

# Site Condition Report

ISSUE 1.0

Produced for **AF Pinkerton & Partners**

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## 1.0 SITE DETAILS

<b>Name of the applicant</b>	AF Pinkerton & Partners
<b>Activity address</b>	Blackbirds Farm Aldenham Hertfordshire WD25 8BS
<b>National grid reference</b>	NGR TL 14538 00101

<b>Document reference and dates for Site Condition Report at permit application and surrender</b>	Date at application: AFP-A02 (24/07/2020)
<b>Document references for site plans (including location and boundaries)</b>	Site location plan: AFP - Site Location Plan a & b v1.0 Site layout plan: AFP - Site Layout Plan v1.0

## 2.0 CONDITION OF THE LAND AT PERMIT ISSUE

<p><b>Environmental setting</b></p>	<p>AF Pinkerton &amp; Partners (hereon referred to as AF Pinkerton) is applying to vary their recently consolidated standard rules permit (SR2011 No.1) into a bespoke waste recovery permit covering the composting of up to 26,775 tonnes of waste per annum. This equates to 75 tonnes per day and as such it falls below the Industrial Emissions Directive threshold above which an installation permit would be required. The variation includes extending the site boundary to cover land previously not covered by a permit. Composting takes place in open windrows and there is an uncovered lagoon to store leachate.</p> <p>The open windrow composting site is located between the villages of Aldenham and Radlett in Hertfordshire. The area is largely agricultural in nature, although immediately east of the site is a Thames Water water treatment works. Also, less than 250m away from the composting activity is the main Blackbirds Farm site. There are a number of small industrial units located on the farm site which are classed as sensitive receptors. The nearest residential property is approximately 210m to the northeast of the composting site, located next to the sewage treatment works.</p> <p><b><u>Geology</u></b></p> <p>The underlying geology of the proposed facility is as follows:</p> <ul style="list-style-type: none"> <li>• There are two types of bedrock beneath the site (i.e. rock types far below the surface). Under the northern portion of the site is Lewes Nodular and Seaford Chalk Formation rock. This is a chalk formed approximately 84 to 94 million years ago in the Cretaceous Period. Under the southern portion of the site is the Lambeth Group rock. This is a clay, silt and sand bedrock formed approximately 48 to 59 million years ago in the Palaeogene Period.</li> <li>• There is one recorded superficial deposit beneath the entire site (i.e. rock types near the surface) known as Gerrards Cross Gravel. This is a deposit made up of sand and gravel formed up to 2 million years ago in the Quaternary Period.</li> </ul> <p><b><u>Hydrogeology</u></b></p> <p>The hydrogeological features of the subsurface features of the site are:</p> <ul style="list-style-type: none"> <li>• The Bedrock Aquifer in the northern portion of the site is designated as a Principal Aquifer. These are layers of rock that have high intergranular and/or fracture permeability meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale and they were previously designated as major aquifers. The Bedrock Aquifer in the southern portion of the site is designated as a Secondary A Aquifer. These are permeable layers of rock capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flows to rivers. They were previously classified as minor aquifers.</li> </ul>
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	<ul style="list-style-type: none"> <li>The Superficial Aquifer across the entire site is designated as a Secondary A Aquifer. These are permeable layers of rock capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flows to rivers. They were previously classified as minor aquifers.</li> </ul> <p><b><u>Groundwater</u></b></p> <p>The groundwater characteristics for the site location are presented below:</p> <ul style="list-style-type: none"> <li>The site is situated within Groundwater Source Protection Zone (SPZ) III – Total Catchment.</li> <li>The groundwater vulnerability of the bedrock below the northern portion of the site is classified as Principal Bedrock Aquifer – Medium-High Vulnerability. This means that the ground is easily able to transmit pollution through the ground through well connected fissures. They are also characterised by the absence of low permeability drift deposits.</li> <li>The groundwater vulnerability of the bedrock below the southern portion of the site is classified as Secondary A Bedrock Aquifer – Medium-High Vulnerability. This means that the ground is easily able to transmit pollution through the ground through well connected fissures. They are also characterised by the absence of low permeability drift deposits.</li> <li>The groundwater vulnerability of the superficial aquifer is classified as Secondary Aquifer – High Vulnerability. This means that the ground is easily able to transmit pollution through the ground through well connected fissures.</li> <li>There is limited potential for groundwater flooding to occur on site.</li> <li>The nearest groundwater abstraction licence is recorded 1280m northwest of the site at Bricket Wood pumping station.</li> </ul> <p><b><u>Flooding</u></b></p> <ul style="list-style-type: none"> <li>The site is located in Flood Zone 1 according to the EA Flood map for planning tool (see Appendix D Flood Zone Map). This indicates that there is no flood risk at site.</li> </ul> <p><b><u>Hydrology</u></b></p> <ul style="list-style-type: none"> <li>The nearest surface water feature is associated with the sewage treatment works which immediately neighbours the site. The nearest main surface water feature is the River Colne located approximately 650m west of the site, although there appears to be a small tributary of this river 500m west of the site. There is also a farm lagoon located approximately 250m southwest of the site.</li> </ul>
<p><b>Pollution history</b></p>	<p><b><u>Historical Land Use</u></b></p> <ul style="list-style-type: none"> <li>The land within the proposed site boundary is indicated from historical mapping, dating back to 1883. On this oldest map, the land within the proposed site boundary was shown to be of agricultural nature. A sparse row of trees ran across the southern portion of the site. Blackbirds Farm is seen to the southwest of the proposed site. Blackbirds Lane exists, running in a north-south orientation to the west of the proposed site.</li> <li>The map from 1899 showed no change in land use.</li> </ul>

