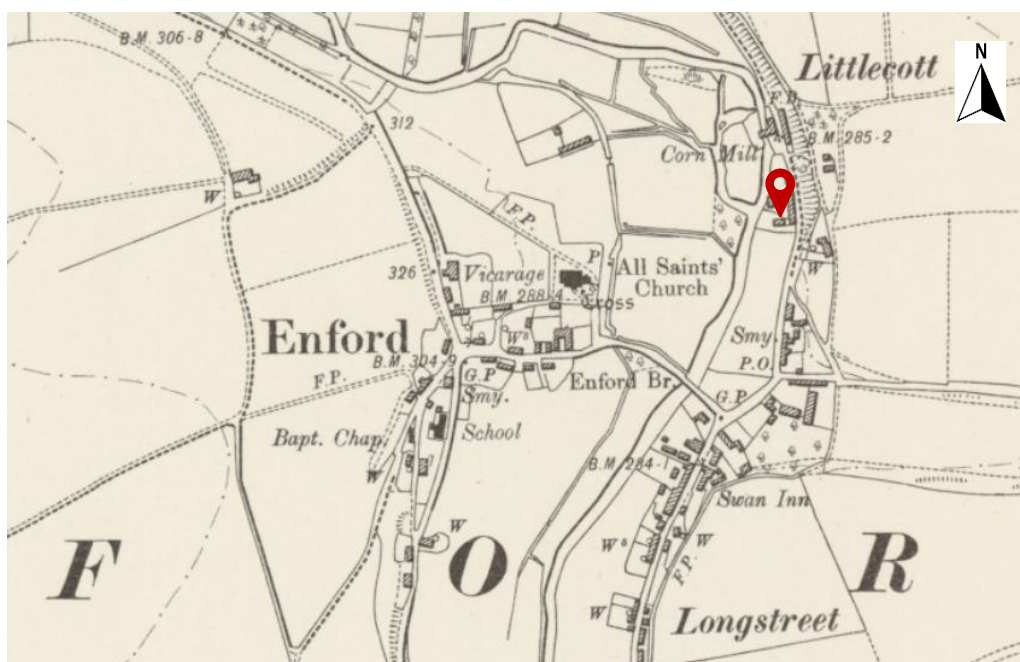
A desk study was completed to identify the previous use of the land and if soil may be contaminated. This concluded that the land use at the period property has remained the same.

No historic landfill sites are located within 500m of the site. The nearest recorded licenced historic landfill is 6.38 km away at Everleigh Refuse tip.

No recorded instances of land contamination at said address or at the site's neighbours are listed with Wiltshire Council.



OS Map circa 1901



7. Pollution Risk

The system must not be next to a septic tank or cesspit and its infiltration system
This is to reduce pollution risks.

A cesspit is a sealed unit that is used for the storage of untreated sewage.

A septic tank is an underground tank where sewage solids sink to the bottom and the liquid flows out and soaks through the ground.

An infiltration system is a series of pipes with holes placed in trenches and arranged so that wastewater can discharge through the ground for further treatment.

Pollution Risk Type	Pollution Risk
Cesspit	No
Septic Tank	No
Infiltration System	No

The Client has confirmed that there is a sewage treatment plant and that their local water company has confirmed they aren't connected to public foul sewer.

8. System Standards

The system is designed to meet relevant British Standards and Ground Source Heat Pump Association Standards.

9. Decommission of system.

Decommissioning a closed loop ground source heating and cooling system means:

- removing anything that could cause pollution such as thermal transfer fluid
- sealing any structures such as boreholes

You will need to employ an installation and maintenance company to decommission your system. It is the responsibility of the client to ensure the system is safely decommissioned so prevent any groundwater pollution.

Thermal transfer fluid must be removed from the system and disposed of appropriately.

Conclusions

Does the site/system meet all of the exemption conditions? Yes

Does the site/system require an environmental permit? No

In performing this assessment Nicholls Licensing have exercised reasonable skill, care and diligence.

This assessment is based on a range of available data, including publicly available historic information & maps supplied by the Environment Agency and other agencies. Whilst this information is generally reliable, it provides only indicative information based on the site and its risk of contamination at the time of the review.

Nicholls Licensing will not be responsible for incorrect information provided by the client or local councils in relation to the site and exemption criteria.

Nicholls shall also not be liable for any copyright infringement by the Client of the Crown's copyright in protected Ordnance Survey base data or other sources.

Appendix A.

Section 5 Conditions

5.1 If your system supplies a single residential property and the maximum output is 45 kilowatts (kW) or less

You will not meet the exemption conditions if the system is within 20 metres of a protected site or ancient woodland.

You can check the maximum output of the system by:

- looking at the design records for the system
- asking the system designer

5.2 If your system supplies a single community building

You will not meet the exemption conditions if the system is within 50 metres of a protected site or ancient woodland.

Community buildings can include:

- village halls
- town halls
- churches
- education centres

5.3 If your system supplies one or more residential property and the maximum output of the system is more than 45kW

You will not meet the exemption conditions if the system is within 50 metres of a protected site or ancient woodland.

You can check the maximum output of the system by:

- looking at the design records for the system
- asking the system designer

5.4 If the system supplies a single building that is not a community building or residential premises, and the floor space is less than 1,000 square metres

You will not meet the exemption conditions if the system is within 50 metres of a protected site or ancient woodland.

This condition applies to systems supplying a building with a:

- commercial use
- mixed residential and commercial use (for example, residential flats above a shop)

5.5 If the system supplies more than one building and the total combined floor space of the buildings is less than 1,000 square metres

You will not meet the exemption conditions if the system is within 50 metres of a protected site or ancient woodland.

This condition applies to systems supplying buildings used for:

- public offices
- commercial, retail and industrial uses

This condition does not apply if your system supplies one residential property and the maximum output of the system is 45kW or less. These systems can meet condition 5.1.

5.6 If the system supplies one building or more with a combined floor space more than 1,000 square metres, or any other building that does not meet conditions 5.1 to 5.5

You will not meet the exemption conditions if the system is within 250 metres of a protected site or ancient woodland.

This condition applies to systems supplying buildings such as those used for:

- public offices
- commercial, retail and industrial uses