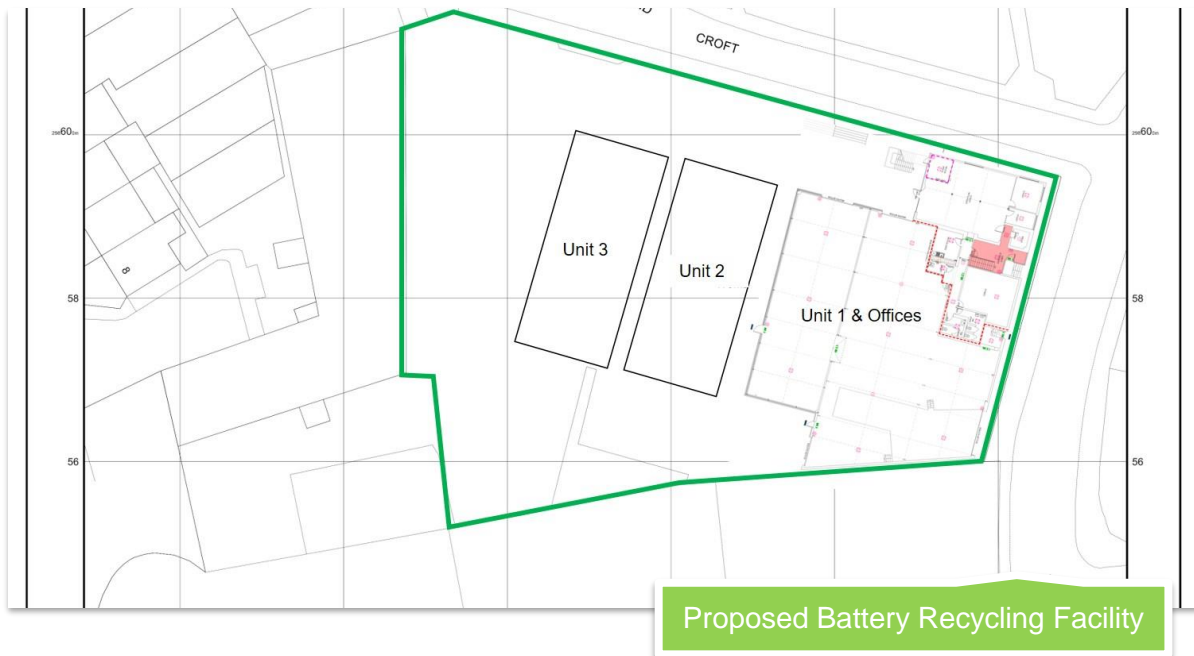


# Site Condition Report

ISSUE 1.0

Produced for **Fenix Battery Recycling Limited**

Document Reference [FEN-SCR]





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## QUALITY CONTROL

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## 1.0 SITE DETAILS

<b>Name of the applicant</b>	Fenix Battery Recycling Limited
<b>Activity address</b>	Field Street Willenhall West Midlands WV13 2NY
<b>National grid reference</b>	NGR SO 96030 98584

<b>Document reference and dates for Site Condition Report at permit application and surrender</b>	Date at application: FEN-SCR (25/09/2020)
<b>Document references for site plans (including location and boundaries)</b>	Site location plan: Site map Site layout plan: Process areas map, storage areas map.