- There was no change in land use of the land within the site boundary or that in the immediate vicinity until 1972-1975 when the sewage works was constructed immediately east of the proposed site.
- The map from 1999 shows additional buildings had been erected on the main Blackbirds Farm.
- No further changes have been noticed since then.

#### **Pollution Incidents**

- There have been two recorded pollution incidents to controlled waters within 1km of the site location. Both of these were recorded as Category 3 – Minor Incidents. The nearest one, when the pollutant was unknown sewage, was 573m away and it was also the most recent one in 1993. The other incident was in 1989 when the pollutant was oil and the incident took place 765m from the site.
- There have been no recorded pollution incidents to air or land within 2km of the site.

#### **Waste Register**

- There are three local authority recorded landfill sites within 1km of the site. It is unknown whether any of these three are active. The nearest one is 772m south of the site on Blackbirds Farm. The other two are located approximately 935m to the north of the site.
- There are three Environment Agency regulated landfill sites within 1km of the site but all of these licences have lapsed / have been surrendered. The closest one is that mentioned above, 772m south of the site.
- There are three historical landfill sites within 1km of the proposed site boundary, with two of those relating to the same site. The nearest historical landfill site is 759m to the south.
- There are two Licensed Waste Management Facilities within the proposed site boundary. These are the licences which are being varied in the accompanying permit application and is operated by AF Pinkerton & Partners.
- There are two other Licensed Waste Management Facilities within 1km of the site, one of which is operated by AF Pinkerton & Partners and is effectively being removed from the permit as part of this permit variation. This site is located 515m southwest of the site. The other Licensed Waste Management Facility is a metal recycling site located 271m away to the southwest.

#### **Industrial Activity**

- There are a number of trade, commercial and manufacturing/production sites within 1km of the site. The nearest is that of the Thames Water sewage treatment works located immediately east of the site. On the main Blackbirds Farm site there are some independently trading businesses. To the north east there is a scrap metal recycling centre located 266m northeast of the site. Approximately 900m northeast of the site is a very small trading area comprising mainly of vehicle repair centres and former gunsmiths. 994m east of the site is a scrap metal merchants.

<b>Baseline soil and groundwater reference data</b>	No baseline soil and groundwater reference data has been collated for the site. Given the historical land use on and around the site, it is considered that there is only a very low likelihood that the land beneath the site has levels of contamination. The client has accepted that the lack of any baseline soil or groundwater data means that they are liable for any remedial works required following permit surrender in order to return the land to an uncontaminated state.
<b>Supporting information</b>	<ul style="list-style-type: none"><li>• Appendix A: Historical Site Maps</li><li>• Appendix B: Environmental Setting Maps</li><li>• Appendix C: Datasheet</li></ul>



### 3.0 PERMITTED ACTIVITIES

<p><b>Permitted activities</b></p>	<p><b><u>Current</u></b></p> <p>Standard Rules Permit (EPR/FB3108FU) covering Works Field 1, Standard Rules Permit (EPR/FB3506KN) covering Works Field 2 and Standard Rules Permit (EPR/MB3533DF/V003) covering the Broadfield site have recently been consolidated into one single permit.</p> <p><b><u>Proposed</u></b></p> <p>Variation of recently consolidated permit to a bespoke environmental permit for a waste recovery operation – composting in open systems – with a treatment capacity of 26,775 tonnes per year (75 tonnes per day) in the Works Field area. The Broadfield site is to be removed from the permitted area.</p> <p><b>R13:</b> Storage of wastes pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced).</p> <p><b>R3:</b> Recycling/reclamation or organic substances which are not used as solvents.</p>
<p><b>Non-permitted activities undertaken</b></p>	<p>There are no non-permitted activities undertaken.</p>
<p><b>Document references for:</b></p> <ul style="list-style-type: none"> <li>• <b>Plan showing activity layout</b></li> <li>• <b>Historical land use maps</b></li> <li>• <b>Site sensitivity maps</b></li> </ul>	<p>Layout Plan: AFP - Site Layout Plan v1.0  Historical Site Maps: Appendix A  Environmental Setting Maps: Appendix B  Datasheet: Appendix C</p>

## 4.0 CHANGES TO THE ACTIVITY

### To be maintained during the life of the permit.

Have there been any changes to the activity boundary?	
Have there been any changes to the permitted activities?	
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	
Checklist of supporting information	<ul style="list-style-type: none"> <li>• Plan showing any changes to the boundary (where relevant)</li> <li>• Description of the changes to the permitted activities (where relevant)</li> <li>• List of 'dangerous substances' used/produced by the permitted activities that were not identified in the Application Site Condition Report (where relevant)</li> </ul>

## 4.1 Measures Taken to Protect Land

Use records that you collected during the life of the permit to summarise whether pollution prevention measures worked. If you can't, you need to collect land and/or groundwater data to assess whether the land has deteriorated.	
Checklist of supporting information	<ul style="list-style-type: none"> <li>• Inspection records and summary of findings of inspections for all pollution prevention measures</li> <li>• Records of maintenance, repair and replacement of pollution prevention measures</li> </ul>

## 4.2 Pollution Incidents and Remediation

Summarise any pollution incidents that may have damaged the land. Describe how you investigated and remedied each one. If you can't, you need to collect land and /or groundwater reference data to assess whether the land has deteriorated while you've been there.	
Checklist of supporting information	<ul style="list-style-type: none"> <li>• Records of pollution incidents that may have impacted on land</li> <li>• Records of their investigation and remediation</li> </ul>

### 4.3 Soil Gas and Water Quality Monitoring

Provide details of any soil gas and/or water monitoring you did. Include a summary of the findings. Say whether it shows that the land deteriorated as a result of the permitted activities. If it did, outline how you investigated and remedied this.

<b>Checklist of supporting information</b>	<ul style="list-style-type: none"><li>• Description of soil gas and/or water monitoring undertaken</li><li>• Monitoring results (including graphs)</li></ul>
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## 5.0 DECOMMISSIONING AND REMOVAL OF POLLUTION RISK

### To be completed at Permit surrender.

<p>Describe how the site was decommissioned. Demonstrate that all sources of pollution risk have been removed. Describe whether the decommissioning had any impact on the land. Outline how you investigated and remedied this.</p>	
<p><b>Checklist of supporting information</b></p>	<ul style="list-style-type: none"> <li>• Site closure plan</li> <li>• List of potential sources of pollution risk</li> <li>• Investigation and remediation reports (where relevant)</li> </ul>

## 5.1 Reference Data and Remediation

<p>Say whether you had to collect land and/or groundwater data. Or say that you didn't need to because the information from section 4 of the Surrender Site Condition Report shows that the land has not deteriorated.</p> <p>If you did collect land and/or groundwater reference data, summarise what this entailed, and what your data found. Say whether the data shows that the condition of the land has deteriorated, or whether the land at the site is in a "satisfactory state". If it isn't, summarise what you did to remedy this. Confirm that the land is now in a "satisfactory state" at surrender.</p>	
<p><b>Checklist of supporting information</b></p>	<ul style="list-style-type: none"> <li>• Land and/or groundwater data collected at application (if collected)</li> <li>• Land and/or groundwater data collected at surrender (where needed)</li> <li>• Assessment of satisfactory state</li> <li>• Remediation and verification reports (where undertaken)</li> </ul>

## 5.2 Statement of Site Condition

<p>Using the information from sections 4 and 5, give a statement about the condition of the land at the site. This should confirm that:</p> <ul style="list-style-type: none"> <li>• the permitted activities have stopped</li> <li>• decommissioning is complete, and the pollution risk has been removed</li> <li>• the land is in a satisfactory condition.</li> </ul>	
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