## 2.0 CONDITION OF THE LAND AT PERMIT ISSUE

<b>Environmental setting</b>	<p>Fenix Battery Recycling Limited (hereon referred to as Fenix Battery Recycling) is applying for an environmental permit for the treatment and processing of hazardous waste.</p> <p>The proposed battery recycling facility will consist of a site office, and three separate buildings in which to process Alkaline and Lead-acid batteries, together with the repackaging and consolidation of other batteries and waste electrical and electronic equipment.</p> <p>The facility is located in the town of Willenhall, sited within a mixed-use industrial area with some residential. Immediately east of the site are several industrial units. To the south of the site is a public house. To the west and north of the site are residential areas, with the nearest residential property approximately 10m north of the site boundary. There are a number of sensitive receptors within 250m of the site boundary.</p> <p><b><u>Geology</u></b></p> <p>The underlying geology of the proposed recycling 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). The vast majority of the site is underlain by the Pennine Lower Coal Measures Formation. This is Sandstone bedrock formed approximately 318 to 319 million years ago in the Carboniferous Period. Under the very north-western edge of the site boundary is the Pennine Middle Coal Measures Formation. This is Mudstone, Sandstone and Siltstone sedimentary bedrock formed approximately 310 to 318 million years ago in the Carboniferous Period.</li><li>• There is one recorded superficial deposit beneath the entire site (i.e. rock types near the surface) known as Till, Devensian - a diamicton detrital deposit that 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 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><li>• The Superficial Aquifer across the entire site is designated as a Secondary Undifferentiated Aquifer. This classification is assigned in cases where it has not been possible to attribute a Secondary Aquifer A or B classification to the rock type. Consequently, the superficial layer is likely to have been previously designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type.</li></ul>
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	<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 not situated within a Groundwater Source Protection Zone (SPZ).</li> <li>• The groundwater vulnerability classification of the bedrock is classified as a Secondary A Bedrock Aquifer – Low Vulnerability. Low vulnerability areas provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits with a low permeability.</li> <li>• The groundwater vulnerability of the superficial aquifer is classified as Secondary Undifferentiated Aquifer – Low Vulnerability. Low vulnerability areas provide the greatest protection to groundwater from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits with a low permeability.</li> <li>• There is potential for groundwater flooding of property that is situated below ground level on site.</li> <li>• The nearest groundwater abstraction licence is recorded 350m west of the site at a borehole at Portobello Works, operated by Assa Abloy Limited.</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 a children’s play pond, located approximately 216m northwest of the site. The nearest main surface water feature is the Willenhall Memorial Park Fishing Pond, located approximately 400m northwest of the site.</li> </ul>
	<p><b><u>Historical Land Use</u></b></p> <ul style="list-style-type: none"> <li>• The land within the site boundary is indicated from historical maps, dating back to 1885. On this oldest map, the land within the site boundary appears to be unmade, with an embankment running along the southern and north eastern portion of the site. There are a number of industrial units located to the east of the site, as well as a church to the south west of the site.</li> <li>• Some time between 1885 and 1902, there was industrial development, in the form of the erection of buildings on the eastern portion of the site.</li> <li>• By 1919, the site has become more established, with further buildings added within the central portion of the site.</li> <li>• Between 1920 and 1938, the site is established as an engineering works, with another engineering works adjacent to the site to the east.</li> <li>• Further development is undertaken on site at some point between 1956 and 1968.</li> <li>• There is also significant development of the residential areas situated north and west of the site, right through until 1975, as well as the development of a social club to the immediate south of the site.</li> <li>• By 1992, a car park, medical practice and a community church had been constructed to the north of the site.</li> <li>• No further changes have been observed to the site since then.</li> </ul>

**Pollution Incidents**

- There have been 41 recorded pollution incidents to controlled waters within 1km of the site location. Of the 41 recorded pollution incidents, 37 were recorded as Category 3 – Minor Incidents, with the remaining 4 comprising Category 2 – Significant Incident. The nearest Category 3 incident, which was a fire at a paper factory, occurred in 1998 at 247m away. The nearest Category 2 incident was also in 1998 when the pollutant was oil, with the incident taking place 318m from site.
- There have been no recorded pollution incidents to air or land within 2km of the site.

**Waste Register**

- There is one registered landfill site within 1km of the site, which is 257m northwest of the site. The site was operated by Foundry Services Limited, but it is understood that the licence has lapsed/ has been surrendered.
- There is one local authority recorded landfill site within 1km of the site, but it is unknown whether this is active. The landfill site is located approximately 507m south west of the site.
- There are five historical landfill sites within 1km of the site boundary, with the nearest 192m northeast of the site.
- There are seven Licensed Waste Management Facilities within 1km of the site boundary, with the closest 363m south of the site boundary and operated as a WEEE treatment facility.

**Industrial Activity**

- There are a number of trade, commercial and manufacturing production sites within 1km of the site, predominantly to the east, with the nearest, a tyre dealer 41m away. To the south east there is an industrial engineering company located 236m from the site, and a coating specialist company located 242m north east of the site. Approximately 272m south west of the site is a tyre dealer, and 435m west of the site is a hardware company.

**Coal Mining Activity** (See Appendix E: Coal Mining Report)

- **Past underground coal mining:** The site is situated on the coalfield, and there is a disused mineshaft located at the centre left portion of the site.
- The site is in an area that could be affected by underground mining in 1 seam of coal at 30 to 40m depth and was last worked on in 1886. Any movement in the ground due to coal mining activity associated with these workings should have stopped by now.
- The site is also in a surface area that could be affected by underground mining in 1 seam of ironstone at 50m depth, and last worked in 1856.
- **Present underground coal mining:** The site is not within a surface area that could be affected by present underground mining.
- **Future underground coal mining:** The site is not located in an area where the Coal Authority has received an application for nor is currently considering whether to grant a licence to remove or work coal by underground methods. Additionally, the site is not within an area where a licence has been granted to remove or other work coal using underground methods.
- The site is not in an area likely to be affected from any planned future underground coal mining but reserves of coal do exist in the local area which could be worked at some time in the future.
- No notices have been given, under section 46 of the Coal Mining Subsistence Act 1991, to state that the land is at risk of subsidence.

	<ul style="list-style-type: none"> <li>• <b>Mine entries:</b> The report identifies that there is one mine entry within 20 metres of the site boundary. There is no record of what steps, if any, have been taken to treat the mine entry.</li> <li>• <b>Coal mining geology:</b> According to the Coal Authority, they are not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.</li> <li>• <b>Opencast coal mining:</b> The site does not lie within 200m of an opencast site from which coal has, or is being removed, by opencast methods. The site is not within 800 metres of the boundary of an opencast site for which a licence to remove coal has been granted</li> <li>• <b>Coal mining subsidence:</b> The Coal Authority has not received a damage notice or claim for the site, or any property within 50 metres of the enquiry location, since 31<sup>st</sup> October 1994.</li> <li>• There is no current Stop Notice delaying the start of remedial works or repairs to the site.</li> <li>• The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.</li> <li>• <b>Mine gas:</b> There is no record of a mine gas emission requiring action by the Coal Authority.</li> <li>• <b>Hazards relating to coal mining:</b> The site has not been subject to remedial works, by or on behalf of the Coal Authority, under its Emergency Surface Call Out Procedures.</li> </ul>
<p><b>Baseline Soil and Groundwater Reference Data</b></p>	<p>At the time of writing, baseline soil and groundwater reference data has not been collected by the operator.</p> <p>Fenix Battery Recycling Limited (the applicant) accepts that as an operator of an installation using, producing or releasing “relevant hazardous substances” (RHS), there is the possibility that they might cause pollution of soil and groundwater.</p> <p>Fenix Battery Recycling Limited have chosen not to submit any quantitative monitoring baseline data and therefore accept the approach that there is zero pre-existing contamination at the proposed site and by doing so they are accepting the risk that they may be required to clean up any pre-existing contamination when they surrender any potential permit which may be issued.</p>
<p><b>Supporting information</b></p>	<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> <li>• Appendix D: Food Zone Map</li> <li>• Appendix E: Coal Mining Report</li> </ul>



### 3.0 PERMITTED ACTIVITIES

<b>Permitted activities</b>	<p>Fenix Battery Recycling is applying for an environmental permit for the treatment and processing of hazardous waste.</p> <p>Permitted activity will be agreed in accordance with the environmental permit issued.</p>
<b>Non-permitted activities undertaken</b>	<p>There are no non-permitted activities undertaken.</p>
<b>Document references for:</b> <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: Process areas map, Storage areas map  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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